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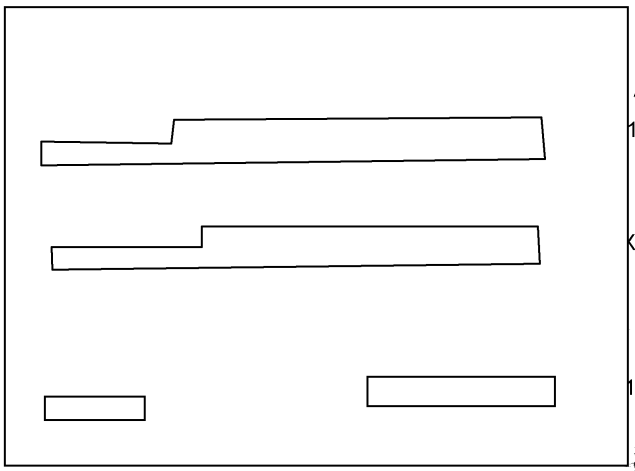


A tyrant's death at patriots' hands revealed as Operation Salmon of Czech Intelligence in exile.

THE ASSASSINATION OF REINHARD HEYDRICH

R. C. Jaggers

On the twenty-ninth of May, 1942, Radio Prague announced that Reinhard Heydrich, Reichsprotektor of Bohemia and Moravia, was dying; assassins had wounded him fatally. On the sixth of June he died.

Though not yet forty at his death, the blond Heydrich had had a notable career. As a Free Corpsman in his teens he was schooled in street fighting and terrorism. Adulthood brought him a commission in the German navy, but he was cashiered for getting his fiancée pregnant and then refusing to marry her because a woman who gave herself lightly was beneath him. He then worked so devotedly for the Nazi Party that when Hitler came to power he put Heydrich in charge of the Dachau concentration camp. In 1934 he headed the Berlin Gestapo. On June 30 of that year, at the execution of Gregor Strasser, the bullet missed the vital nerve and Strasser lay bleeding from the neck. Heydrich's voice was heard from the corridor: "Not dead yet? Let the swine bleed to death."

In 1936 Heydrich became chief of the SIPO, which included the criminal police, the security service, and the Gestapo. In 1938 he concocted the idea of the Einsatzgruppen, whose business it was to murder Jews. The results were brilliant. In two years these 3,000 men slaughtered at least a million persons. In November of that year he was involved in an event that in some inverted fashion presaged his own death. The son of a Jew whom he had deported from Germany assassinated Ernst von Rath in Paris. In reprisal Heydrich ordered a pogrom, and on the night of November ninth 20,000 Jews were arrested in Germany.

In 1939 the merger of the SIPO with the SS Main Security Office made Heydrich the leader of the Reichssicherheitshauptamt. In this capacity he ordered and supervised the

"Polish attack" on Gleiwitz, an important detail in the stage setting for the invasion of Poland on September first. It was he who saw to it that twelve or thirteen "criminals" dressed in Polish uniforms would be given fatal injections and found dead on the "battlefield." It was probably he who chose the code name for these men—Canned Goods.

At this time Bohemia and Moravia had already been raised from independent status to that of Reichsprotektorat, with Baron von Neurath, Germany's now senile former foreign minister, designated the Protector—of the Czechs from themselves, presumably. But a greater honor was in store for them. On 3 September 1941 von Neurath was replaced by SS Obergruppenfuehrer Heydrich. The hero moved into the Hradcany Palace in Prague and the executions started, 300 in the first five weeks. His lament for Gregor Strasser became his elegy for all patriotic Czechs: "Aren't they dead yet? Let them bleed to death."

He had come a long way in thirty-eight years. The son of a music teacher whose wife was named Sarah, Reinhard had gone on trial three times because of Party doubts about the purity of his Aryan origin. Now, as chief of the RSHA, which he continued to run from Czechoslovakia, he was Hangman to all occupied Europe. His power was such that he could force Admiral Canaris to come to Prague and at the end of May, 1942, sign away the independence of the Abwehr and accept subordination to the Sicherheitsdienst. It was his moment of sweetest triumph. A few weeks later he was dead, and Himmler pronounced the funeral oration calling him "that good and radiant man."

So much for the story we all know, and on to questions left unanswered by it. Who were Heydrich's assassins? Who could successfully plan his death? Was the motive simply revenge for suffering? How was it accomplished? And the hardest question of all, was it a good thing? Here, for the first time, are the answers to all these but the last, and on that question stuff for pondering.

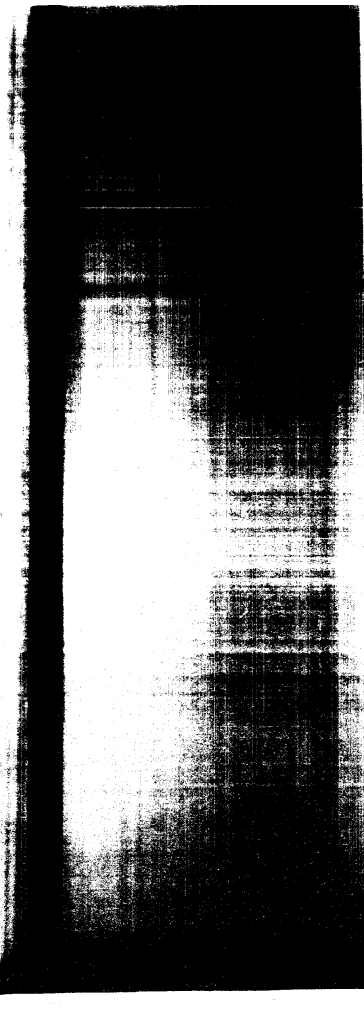
Need Mothers an Invention

When Heydrich took charge of Bohemia and Moravia, the Czechs learned what it means to live under a master of suppression. The war fronts were far away: it was the period of smashing German successes in the Balkans, Scandinavia, France, and the USSR. The Czechs heard little that Heydrich did not want them to hear. Their underground movement was systematically penetrated and all but destroyed. On October third of 1941, for example, the capture of a single Czech radio operator by Heydrich's men led to the arrest of 73 agents working for Moscow. Underground radio contact with London was monitored. The Czechs were losing heart.

In London the strength of the resistance in all occupied countries was periodically reviewed, and the countries were listed in the order of the assistance each gave the Allied cause. In 1941 Czechoslovakia was always ranked at the very end. Eduard Benes, its president-in-exile, was deeply embarrassed. He was also gravely concerned that the Allies, if his people failed to fight, might give short shrift to any Czech claims after the war. He told his intelligence chief, General Frantisek Moravec, to order an intensification of resistance activity. But it was difficult enough to get even a parachuted courier or coded radio message past the wary Heydrich. Nothing happened in response.

Then President Benes hit upon the idea of contriving to assassinate a prominent Nazi or Quisling inside the tight dungeon of the Protectorate; such a bold stroke would refurbish the Czech people's prestige and advance the status of their government in London. The German retaliation would be brutal, of course, but its brutality might serve to inflame Czech patriotism.

Who should be the target? General Moravec first nominated the most prominent of the Czech collaborators, an ex-colonel whose fawning subservience to his Teutonic masters left the London Czechs nauseated and ashamed. The general also had a personal reason for his choice: the name of the Czech Quisling was Emanuel Moravec, a coincidence that had plagued the general for years. But Emanuel, called the Greasy, was not the right man for the purpose. He was not well known abroad, and Czech prestige would not be raised significantly by crushing a worm. The Germans, too, were likely to regard his death as no great loss; he was only a minister of education, easy to replace, and even the Nazis despised traitors.



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Heydrich was totally different. His unique combination of brilliance and brutality had no peer even in the Third Reich. He had been personally responsible for the execution of hundreds of Czechs and the imprisonment of thousands. The shot that killed him would be heard in every capital of the world. There could be no other choice. General Moravec so recommended, President Benes agreed, and the planning of Operation Salmon began in tense secrecy.

Wanted: Men for Martyrdom

The first problem was finding one or two men who could and would do the job. It must have seemed to General Moravec, at least at the outset, an almost impossible task. The many Czech politicians in London were preoccupied in the unending scramble for posts in the provisional government. There were quite a few Czech businessmen in England, but most of them were too busy making a fast *koruna* to be interested. There were brave and patriotic Czechs serving in fighter and bomber wings attached to the Royal Air Force, but the Air Ministry would never let them go. And so the choice narrowed to the single infantry brigade of about 2,500 men encamped near Cholmondly.

This pool of prospects had its own disadvantages. An encampment of 2,500 is like a town of that size: everyone knows everyone else and is full of curiosity about everything that anyone does. Here this inquisitiveness was also undissipated by outside contacts, the Czech soldiers speaking little or no English and having few interests beyond the limits of the camp. Each transfer, trip, or trifle thus became news, something to discuss and analyze.

For screening purposes the personnel files of the brigade contained only what each man had told about himself or, in rare instances, about others whom he had known earlier, at home. There was no way to check police files, run background or neighborhood checks, or otherwise obtain independent verification of loyalties. Under such circumstances it is a tribute to General Ingr, Minister of Defense in the exiled government, to General Moravec, and to their subordinates that of 153 parachutists flown from England and dropped into Czechoslovakia, only three proved turncoats.

How many people would have to know? President Benes, General Ingr, General Moravec and his deputy, Lt. Col. Stragmueller, and Major Fryc, chief of operations. Of these, President Benes and General Ingr needed to know only the purpose of the operation and the names of the men chosen to carry it out. Others, required for instruction, would necessarily know that certain men were entering Czechoslovakia to carry out a clandestine action, but not their precise intent. Four instructors would be needed, experts respectively in parachute work, in the terrain of the area, in cover, documentation, clothing, and equipment, and in commando techniques.

Several British officers, representatives of MI–6, would participate in this training. The crew of the plane carrying the men into Czechoslovakia would know where and when they were going, though not their identities or mission. And finally, a large number of men in the brigade personally acquainted with the candidates could be expected to make guesses of varying degrees of accuracy as the preparations for assassination progressed.

Because the number of persons who would be partly or fully informed was so unavoidably much too large, it was essential that the men finally chosen should be as discreet as they were brave. Of the 2,500 Czech soldiers in the brigade some 700, most of them volunteers, were already engaged in parachute training under British instruction. Two officers were assigned to the brigade, one to the parachutists and the other to the ground troops, ostensibly as aides but actually as spotters. These two officers knew only that they were to choose the best candidates for a dangerous assignment.

Men recommended by the spotters were interviewed singly by Lt. Col. Stragmueller. Some were asked whether they would volunteer for special training. Almost all those asked agreed, and they were sent in groups of ten for vigorous physical conditioning and thorough schooling in commando tactics—the use of a wide assortment of small arms, the manufacture of home-made bombs, ju-jitsu, cover and concealment, and the rest. During this intensive drilling the ten-man teams were kept under close observation. It was essential to discover not only the bravest and most capable but also—it having been decided that the assassination was a two-man job—

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those who worked best in pairs. Other considerations also came into play; men from Prague, for example, were automatically eliminated because of the danger of recognition after arrival.

By now the choice had narrowed to eight men in half as many groups. General Moravec visited these four groups, along with all the others, on a regular schedule. On his orders the instructors drew the eight candidates aside one at a time and passed each a piece of juicy, concocted information with the warning not to mention it to anyone. Each tidbit was different. Soon two new rumors were circulating, and two men were eliminated. One of the remaining six was disqualified by marriage; another was suddenly incapacitated by illness.

General Moravec interviewed the remaining four. Two of them, non-coms, met all tests and were also good friends. Their names were Jan Kubis and Josef Gabcik. Kubis was born in Southern Moravia in 1916. After some ten years of schooling he had gone to work as an electrician. He had been in the Czech Army since 1936 and had fought in France in 1940. His excellent physical condition made his 160 pounds, at 5'9", look lean. Slow of movement, taciturn, and persevering, he was also intelligent and inventive.

Gabcik was a year younger than Kubis. An orphan from the age of ten, he too had left school at sixteen. After working as a mechanic for four years, he had entered the Czech Army in 1937. He had been given the Croix de Guerre in France in 1940. He was strong and stocky, an excellent soccer player, and like Kubis lean for all his 150 pounds on a 5'8" frame. His blue eyes were expressive, and his whole face unusually mobile. Talented and clever, good-natured, cheerful even under strenuous or exasperating circumstances, frank and cordial, he was an excellent counterpoise for the quieter, more introverted Kubis.

Both men had gone through the arduous training without illness or complaint. Both spoke fluent German. Both were excellent shots. General Moravec spoke separately to each of them. He explained that the mission had the one purpose of assassinating Heydrich. He stressed to each of the young men the great likelihood that he would be caught and executed. Escape from encircled Czechoslovakia after Heydrich had been killed would be practically impossible. And the survival of either, hiding inside the country until the war ended, was extremely unlikely. The probability was that both would be killed at the scene of action.

Although neither man had relatives or friends in Prague, both had relatives in the countryside; and the general reminded them of what had happened to the family of a Czech sent from London on a successful clandestine mission to Italy. Somehow the Gestapo had learned his identity and executed all of his relatives in Czechoslovakia, even first and second cousins. "Please understand," General Moravec told each of them, "that I am not testing you now. You have proved that you are brave and patriotic. I am telling you that acceptance of this mission is almost certainly acceptance of death—perhaps a very painful and degrading death—because I do not believe that the man who tries to kill Heydrich can succeed if the awful realization that he too will die comes too late, and unnerves him. I have another reason, too: if you make your choice with open eyes, I shall sleep a little better."

First Gabcik and then Kubis agreed, thoughtfully but without hesitation or bravado. Both were quietly proud to have been chosen. The general then brought them together and explained that from that moment on they would be separated from all the rest, the final preparations would be made in strictest seclusion. If at any moment either man felt that he could not go through with the assassination, he was bound in duty and honor to say so immediately, without false shame.

They glanced at each other. "No," said Gabcik. "We want to do it." Kubis just nodded.

Dress Rehearsal and Curtain Up

Some training was still needed. Kubis had to learn to ride a bicycle. Both had to know Prague as though they had spent years walking its streets and alleys. Both needed instruction in withstanding hostile interrogation. Both had to memorize all the details of separate cover stories which could be "confessed," after initial resistance, to the Gestapo. On the last day of training they were each given a lethal dose of cyanide and told how to conceal it on their persons. It was the last defense against torture.

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"One more point," General Moravec told them. "Under no circumstances—and I mean none at all—is either of you to get in touch with the underground, directly or indirectly. You are absolutely on your own. The underground is infested with informants; Heydrich has done his usual masterful job. For this reason we have not sent out one word about you, even to the most trusted leaders there. If anyone approaches you and says that he comes from the underground, he is a provocateur. Treat him as such."

The men nodded.

"Don't forget," the general insisted. "And now, a review. Kubis, where does Heydrich have his office?"

"Prague Palace."

"Show me on the map."

Kubis did so without hesitation.

"Gabcik, where do you land?"

"Here, sir," said Gabcik, pointing to another spot some 50 kilometers southeast of Prague, an area chosen because it was wooded, rolling, and offered good approaches to the city.

"Kubis, what do you do first, after touching ground and removing parachutes?"

"We destroy all traces of the descent, sir."

"Do you proceed to the palace, Gabcik?"

"No. It is too heavily guarded. All visitors are thoroughly checked."

"His private residence?"

"The same, sir."

"Kubis, where do you go?"

"Here, sir." Kubis' finger pointed to a spot half way between Prague and the village of Brezary.

"Gabcik, when does Heydrich pass this spot?"

"Daily, sir, going into the city, and at night on his return. We shall observe the time."

"Why have we chosen this particular spot on the road?"

"Sir, there is a sharp curve. His car and the motorcycles must slow down to twenty kilometers."

"How many motorcycles, Kubis?"

"Probably two, sir. We'll find out."

"Good. Now remember—don't rush it. Don't use pistols in any case. If there is any chance that you can't bring it off with the bomb or the machine gun on first try, wait and pick a better spot for the next day. But don't delay too long. Now, a last dry run."

The two men left. General Moravec waited for ten minutes, summoned his car, and asked to be driven down a certain country road at normal speed. He sat in the back, with binoculars, closely scanning all the foliage and other cover wherever the car slowed for a curve. Then he drove back and waited. Soon Gabcik and Kubis reappeared.

"Well?" the general demanded. "Did you kill me?"

"Yes, sir."

"Are you sure?"

"Yes, sir."

"Good."

The escape was planned with equal care. The men would make their way, mostly on foot, to Slovakia, where the German pressure was far less severe. Gabcik, who knew the mountains of Slovakia well, had chosen a safe area where none of his friends or relatives lived. For food they were on their own.

Early April was all fog, wind, and rain. Normally Czech, Polish, and Canadian crews took turns flying paratroopers over Czechoslovakia, but General Ingr had made sure that a Czech team, Captain Anderle and his crew, would be rested and ready for a good day. The fifteenth, at last, dawned clear and still. General Moravec walked to the plane with his two chosen men. They stood at the bottom of the ramp. He looked at them, and they at him, in silence. No speeches, no cheek-kissing, no wet eyes. Gabcik and Kubis seemed as impassive as two farmers starting the day's work. They shook hands briefly.

The general went into the plane and briefed its captain and crew. When he came out, he found Gabcik suddenly flustered. "Sir, may I speak to you for a moment in private?"

So, the general thought sadly. Well, better for it to happen now. We shall have to send him to the Isle of Man until the war ends. "Of course, Gabcik," he said, and moved some yards away.

Gabcik followed, uncomfortable. He said, "Look, sir, I don't know how to tell you this, I'm ashamed. But I have to tell you. I've run up a bill at a restaurant, the Black Boar. I'm

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afraid it's ten pounds, sir. Could you have it taken care of? I hate to ask, but I haven't got the money, and I don't want to leave this way."

"All right," Moravec managed. "Anything else?"

Gabcik was relieved. "No, sir," he said, "except don't worry. We'll pull it off, Kubis and I."

They climbed in, then, and the plane started down the runway. The general thought of all the courageous men he'd known. "No," he said out loud. "None of them were braver." He felt full of pride and pain.

Death Rides in Spring

Captain Anderle came back on schedule. He reported that the two men had teased his crew about having to go back to the strangeness of England instead of coming home. At the command they had jumped unhesitatingly.

So the waiting started. Gabcik and Kubis had not taken a transmitter or any means to report back: if they were successful everybody would know it. None of the anxious witting talked about the operation. On the tenth day Captain Anderle was shot down and killed in an air battle at Malta. "I am not a superstitious man," General Moravec told himself.

Two weeks, three weeks, four. It must have gone wrong. "If they failed," said General Ingr, "let us hope they failed completely, without getting anywhere near Heydrich."

Six weeks, and May 29, Friday afternoon. Prague radio, indignant, reported that Reichsprotektor Reinhard Heydrich had been severely wounded by murderers in a criminal, dastardly attempt upon his life that very morning. They had thrown a bomb into the Protector's car. Two men had been seen leaving the spot on bicycles. The search for them was under way. They would be found.

The news exploded in the international press. At home and abroad, Czechs stood a little straighter. Several "authentic inside stories" were printed. The favorite was that the Czech underground had struck. Scarcely less popular was the tale that the Abwehr had killed Heydrich because of the humiliating agreement he had just forced Canaris to sign.

At Cholmondly the brigade buzzed. The absent Gabcik and Kubis were talked about, of course; but they had been gone for a long time. And so had many more paratroopers dispatched on one mission or another. There was no reason to pick out these two over others who had never returned. Lieutenant Opalka, for example. He had been gone for five months now. And three men had left the camp just a week before Heydrich was killed.

The battalion talked of little else. One sergeant, a little older than the others, was convinced that the man who took care of Heydrich was a non-com named Anton Kral.

"Kral?" repeated one of the others. "Why Kral? He's been gone as long as Opalka."

"I don't know," the sergeant answered. "It's just a feeling. Remember how tall and dark he was, and silent?"

"And brave," said another. "He fought well in France."

"Well," shrugged a third, "it could be anybody."

Perhaps the sergeant knew more than the others about Anton Kral. Kral had been picked by General Moravec to be parachuted with Lieutenant Opalka into an area northeast of Prague. Their mission was to get in touch with the underground there to deliver instructions. Nothing had been heard from either of them since their departure, and they were presumed lost.

In Prague, Heydrich was dying. The three physicians summoned from Berlin—Gebhardt, Morell, and Brandt—tried hard, but could not save him. Himmler was there too, full of public sorrow, privately perhaps rejoicing. He had his funeral oration down pat before the sixth of June, when Heydrich died. And he seized the chance to direct personally the search for the assassins and the massive reprisals.

First, martial law was proclaimed over all Bohemia and Moravia. A rigid daily curfew at sundown was imposed. Throughout the land public announcements proclaimed that anyone who harbored the assassins or otherwise aided them in any way would be executed summarily and without trial. The illegal possession of arms and even approval of assassination in principle were declared capital crimes. Himmler's chief executive in the subsequent action was the notorious Sudeten German, Deputy Reichsprotektor Karl Hermann Frank.

The mass arrests and mass executions began. Czechs were killed without investigation, without trial, even without in-

terrogation, usually on the basis of some vague or distorted denunciation. For twenty days the slaughter continued. But neither terror nor the special Gestapo details dispatched to Prague could bring the assassins to light.

Then Himmler and Frank had a new idea. Quite arbitrarily they chose a small settlement near Kladno, fifteen miles from Prague. On 9 June Colonel Rostock marched a military detail into this village of the now memorable name, Lidice. Every male not unquestionably a child was slaughtered. Even the few who chanced to be absent were run down and killed—two hundred men and boys in all. The women were driven into concentration camps. The children were shipped off to Germany. Everything above ground, all structures, were razed, and the ground was ploughed. Lidice became a blank, a field of regular brown furrows.

And still there was no trace of the killers of Heydrich. So they did the same thing to another hamlet, Lezaky, in southwestern Bohemia.

The killers were not found.

On 24 June Frank officially announced that if the assassins were not turned over in 48 hours, the population of Prague would be decimated. He also used a carrot—1,000,000 marks for anyone giving information leading to the death or capture of the wanted men. This worked, apparently. On 25 June Radio Prague reported that the culprits had been discovered in the basement of the St. Bartholomeus Orthodox Church on Reslova Street. Encirclement was under way and capture only a matter of hours. In London the listeners knew that Gabcik and Kubis were fighting back.

The following day the radio said the fight was over; the assassins were dead. There were four of them, the announcer said flatly, one Gabcik, one Kubis, a certain Opalka, and a man known as Josef Valcik.[1]

In England Opalka was known, of course. So was Valcik, a reliable member of the Prague underground. But what were they doing in the same cellar with Gabcik and Kubis, sharing their hopeless last stand? General Moravec, at least, felt certain that his men would not have violated his orders and made contact with the underground. And no word had gone to the underground about Gabcik and Kubis.[2] Perhaps the two teams had met by chance at the church, driven to the same sanctuary because the priests were known to be patriotic and because all four were desperate.

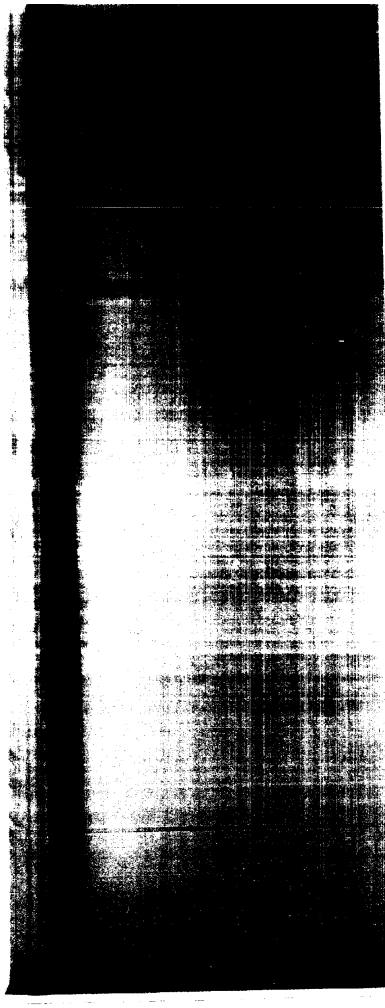
Even now the Nazis went on murdering. The paralytic SS General Kurt Daluege succeeded Heydrich. During the trial that preceded his execution in Prague in 1946, he admitted that 1,331 Czechs were executed, 201 of them women, in reprisal. From another source it has been established that during this period 3,000 Jews were taken from the Terezin ghetto and exterminated. No one knows how many died in concentration camps. A sober estimate is that at least 5,000 Czechs were killed to avenge the death of one murderous Nazi. Among them were all the priests of St. Bartholomeus, not one of whom would say a word about their guests.

Was It Worth This Price?

In London the jubilation of the Czech leaders gave way to doubt as the murderings continued, and then to recrimination. At first President Benes would have none of it. He listened to Radio Prague as day after day, and several times a day, the numbers and names of the executed were methodically announced. "Why don't they fight?" he asked his staff. "Why don't they die as partisans and men, in the forests and the mountains, taking as many Germans with them as they can? Look at the Poles, the Yugoslavs, the French. They

[1] There are conflicting records of this name; the *New York Times* gives Walicikoff.

[2] In an unpublished manuscript, *War Secrets in the Ether*, Wilhelm F. Flicke asserts, "The attempt upon the life of Heydrich had been planned and directed over [the Czech underground to London] network. That was a big mistake on the part of the English and Czechs because it afforded the German radio defense a complete disclosure not only of the plot itself and those directly participating but also of all the connections within the Czech resistance movement." This statement is almost wholly wrong. It is true that Heydrich and his spies had penetrated the Czech underground thoroughly. But radio was not used for Operation Salmon, and the network inside Czechoslovakia had no hand in planning or directing Heydrich's assassination. The Germans had no advance warning. And it was not merely an "attempt"; Gabcik and Kubis did kill Heydrich.



don't line up at the scaffold, waiting patiently like sheep." He was unmoved by arguments about the terrain, the proximity of France to England, the density of the population in Bohemia and Moravia. "Why don't they fight?" he asked again. "It's their duty." Whatever the answer, it was plain by now that one of the hoped-for results, the stiffening of the Czech will to resist, had not been achieved.

In Czech political circles the intensity of criticism mounted in direct ratio to the mounting toll of German reprisals at home. Although President Benes remained privately convinced that the execution of Heydrich had been both justified and necessary, he began to feel a need for modifying his views publicly. He reacted to the pressure, finally, by announcing that General Moravec had planned and supervised the assassination; and the accusations of irresponsibility from the political group were turned on the intelligence chief. Those who had lost relatives and friends at home were especially bitter.

As the war went on, General Moravec found that his mind would not stop mulling over the profound questions of right and wrong that attend all action but become sharpest, most nagging, when the action has terrible consequences for others. There was no doubt that the killing of Heydrich had served its intended prestige purpose. In this sense it had been a major success. For a time, at least, Czechoslovakia had jumped from last place to first in the esteem of all the anti-fascist world. Even the suffering of the people, even Lidice and Lezaky, served this cause. But the aim of awakening resistance had been a mirage. The people were not fighting, were not earning the acclaim. They would be remembered as martyrs, not heroes, even though there were heroes—Gabciks and Kubises and Opalkas—among them.

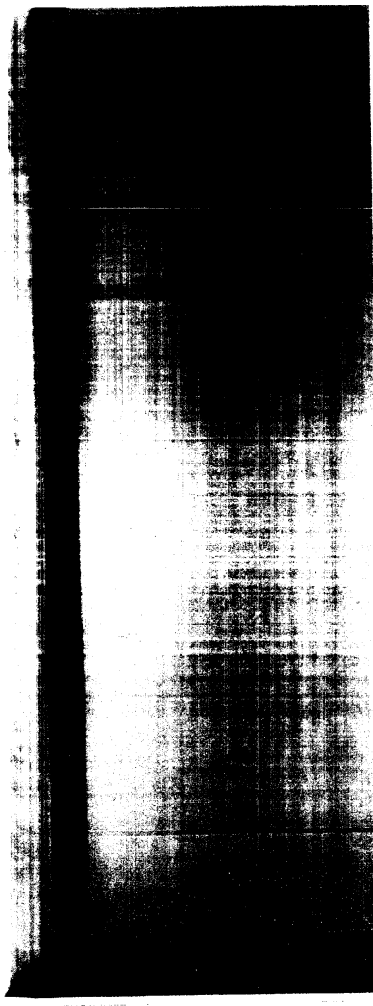
Who had killed these 5,000 civilians? The Germans? General Moravec himself? The civilians at home, inviting slaughter with their meekness? As the toll of war dead mounted into the millions, the 5,000 shrank to perspective and seemed almost insignificant; the war killed thousands every day, women and children as well as soldiers. Yet right and wrong are not a matter of quantity. The same questions would have come whispering in his ear at night, like old ghosts, if only the brave assassins had died because of Reinhard Heydrich's death.

Modern war, total war, kills everyone indiscriminately; women and children drop as fast as soldiers. Millions were dying to destroy the German instruments of war. And clearly Heydrich had been one of the most effective of those instruments. When Hitler escaped the twentieth-of-July bomb in 1944, the general wondered whether the German anti-fascists would have been able to strike even this unsuccessful blow if Heydrich had been alive to trap them before they could act. Was it wrong to have assassinated Heydrich and right to try to kill Hitler? No one who believed that fascism had to be destroyed felt anything but admiration for the Yugoslav partisans, the French Maquis, the brave Norwegians and Poles—for all the people who fought and killed Germans. The Czechs at home were not fighting, so the Czechs abroad had to do the job for them.

It might have been wrong if the target had been the one he first considered, Emanuel Moravec. This would have had the taint of personal motives. But there was no such taint in the assassination of Heydrich, and it had the official and unqualified approval of President Benes. Of course, the general thought wryly, I cannot proclaim this fact today. It is the duty of subordinates to step back when their plans succeed and come forward into the limelight if their plans fail.

Finally, before the war ended, the self-questioning, the drilling inside, apparently hit bed rock. General Moravec found a firm position, he later explained, in the truth that no one ever gets something for nothing. If Czechoslovakia had rejected the Chamberlain capitulation at Munich, a real underground would have been born of its thus-affirmed integrity. Men must die that countries live. If enough of them die at once, the country may be lucky enough to coast for a few generations. But coasting builds no muscles. The cost of the free ride is strength, and the cost of sapped strength is freedom. So in the last analysis you have to kill a Heydrich not because he needs killing but because coasting along with his kind will kill you and everybody else.

By the time the war was over, General Moravec felt sure that the assassination of Heydrich was not a sombre page of



The Assassination of Reinhard Heydrich SECRET

history. It was a page that he could turn back to with satisfaction, he and his countrymen and all the rest of us. Turn back to, read again, and know that it was right.

Dregs of the Bitter Cup

At last the war ended, and General Moravec went home to Prague. Everywhere in the city was a kind of gladness; it was over now, and all were thinking of the future. Everywhere, it seemed, except at General Moravec's home, where the callers apparently could not forget the past. They asked why their fathers and mothers had been executed. They wanted to know if the former general still thought he'd done the right thing. His doubts returned. These people saw him not as the executioner of Heydrich but as the killer of their kin. This post-war period in Prague, he said later, was the most miserable of his life. The men who, now that the war was over, called themselves the leaders of the underground also came to ask questions and pronounce judgment. They said that the Heydrich operation was conceptually faulty. They said they should have been consulted in advance, they never would have permitted so blatant an error. The general asked them to give a detailed account of their underground activities and a signed estimate of their contribution to the war against fascism, and they went away.

One day a different caller came. He said that the traitor who delivered Gabcik and Kubis to the Gestapo had been discovered and interrogated. He had confessed to a revolutionary tribunal, but he stubbornly refused to give details. His name was Alois Kral.

Kral! So the general's careful choice of men had produced two heroes, and one villain to seal their fate. He put on his coat; he would visit the man in prison and talk to him. He recognized Kral as soon as he saw him; the four full years had not changed him. Tall, swarthy, taciturn, he squinted up at Moravec and said, "Greetings, brother."

"Brother?"

"I killed two Czechs. You killed five thousand. Which of us hangs?"

So it went throughout the questioning. Kral kept most of his secret to himself, not to save his neck but because he knew he couldn't. Besides, the revolutionary tribunal was not predisposed to patient inquiry. It consisted of one professional lawyer and four lay judges on the bench, a prosecutor, and a defense attorney appointed ex officio. All of them had been chosen by the Citizens' Committee, which in turn was dominated by the Communists. Each actor in the play had memorized his part, knowing that the function of the court was not to serve justice but to kill Kral. The hand-picked audience was fanatical, a lynch mob. Neither actors nor spectators cared about the fate of Gabcik and Kubis; they were all preoccupied with the million marks Alois Kral had collected for his act of betrayal. While their closest relatives and friends were dying and they themselves were suffering, Kral had been living like a king. There was the unforgivable crime—not murder or treachery, but his comfort in the midst of their pain.

In France Kral had fought well. In England he could not have been serving as a German stool-pigeon, because two operations he knew enough about to wreck had been successful. There was even evidence that he had not betrayed Lt. Opalka to the Gestapo, or any of his underground contacts. Why had he turned traitor at the end? General Moravec went to see him several times. The best he could get was a fuller record of events.

Kral said that Gabcik threw the bomb, Kubis covering with the machine gun. Then the two rode their bicycles straight to the church, where they were given sanctuary. The presence of Lt. Opalka and Valcik was accidental. The four hoped that the storm would subside, and when the intense searching was called off they could escape to Slovakia. Kral hinted that he found out about the fugitives from a prostitute; he was vague at this juncture.

"But why did you tell the Nazis?" asked the general.

"Maybe for the million marks," said Kral. "Or maybe I thought it was better that two men die than two thousand. What does it matter?"

At the church, the Gestapo had shouted to come out, to surrender. The men answered with the machine gun, and later with their pistols. The cellar of the two-hundred-year-old church was a fortress not to be breached or taken by

storm. Finally the Germans flooded it. It was then that all four men, out of ammunition and near drowning, swallowed their cyanide. The Gestapo officers reported the great victory. Alois Kral was paid his million marks and lived in luxury for three years.

The next morning General Moravec got up early. He wanted to have a last talk with Kral and get the rest of the story, how Kral found out and why he informed. But before he could leave the house a member of the Citizens' Committee, a leading Communist, came to see him.

"Let's have a little chat," the visitor said, removing his coat.

"I was just leaving."

"It's no use," said the Communist, sitting down and lighting a cigarette. "We've given orders that you're not to be admitted at the jail any more."

"Why?"

"Why do you want to talk to Kral? You have no status in this matter."

"I want to find out the truth."

"We know what you want. You want to keep your glamorous story of the Heydrich case alive. Don't try to pretend that you care about Gabcik and Kabis, or whatever their names were, or Kral either. You just want people to believe that your so-called government in London was a band of heroes and patriots. You're not getting away with it. Keep away from the jail, or we will let you in. There's still room."

The general did not say anything.

"And stop sniffing around trying to get records and names of other people to talk to." The visitor got up. "In fact, former General Moravec, it would be a very fine idea for you to get out of here. I think we understand each other?"

"I understand you," the general said. "Good day."

He knew it was no use to go to the jail, but he did anyway. He was turned away so rudely that he was surprised to be admitted to the trial. It lasted about five minutes. Gabcik and Kubis were scarcely mentioned; Kral was tried and condemned for collaboration with the Gestapo. It was a marionette show. But just at the end an impromptu line brought it momentarily to incongruous life.

"Why did you do it?" the chief justice recited. "For their rotten German marks?"

"One million of them," Kral retorted. "How much are the Russians paying you?"

They killed him, of course; General Moravec watched the execution. He could not help thinking that Kral was dying for the wrong reason—not for his crime, but for Communist ends. Maybe that's really what keeps bothering me about Heydrich's death, he reflected. Did we kill him and trigger 5,000 other deaths in a just cause, or out of political ambition? Is any human motive ever untainted?

At least the two who did the killing, Gabcik and Kubis, came close to purity of motive. They had been healthy young men, not born martyrs in search of death. They had not killed for pride, greed, envy, anger, or ambition. They had killed like dedicated surgeons removing a cancerous mass. They must have felt deeply that the play had to unfold and that their business was not to choose the actors or criticize the choice of theater but only to play their ordained parts as best they could. Of all forms of courage, theirs was the highest because it is the most humble.

As he walked away, General Moravec met the Communist functionary who had forbidden him to visit Kral.

"Will you please tell me where Gabcik and Kubis are buried?" he asked politely.

"Nowhere," came the sardonic answer. "There are no graves. You foot-kissers of the British are not going to have that excuse to build a statue and hang wreaths. Czech heroes are Communists."

General Moravec felt tired. There were more Heydrichs than a man could destroy. Fascist Heydrichs died and Communist Heydrichs took their places and there was no end to it, as long as people coast.

Some day, perhaps, the wheel would turn and Czechs would grow strong again, and be free to remember the strength of Josef Gabcik and Jan Kubis.

The assignment of an interpreter with slightly ulterior motives for selected international visits yields a net gain.

THE INTERPRETER AS AN AGENT

Francis Agnor

The rather obvious time-honored practice of using interpreters assigned to international exchange delegations as intelligence agents (or, conversely, of getting intelligence personnel assigned as interpreters) has both advantages and disadvantages. If the interpreter makes the most of his intelligence mission, however, and observes some common-sense rules of behavior, there can be a net advantage both in the direct yield of information from such an assignment and in the improvement of an asset in the person of the interpreter. The advantage in immediate information is likely to be limited; the improvement of personal assets can be considerable.

In discussing these advantages we shall assume that the interpreter can be given adequate intelligence training and briefing (or that the intelligence officer is competent as an interpreter, and not compromised). We shall ignore the technical aspects of the interpreter's art and the occupational diseases, nervous indigestion and undernourishment, contracted in his attempts to gulp food while translating banquet conversations. We shall examine his domestic and foreign assignments separately: the advantages and disadvantages of assignment at home and abroad often coincide, but there are also important differences.

Gains on Home Ground

Let us look first at the domestic assignment, where the interpreter is on his own native soil, attached to a group of foreign visitors or delegates. As the communications link between the visitors and their strange surroundings, he possesses a strong psychological advantage in his available option to confine himself strictly to the business portions of the trip, leaving the visitors to fend for themselves in their spare time. Even if they have their own interpreter along, there are a

The Interpreter As Agent SECRET

number of matters—shopping, local customs, the availability of services—in which it would be convenient for them to have his help.

Recognizing their dependence on his cooperation for the smooth progress of their visit, they will usually do their best to establish, if not a cordial friendship, at least a good working relationship. A great deal depends on the interpreter himself, of course, but normal friendly overtures on his part will usually be met at least half way by the visitors. Just by being relaxed and perhaps willing to do a small extra favor here and there, he can become accepted as an indispensable member of their family group. An excellent way to break down reserve and promote a free exchange of ideas is to invite the group to his home. (It does *not* pay for him to be so obliging that he becomes a valet, and it is advisable to establish this principle early in the game.)

Continued friendly gestures are likely to result in time in the establishment of a genuine rapport, with its attendant benefits. If the interpreter is knowledgeable in the field of the official discussions which he is interpreting, he can clarify in private discussions with the visitors some of the ambiguous or contradictory statements made during the official talks. Without appearing too curious or asking too many questions of intelligence purport (he should be particularly circumspect at the outset of a trip, when his bona fides is subject to greatest suspicion), he will sometimes be able to get definitive statements in private which are lacking in the confusion and interruptions of official discussions. It is here that he may bring to bear his training or natural bent for elicitation, whether for official purposes or for his own education.

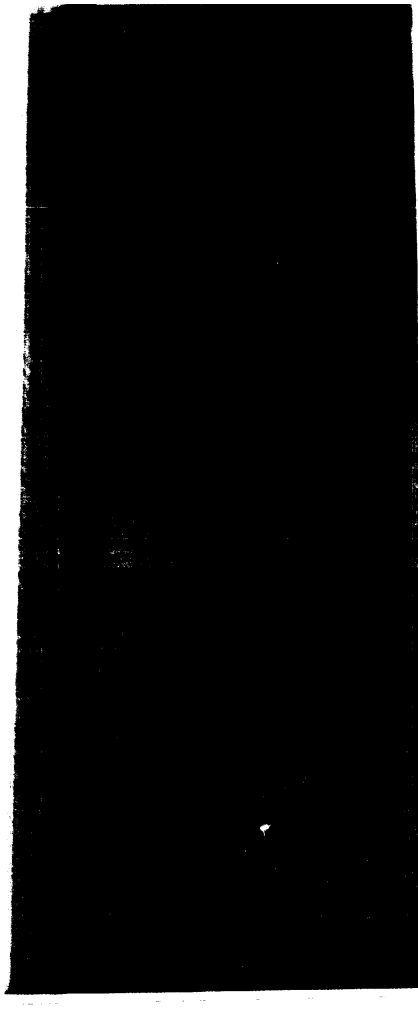
At the same time the interpreter himself is the target of numerous questions which reveal both intelligence and personal interests on the part of his charges. Their intelligence questions may indicate gaps in their own service's information, and their personal ones are more broadly useful in showing the preconceived picture of this country that the visitors have brought with them. Although they often realize that their questions betray a lack of sophistication, they are willing to sacrifice dignity to satisfy their burning curiosity. Honest, natural answers, despite the apparent rudeness of some of the questions ("How much do you make? How much are you in debt?"), strengthen the interpreter's position and may lead to even more revealing questions. If the visitors are from a controlled society the very opportunity to put certain kinds of questions is a luxury they cannot afford at home. And when one of them is alone with the interpreter he often shows eagerness to ask questions of a kind not brought up in group discussions.

In all these discussions the interpreter is gaining knowledge which no academic training can give him. First, he is given a glimpse of his own country through the warped glass of foreign misconceptions and propaganda. The image will not be fully that which hostile propagandists have sought to fix, but it will show where they have succeeded and where they have failed. Second, he learns how to get ideas across to these representatives of another culture, learns where he must explain at length and where he can make a telling point in just a few words. Finally, as a sort of synthesis of his experience, he can arrive at some conclusions concerning the visitors' inner thought processes, often quite alien to his own.

In addition to gaining these insights, the interpreter makes what may prove to be useful contacts in future assignments. How potentially useful depends on the spirit in which he parts company with the visitors, but anything short of outright hostility is likely to make them of some value.

Drawbacks and Limitations

The chief disadvantages of domestic assignment for the agent-interpreter lie in the shallowness of his cover. Visitors from Communist countries, in particular, start with a strong presumption that any interpreter is at least working hand in glove with local intelligence or security groups if he is not actually a member of one. The barrier thus imposed in the initial stages of a trip may break down as rapport is established, but there always remains a lurking suspicion that the interpreter is not what he seems, and the visitors are always on guard against the slightest hint of prying or propaganda. Furthermore, they collect a large file of biographic information on him in the course of their association, material which is certainly delivered to their own security forces. Matching



this up with some earlier trace they may have of him may blow his organizational connections.

Another limiting factor is that foreign delegations, particularly from Bloc countries, are drawn from the elite and so not typical of the peoples they represent. The impressions the interpreter receives concerning their beliefs and feelings may not be applicable to their countrymen at home. Though the delegation members may not be as orthodox abroad as on their home ground, where conformity is obligatory, they have a more compelling stake in the regime than the average citizen.

The last disadvantage to be noted depends in large part on the capabilities and limitations of the interpreter himself. It lies in the difficulty of retaining facts and figures in one's head while performing the complicated task of translation. It is possible to store in one's mind only a limited number of figures before the whole delicate structure of memory disintegrates into a jumble of confused statistics which are of no use to anyone. While it is permissible to take notes during long speeches where it is obviously impossible to remember everything said between pauses, this device is not appropriate for short conversations. If the interpreter is caught frantically scribbling notes immediately after a visitor has casually let drop the annual production of some electronic gadget, his usefulness to intelligence has largely evaporated. Furthermore, he has pinpointed an area of intelligence interest. A dash to the toilet after some particularly significant slip on the part of a visitor can sometimes provide privacy for note taking, but too frequent use of this dodge excites embarrassing commiseration or, more often, suspicion.

On the Opponent's Home Field

The foreign assignment differs in many respects from the domestic. On the profit side, in addition to getting the same positive intelligence take as the domestic interpreter, the interpreter abroad can be an observer, reporting on things which have nothing to do with his linguistic job. If he has had proper training, such observations can be quite valuable. Furthermore, he can acquire a feeling for the country and a sense of what intelligence activities can be undertaken and what cannot. He may, for example, attempt photography in areas on the borderline of legitimacy just to test reaction, or take a stroll before going to bed in order to check surveillance patterns. If he is an area specialist, the trip provides an education which no amount of book learning could give. He confirms certain of his preconceptions while discarding others, and he returns with a far more solid grasp on his specialty than he had previously. The confidence thus gained from firsthand experience is a very valuable asset if he is to be involved in operations against the country in the future.

On the negative side we find all the disadvantages noted in the domestic assignment: the interpreter accompanying a delegation abroad is, if anything, under sharper scrutiny as a probable agent, and should be prepared for a more or less clandestine search of his baggage; his memory is still strained to hold on to useful data; his official foreign contacts are the most loyal stalwarts of the regime; his digestion deteriorates. In addition, he finds himself a prisoner of his cover profession. Whereas the foreign delegation's dependence on him during his domestic assignment led to enlightening discussions, his own party's need for his help, not only on official matters but on everything that requires communication during every waking hour, now obliges him to spend *all* of his time with his own countrymen. He becomes a communications machine, unable to introduce any of his own ideas or queries into the conversations. Contacts are pretty well limited to those which the hosts have thoughtfully provided for about eighteen out of every twenty-four hours, and a delegation of six-foot Americans accompanied by watchful hosts is not the sort of group which a dissident member of a closed society is likely to approach in order to unload his true feelings about the regime.

Finally, even the diffident admissions of ignorance implicit in questions put to the interpreter on his own home ground are lacking when he goes abroad. Particularly in Communist countries the officials he contacts need to show that they have not been contaminated by his ideology; each tries to out-party-line the rest, less as an effort (usually counter-productive) to influence the visiting delegation than as a demonstration of his own orthodoxy for the benefit of his comrades. This compulsion precludes any serious discussion about either the hosts' or the visitors' country. During such exhibitions of chest-beating the interpreter is put on his mettle to hold his temper

and restrain himself from active participation in the conversation.

Criteria and Other Considerations

From the foregoing we may conclude that the principal intelligence value of the domestic assignment lies in the psychological field—exploration of mental attitudes, blind spots, thought processes, strength and weakness of beliefs—whereas the value of the foreign assignment derives from first-hand experience in the country and from the collection of observable operational and positive intelligence. It is perhaps unnecessary to warn that the interpreter can *not* fulfill the classic agent roles of recruiting spy nets, agitating for revolution, or personally stealing the master war plans. He will pay his way by less dramatic acts.

Here are some of the factors that should be taken into consideration in recruiting an interpreter for an intelligence mission or utilizing an existing intelligence asset in interpreter capacity. First, it must be borne in mind that almost any interpreter will be the target of intense scrutiny by the opposition, particularly in Bloc countries. The prevailing political climate today, however, is such that the interpreter's official position as part of a delegation protects him from arbitrary arrest, except perhaps in Communist China. The rest of the Bloc is so committed to East-West exchanges that it would not jeopardize the program for one rather insignificant intelligence fish.

Second, the interpreter should not be the only briefed member of the delegation going abroad. As we have shown, the interpreter has his hands full with his official duties and has little opportunity for taking notes. The official delegate, however, has good opportunities and excellent cover for taking notes. In addition, being presumably an expert in the field of the discussions, he can recognize significant material better than the interpreter.

Third, the size of the delegation is an extremely important factor affecting the usefulness of both domestic and foreign interpreter assignments. A delegation of more than six or seven people imposes such a burden on the interpreter that he has no time for an intelligence mission. He is kept continually busy rounding up strays, making travel reservations, getting people settled in hotels, and generally playing nursemaid. The best possible delegation would consist of one very lazy man who neither demanded nor rejected the presence of the interpreter.

Finally, the itinerary itself must be considered. On domestic assignments the most important thing is a relaxed schedule which will give the visitors enough spare time to observe their surroundings and ask questions about non-official matters. On the foreign assignment perhaps the most important consideration is the previous accessibility of the areas to be visited. If the area is completely off the beaten track or had previously been closed to foreigners, there is excellent reason to employ a trained observer as interpreter. Even the standard tourist trips, however, may provide useful information if the interpreter is alert.

This paper has been oriented primarily towards the interpreter-agent question as it obtains in visits to or from the Soviet Bloc, but many of the same factors are valid for neutralist or uncommitted areas. With the steady increase in cultural and professional exchanges among most countries of the world, opportunities for placing interpreters have also expanded. The expansion is not only making more experience and training available but is affording better cover for interpreters with intelligence objectives. Perhaps more of them should be given such objectives, despite the drawbacks we have noted.

SECRET

Anatomy of a scientific bag of tricks to conjure up the likeness of an unknown face.

THE IDENTI-KIT

Herman E. Kimsey

One of the most difficult problems in human communication is that of exactly duplicating in another mind the visual image one has in one's own. Language is not adequate to the job: the range of variant concepts corresponding to each descriptive word, not to mention their inevitable emotional and imaginative colorings, create inaccuracies, distortions, and downright false impressions. Man has therefore had to resort to comparing such an image or its elements with accepted common physical standards, which reach their ultimate precision in the standard units of measurement. This procedure leaves no room for the vagaries of individual interpretation.

This communications problem has always been particularly acute between the describers of absent persons and those whose job it is to identify the subjects described—notably the police—and the identification world has therefore been using for more than a hundred years some system of comparing individual characteristics with physical standards. The rather startling Identi-Kit herein presented, which provides a set of such standards, must then be considered the product of a development and evolution whose basic principles have been thoroughly proven. The Kit itself is no untested or controversial invention: it has withstood continuous testing and retesting for the past five years in both experimental and practical on-the-job applications.

The Identification Process

The basic premise of all identification systems is the fact that nature never creates two identical individuals. The problem is to record the identifying characteristics and then to catalog them objectively in some system by which they can be communicated from person to person and from place

to place. In identification by fingerprints and other similar means the recording is done by taking a physical impression of the characteristic features. Systems have been developed to catalog and communicate these with accuracy. But circumstances do not always allow for the taking of these physical impressions.

Identification by facial appearance gives us a wider range, requiring as it does mere visual contact with the subject, if only we have some method to crystallize out of the fluid memory of the observer an objective image of the subject's appearance and some way to code or tabulate its identifying characteristics. The Identi-Kit provides such a method of recording and cataloging. It has limits, however, short of positive identification, limits inherent in human ability to observe and remember.

If every natural mark and line in a human face could be visually compared with its antecedent image, complete and positive identification would be possible. Such positive identification is not practical because the human eye and brain, even with minute observation of all the natural marks and lines on a person's face, could not retain the memory of their exact location well enough to recreate a perfect image of it. But given the impossibility of an infallible system of visual identification, we can nevertheless make a practical and utilitarian approach to the identification problem through a process of elimination. In this process visual comparison can eliminate great numbers of possible persons who fail to qualify for likeness to the subject sought, and so reduce the possibilities to a few individuals, and frequently to a single one. The elimination process can begin with the gross physical features of age, sex, race, height, weight, build, etc., and proceed from there to the finer distinctions of facial appearance.

The Kit

It is in pinpointing these finer distinctions that we run into trouble when questioning a witness in order to build up an image of the absent person. And this is where the Identi-Kit comes in. The kit breaks a full-face image up into component parts—hair, brows, eyes, nose, lips, chin-line with ears, and age lines, plus beard, hat, and glasses, if any. It contains several dozen transparent slides picturing each of these components with different types of contours, 500 slides in all, with five notches on the side for different placements of each feature. Each slide is coded with a letter for the facial component illustrated and a figure for the particular configuration. The witness is given a catalog showing all these slides and asked to pick out the brows, nose, chin-line, etc., which most nearly suit the person he saw.

The witness, not accustomed to recognizing a pair of eyes with the brows removed or a mouth with no face around it, will find the going difficult at first. No matter: he will soon be able to study the whole reconstructed face and make adjustments. As he makes his tentative selection of components the slides are assembled on a make-up pad and the composite image displayed. Is the nose too fat? Pick a bonier one. Are the brows too prominent? Rearrange the pile of slides, putting the brows at the back and the eyes farther forward. Is the forehead too high? Slip the hair slide down by one or two from the normal third notch. Is the hair parted on the wrong side? Reverse the slide.

The witness is at last satisfied; he recognizes this man. It is not a finished portrait, but a good line-drawing of the right *type* of person. Figure 1 shows what a close resemblance to a well-known face can be assembled with the kit. In the first 129 operational cases in which the kit was used (by four different operators), the witness was able to produce a recognizable likeness of all but nine subjects. It took him anywhere from five minutes to several hours, averaging perhaps between thirty minutes and an hour.

There is one further refinement illustrated in Figure 1: if there are moles or scars on the remembered face, a grid of numbered lines is placed over the composite image and the positions of the marks are noted in this frame of reference. The scar grid is shown in Figure 2.

One of the advantages of the kit is the ease with which its coding permits a face to be recorded or transmitted to a distant location through almost instantaneous assembly from another kit there. A face is contained, for example, in the code message

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The Identi-Kit

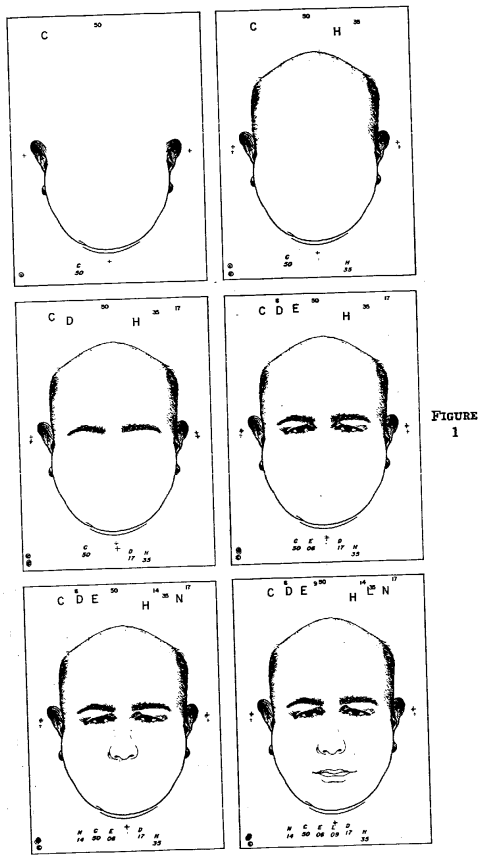
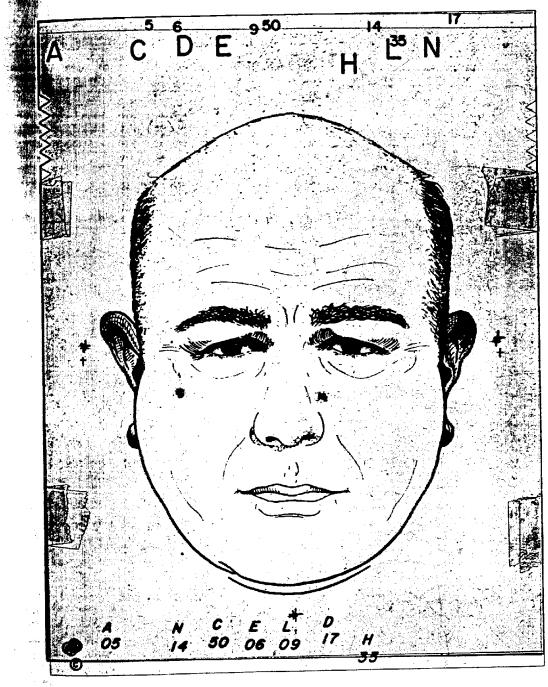


FIGURE 1



which means "Age lines slide 17, nose slide 21 two notches below normal, chin and ear slide 30, eye slide 79, lip slide 16, brow slide 55, hair slide 92 reversed and one notch above normal, mole under right eye at vertical 40 horizontal 20, no beard, glasses, or hat."

The number of such facial combinations that can be formed from the Identi-Kit is too astronomical to be conveniently

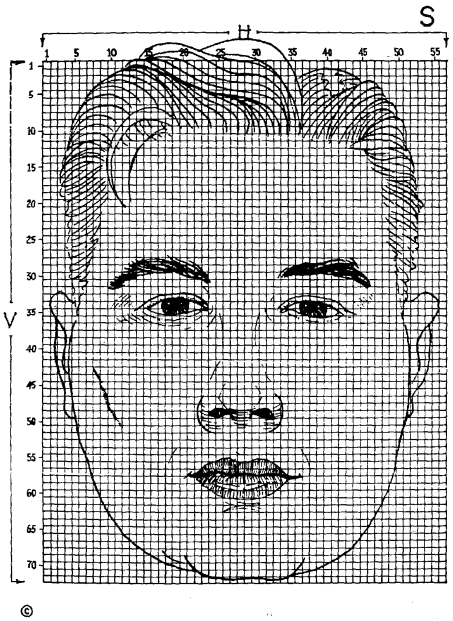


FIGURE 2

written. These assemblages are rather like passport or other identity photographs in reproducing physical contours without reflecting "personality." Although they thus fall short of portrait-type likenesses, they are sufficient when compared feature by feature with known persons to weed out quickly all but one or a few that each could represent.

We have been treating the kit as a police device, but its application in intelligence is obvious. One might almost say, in fact, that virtually every technique used in intelligence is

some variation of a police technique, a relationship reflected in the identity in many small countries of the police with the intelligence service. The kit was actually a product of intelligence effort later released for police use, and it is being applied in an ever growing number of operational intelligence cases to the problem of identifying the "third man."

The effectiveness of the kit, thoroughly tested by both intelligence and the police, has produced startling results in areas where it has been properly applied. In fewer than one percent of police cases is it identification by fingerprints that leads to an arrest. In the several hundred Identi-Kit cases on record the kit has led to a whopping 35 percent of the arrests. Most of these identifications were accomplished by cross reference of the witness's reconstruction with "mug" files of known criminals which were classified in the Identi-Kit system. This process was possible in 100 of the first 129 cases, with an average file search time of 40 seconds.

One must remember, however, that the Identi-Kit system is not intended to supplant any of the identification systems in present use. It is simply an additional tool in the interrogation kit, a special wrench that enables you to get at a formerly inaccessible spot and work there effectively. You still need your other tools, and you have to be a good mechanic in the first place: the kit needs the control of a skilled interrogator, who can master this additional instrument with the help of a special one-week course of instruction. A child can make mechanical faces from the kit; but only experience and training can develop the right images from the mind of a person who had no particular reason to remember them until the questioning began, or perhaps does not want to remember them at all.

The potential uses and performance of the Identi-Kit system have barely been touched upon in this article. Extensive files must be developed and many operators trained before the full benefit of the system will be apparent. But the intelligence officer will feel the power of a conjuror when he can take the codes from a face his agent has built up to the nearest telephone or communications center, notify a distant file of his problem, and get back the required identification, complete with details, in a matter of minutes more than the communications lag.

Glimpses into the meticulous work of those who examine identity papers for forgery or falsehoods.

CREDENTIALS—BONA FIDE OR FALSE?

David V. Brigane

The use of false documents, traditional in espionage, has responded like all else in the profession to the modern trend of expansion, organization, and technological advance. As intelligence activities have multiplied, the demand for documents has grown, and increasing effort has gone into their procurement and manufacture. On the defensive side, the detection of false documents has undergone a parallel growth in importance.

Those not familiar with false documentation would be amazed to see the elaborate techniques that go into the making of a high-grade reproduction and startled by the perfection of the results achieved. German World War II reproductions of British pound notes were so accurate that a Swiss bank, asked by German agents to check them as possible forgeries, had no reservations about declaring them authentic. The bank had not been remiss: it had made a careful examination and cabled London to verify the serial numbers and dates. After an extended period of use it was no physical flaw but merely the unavoidable duplication of existing serial numbers that ultimately gave them away. More recently a Western security service accepted a reproduction of its country's passport as genuine even after the question of forgery was raised.

But false documentation is an uneven business. Requirements on it are unpredictable, its raw materials often unavailable, and the time interval between demand and delivery can be appallingly short. The perfection of high-grade reproductions is no less astonishing than the crudity of makeshifts sometimes used even by the intelligence services of major world powers. Documents prepared by the German secret services during World War II have been described as being in

many instances "beneath contempt" and "veritable death warrants to their unhappy holders." [1] Japanese documentation specialists, examining German reproductions of the Russian basic identity document, noted that the cloth cover was too light, the printing ink too glossy, the multi-colored background tint made by the Zammel printing press noticeably brighter than it should be, and the place-of-issue indicator identical in all copies.

Soviet Agent Documentation

The Russians themselves have not been above using some of the crudest devices known to the forger's trade. In reproducing rubber stamps for the German military travel permit, they economized by making a separate stamp for the center emblem and combining it with various reproductions of the outer portion, which showed the place of issue. The composite cachets, of course, did not reflect the individual variations characteristic of the originals, did not have the emblem in proper alignment with its encircling legend, and even showed inking differences from the separate imprintings. But although the Soviet services have thus improvised under the pressure of operational needs, especially in wartime, gambling that their makeshifts will escape close scrutiny, they are nevertheless journeymen at the documentation trade, having long since passed their apprenticeship.

The Soviet emphasis on clandestine and deep-cover activities has historically made documentation of its agents a matter of prime importance. As Don Levine's new book recalls,[2] a false Canadian passport was successful in establishing an identity for Trotsky's killer, even though the NKVD has misspelled the name as "Jacson." Richard Sorge used forged passports to conceal his travel to Moscow, and his radio operator, Max Klausen, traveled on three passports, Italian, Canadian, and German.[3] Documents were a major concern to Alexander Foote and other members of his net. Rudolf Abel used an altered American passport for entry into the United States and two birth certificates to create different identities

[1] Alexander Foote, *Handbook for Spies*, p. 102.
[2] *The Mind of an Assassin*, reviewed in this issue.
[3] See Willoughby's *The Shanghai Conspiracy* (New York: 1952).

after his arrival; his assistant, Hayhanen, built an elaborate identity structure on an original American birth certificate apparently confiscated from a U.S. citizen who had emigrated to Estonia.[4] Khokhlov,[5] Wolwebber, and "Witczak" relied on documents to support false identities. But if documents were of critical importance in these famous cases which now happen to be in the public eye, imagine the documentation requirements created by the countless throng of subordinate agents and couriers, the proletariat of Communist espionage hierarchies.

To meet this continual demand, the Communists have always devoted a major effort to document collection and forgery. Even in the early thirties they operated a documentation unit in Moscow, one in Berlin, and a third in the United States.[6] Of these three the German *Pass-Apparat* was the most elaborate, with six workshops and agencies all over Europe. In Germany alone there were agents for document collection in each of 24 districts. Their sources were varied. Communist sympathizers sometimes offered their own personal documents. A cleaning woman at Berlin police headquarters stole blank passports for the Party from time to time. Two engravers at the Stempel-Kaiser plant provided duplicates of rubber stamps manufactured for the German government. Two Saarland police officers formed a partnership in passports, one supplying the blanks, the other the stamps. Once during these years a Communist raid on a Czech police office yielded 1500 Czech passports as a by-product, but the richest document hauls in the thirties came from the International Brigade in Spain. Later, during World War II, Max Habijanic, a Swiss police officer in Basel, was a reliable source of backstopped Swiss passports. Currently the Soviet intelligence services use documents of their own Bloc extensively to authenticate defector and refugee cover. They also maintain a systematic watch within the Bloc for foreign identity documents held by returned émigrés.

[4] See W. W. Rocafort, "Colonel Abel's Assistant," *Studies*, III 4, p. 1.
[5] See his book, *In the Name of Conscience*, to be reviewed in the spring issue of the *Studies*.
[6] David J. Dallin, *Soviet Espionage*, p. 92.

As a corollary to these Communist activities, Western intelligence services have given increasing attention to the counterintelligence aspects of documentation. Techniques of document analysis developed in scientific criminology have been combined with world-wide intelligence resources to serve the investigative needs of intelligence organizations. Document analysis has been found increasingly effective as an aid in the investigation and detection of enemy agents, in the surveillance and control of one's own agents and verification of their intelligence reports, in the screening of refugees and defectors, and in developing biographic information and establishing the bona fides of individuals of intelligence interest.

Enemy Agents

Among the odds and ends of intelligence debris deposited during World War II by the tide of battle in Burma was a Japanese document bearing the title "CERTIFICATE OF RELIABILITY." It contained a detailed description of the bearer, followed by this text: "Please extend every assistance to Mr. Aung since he is employed by us as a spy." Although a spy's normal documentation does not resemble the forthright Mr. Aung's in advertising his profession, it often holds hidden evidence against him. Document analysis can play a key role in uncovering enemy operations.

The nature of this role can be illustrated in the case history of a Soviet escapee, whose documents and statement, in accordance with standard practice, were subjected to analysis and evaluation. During examination of the documents for format, an abnormally small spacing between the abbreviation "No." and the serial number of his basic identity document, the *pasport*, attracted attention. No *pasport* from the same place of issue being available for comparison, an analysis of the imprint was undertaken. It was determined that the serial number had been added after the document was printed and bound, contrary to all normal procedures for manufacturing the *pasport*. Then the signatures came under suspicion, two signatures by each of two officials, because both pairs showed undue similarity. Subjected to handwriting analysis, all four proved to be traced forgeries.

Now the *pasport* was checked against the escapee's military reserve document, and an irregularity in the photographs became apparent. Normally the photos in the two documents would have been taken on different occasions and would show different poses, clothing, and lighting. It does sometimes happen that prints for both documents are made from the same negative, but then the print used in the *pasport* is differentiated by a white corner. In this case it was found that the photo in the military reserve document had been copied from that in the *pasport* but enlarged and cropped to eliminate the white corner. Such rephotographing from another document, generally inconsistent with legitimate issuance, may be necessary when a forged document should show the person at an earlier age or when because of time, distance, or security considerations the subject is not available to the forger for photographing in person.

In addition to these evidences of forgery, discrepancies were found between the information given in the documents and biographic data supplied by the escapee himself. In the use made of these discoveries this case was a typical one. While the results of document analysis did not prove conclusively that the man was a Soviet agent, they showed that his documents had not been issued legitimately, disproved his general story, and opened up specific lines of interrogation and investigation.

As a tool in the investigation of enemy agents, document analysis can be used to great advantage not only in making an initial detection but in the handling of known agents, inducing them to talk and confirming or refuting their statements. The material evidence from documents has a strong psychological impact in corroborating or disproving an agent's story, and can be effective in destroying his self-confidence and eliciting confession.

Agent Control and Other Applications

Document analysis is not reserved for enemy agents; it can be equally valuable in determining the reliability of one's own agents and in assessing their reports and missions. A Far Eastern case will serve as illustration, one wherein an agent's report and the authenticity of a Chinese Communist document on which it was based were tested by analysis.

As evidence of mission accomplished, the agent had also presented, along with the questioned document, the forged travel permit supplied him for use in the target area, now bearing a Chinese Communist cachet stamped on, by his account, at a checkpoint in the area itself. There were no known authentic exemplars with which to compare either the questioned document or this precise checkpoint cachet, but the cachet was compared with others from the same general area. It appeared to follow the normal pattern; several of the examples on hand were similar in format. One of them, however, was especially similar, to the point of suspiciously close likeness. Photographic comparison proved that both cachets had been stamped with the same instrument, and the place names separately imprinted.

Legitimate use of the same stamp in two different localities was out of the question. Fraudulent use of an authentic stamp in Chinese Communist hands was also out; this agent had no such capability. The answer was obvious: both cachets were forgeries. Since the exemplar cachet had been obtained from another agent travel permit, all papers connected with the mission this one had been used for came under scrutiny. Among them was a document, allegedly procured in another target area, which bore a small cachet of receipt in a Chinese Communist office. Here again economy of effort betrayed the forger's hand. This cachet proved to be identical with a receipt cachet on the questioned document in the current case, although the receiving offices could not have been the same. It was clear that neither of the reported missions had been carried out and that the documents allegedly acquired in the target areas were fabrications.

In a similar but simpler case, an agent presented a letter which bore a postal cancellation as proof that he had been in a certain city. This time, however, many authentic examples of postal cancellations from the city in question were available for comparison. Examination of the lettering, dating, inks, and indicators conclusively proved that the cancellation was a forgery.

Document analysis is useful in many other kinds of personal investigation—for establishing the bona fides of refugees, for surveying the activities of target personalities, for clearing prospective recruits, etc. Sometimes it is not a question of establishing authenticity, but only of developing informational content. An itinerary analysis from a passport, for example, provides detailed information on a person's movements which may not be procurable from any other source. Culling information of this type might appear to be a simple matter of reading the record, not involving analysis; yet it requires thorough familiarity with travel regulations and the customary passport entries to get the maximum amount of information. In one recent case where little proved biographic information was available on a person, his detailed record dating back to 1931 was built up through documents.

Spotting Forgeries

False documents are brought to attention through observation of some defect in them, through improper use, or through suspicion about the situation or activities of the bearer. Analysis can come only after the initial spotting, and relatively poor documentation can frequently escape detection if used in an ordinary way under circumstances which do not attract attention. Anyone who has experienced the harried formalities of an international port of entry must be aware that a passport flaw could well be passed. For where the vast majority of the documents are genuine and the circumstances of use normal, only an obvious flaw will give the document away.

The obviousness of a flaw, however, is relative to the acuity of the checker. The human mind and senses make astonishingly fine distinctions, often unconsciously, in dealing with familiar things. And the results of analysis can be used to increase the checker's sensitivity and so play a part in the initial spotting.

Checklists of irregularities indicative of forgery have long been a counterintelligence tool. During World War II Soviet intelligence prepared a list of indicators for reproductions made by the German Abwehr. One of the salient signs was the use of rustproof staples in the Abwehr reproduction of the Ukrainian basic identity document, a gleaming evidence of forgery. More recently such checklists have been useful in screening Hungarian refugees. In another part of the world, analysis of South Korean documents reproduced for

North Korean agents has revealed characteristic flaws and even made it possible to differentiate among those forged by different North Korean intelligence units.

Aside from characteristic individual flaws, patterns in the documentation of enemy agents can be detected by analysis and set up as spotting devices to be used in screening large groups of people. Some underlying pattern is likely to reflect the basic constants in operational needs and aims and the limitations of human imagination and material resources for support of operations. For one thing, there is a tendency to simplify false documents, since greater variety and complexity mean greater chance of error in detail. The resultant simplification may lead to the establishment of more specific detectable patterns. Take for example the question of showing a military career. A fictitious military background is complex and would require elaborate training to maintain under interrogation. The simpler solution of giving no military background has been noted in the documentation of numerous Soviet agents. Lack of military background may therefore be one element of pattern.

The effort to conceal information of value to the opposition may account for other elements of pattern. When the Communists use defector or refugee cover, the agents' documents themselves are of considerable value to Western intelligence. The Communists, operating under the assumption that these Bloc documents will be exploited by Western intelligence services, have introduced slight defects in them, presumably in the hope that these will be reproduced in documents for Western intelligence operations and thus serve to identify Western agents.

One of these defects is the separate imprinting of the *passport* serial number noted in the case of the Soviet "escapee" we examined earlier. Other deception devices have been an added letter, asterisk, or period, differences in printing impression, fabricated registration and deregistration cachets, and an additional dry seal not used in legitimate documents. One Communist service has shown a pattern of suppressing serialization information by not recording the number of a previous document as "basis for issuance."

But the Communist services risk being trapped in their own dialectic. This technique has been noted and turned antithetically to counterintelligence profit by the West: intentional irregularities are carefully watched for and when found incriminate the document holder. And their detection is facilitated by their tendency to follow a general pattern.

If, on the other hand, the Communists use the documentation of a neutral or enemy country, the limitations on their resources for such documents may set a noticeable pattern. After the Communist raid on the Czech police office back in the thirties, the windfall of Czech passports was used freely until French police became aware of the pattern of Czech passport holders unacquainted with their native language.

For all these potential aids to document checkers, it must be admitted that the counterintelligence function of providing them data for the identification of forgeries has in general not been well developed. This is evidenced by the fact that the average official whose duties include checking personal documents is surprisingly uninformed even about the characteristic features of domestic documentation. The systematic Japanese do go so far as to provide police with pocket-sized booklets listing the blocks of numbers assigned to provinces for Japanese Alien Registration Certificates and describing some elementary characteristics of forgeries; but these rudimentary aids did not prevent the Tokyo Metropolitan Police from being taken in by a Tokyo-issued Alien Registration Certificate carried by a self-acknowledged North Korean agent. Only the agent's insistence that he brought the document from Korea led the police to request an analysis by Printing Bureau experts, which proved the document a forgery.

Another Far Eastern country, less methodical, is also perhaps more typical in its lack of attention to the counterintelligence aspects of documentation. It gives its police officers little or no assistance in detecting forgeries of the basic identity document of its capital city, although an excellent device is at hand. Genuine documents in use in the city have come from thirty or more different printing plates made up from time to time when additional stocks have been needed and the old plates were no longer available. No attempt appears to have been made to turn this diversity to benefit by

maintaining accurate records of the districts and dates of issue of the different printings. At the same time, Communist reproductions of the document have seemingly undergone only the most elementary analysis by the security forces, and documentation, as might therefore be expected, has played a very minor role in the spotting of infiltrators.

In the long-continued struggle against Communist infiltration and subversion, this counterintelligence function deserves much greater attention.

Analytic Procedures

Analysis of documents is essentially a matter of comparison. But it is not simply comparing an item with an authentic example in order to detect discrepancies. Take two examples of a given signature: they will not be identical unless one or both have been forged. So the process of analysis is one of double comparison. First the two signatures are compared and points of similarity and difference noted. Then these differences are compared at least mentally with standards of acceptable variation which the handwriting expert has established through previous examination of large numbers of handwriting specimens and through study of principles based on similar experience by others. The most laborious part of the job, the establishment of norms, has therefore been accomplished before the two signatures have ever been seen. And norms could not have been established without large numbers of handwriting specimens available.

Essentially the same process is applied in all stages of document analysis, and invariably one of the greatest difficulties is to build up a volume of material extensive enough to determine norms. Standards of judgment are needed on all the innumerable details relating to format, alterations, aging, and applicability and use of the document under varying conditions.

One of the first things to be established is whether a document's format is the normal one, as determined from originals, photos, regulations covering issuance and use, and information reports of many types. All characteristics of the document must be considered—printing, dry seals, cachets, serial numbers, signatures and handwriting, style of entries, terminology, photos, inks, paper, binding, etc. Some of these elements must be subjected also to technical analysis, a specialized field requiring separate treatment.[7]

Interestingly enough, format analysis can be applied very successfully to Soviet agent documents issued by the Russians themselves. It is sometimes assumed that when an intelligence service requires the documents of its own country for its operations, it will make use of the genuine article, documentation invulnerable to counterintelligence analysis. This is by no means true. Even if an agent document is issued by the normal issuing office, it will frequently show peculiarities arising from the operational needs of the case. Most notably there is the problem of the date of issue: the agent cannot be equipped with birth certificate, school diploma, military registration document, occupational papers, and basic identity document all issued with a current date. But the blank documents appropriate to the required date may long since have been replaced by new forms, and the normal issuing official, not being a documentation specialist, will probably back-date the document as required without departing from current issuance procedures. The resultant discrepancies can be revealed by format analysis.

A Seaman's Passport carried several years ago by a Communist agent is a case in point. The document itself was genuine, duly issued by the appropriate Harbor Master, but it had been back-dated one year to meet operational requirements. Its serial number therefore corresponded to those of issuances a year later than the date shown, in other words to the actual rather than ostensible date of issue. It also bore a cachet which did not come into use until several months after its purported date and omitted the fingerprint which had been included up to and for approximately eight months after that date.

In addition, the document lacked the two dry seals normally placed over the photo. The logical explanation of this irregularity appears to be that it was received from the Harbor Master's office with serial number, issuance cachets, and signatures, but otherwise blank. The seal could not have been included with the issuance cachets since it had to be stamped

[7] See Wilson K. Harrison's *Suspect Documents—Their Scientific Examination*, reviewed in *Studies*, III 2.

on the still absent photo. For reasons of security or convenience, the intelligence office did not see fit to have the completed document stamped later by the issuing authority.

These various flaws in format could be detected because of the availability of document intelligence reports and a large number of photocopied Seaman's Passports from which norms could be established. These made it possible to determine the approximate dates on which the new cachet was introduced and the use of fingerprints discontinued, and through the serial number sequence shown in the photocopies to pinpoint the exact date on which the questioned document was actually issued.

In addition to flaws in format, the Seaman's Passport contained certain biographic inconsistencies. It recorded a change of position from radio operator to apprentice, a retrogression violating the normal occupational pattern; and it indicated that the seaman had made no voyage for a full year after the document was issued. An even more damaging fact turned up in the photocopies of Seaman's Passports on hand: the bearer had held a second such Passport concurrently with the questioned document, apparently for a different mission.

The difficulty of establishing norms and distinguishing furtive violations of them is compounded, however, by human unpredictability, which can easily disrupt the best established official procedures. Irregularities do not *per se* prove fraud. A document held by a Hungarian refugee is a good example. It aroused immediate suspicion because the code number appearing in the dry seal impressed on the photo did not correspond to the number in the cachet of the issuing office. This irregularity, however, was the legitimate result of an unusual chain of events. Involved in a bicycle accident in Budapest, the bearer had had to present her basic identity document for police check. The Budapest police had observed that the dry seal was missing—something she herself had never noticed—and checked with the issuing office in another town. When the authenticity of the document was confirmed, the woman was allowed as a matter of convenience to have the dry seal entered in Budapest, where she was then staying, although the Budapest office number on the dry seal would not correspond, as in principle it should, with the number in the issuance cachet.

In another refugee case, analysis disclosed entries in civilian documents inconsistent with the refugee's reported military record. Further interrogation of the subject satisfactorily explained these inconsistencies, drawing his exasperated comment that if there had been anything wrong with his documents, he wouldn't have presented them. This comment of a sensible man caught in the toils of a suspicious bureaucracy seems logical, but its logic is not shared by those who have something to conceal. The risk of having no proof seems greater to them than the risk of defective proof. They are generally not aware of the amount of information their documents will yield, and are prone to suppose that officials unfamiliar with them will fail to detect flaws.

One such hopeful deceiver was a Hungarian refugee whose documents were used to check his political background, especially with regard to whether he had served in the State Security Authority, the AVH. The man denied that he had, maintaining that he had been employed in the civil police only; but his documents told a different story. His Military Reserve Document recorded his police service in the space provided for military experience, and only service in the AVH, not in the civil police, is counted as military service. Furthermore, the Military Reserve Document was not issued until the termination of his police service, which therefore must have been considered the equivalent of military duty. This is one of the many cases in which documents that are themselves genuine serve on analysis to betray the bearer's falsifications.

Document analysis is a valuable tool in counterintelligence, but it is one tool only, to be used in combination with other investigative techniques. And since documents do not exist in a vacuum, intelligence data on many apparently unrelated subjects may enter into document evaluation. On one occasion, Navy reports on coastal Chinese weather corroborated the travel route shown on a Chinese Communist document, confirming other evidence of its authenticity. Furthermore, the dependence for analytic effectiveness on intelligence resources, document information and exemplars requiring constant collection effort, make this activity an integral part of intelligence processes, one that cannot be carried on in isolation from the whole.

A priori considerations prejudicing successful interrogation by trance induction suggest a possible variant technique.

HYPNOSIS IN INTERROGATION

Edward F. Deshere

The control over a person's behavior ostensibly achieved in hypnosis obviously nominates it for use in the difficult process of interrogation. It is therefore surprising that nobody, as the induction of "Mesmeric trance" has moved from halls of magic into clinics and laboratories, seems to have used it in this way. A search of the professional literature shows at least that no one has chosen to discuss such a use in print, and a fairly extensive inquiry among hypnosis experts from a variety of countries has not turned up anyone who admits to familiarity with applications of the process to interrogation. There is therefore no experimental evidence that can be cited, but it should be possible to reach tentative conclusions about its effectiveness in this field on the basis of theoretical considerations.

The Nature of Hypnosis

Experimental analysis has gradually given us a better understanding of hypnosis since the days of Mesmer [6] and his followers, who held that it results from the flow of a force called animal magnetism from hypnotist to subject. Nevertheless, although no present-day investigator shares the lingering lay opinion that hypnosis is in some way an overpowering of a weak mind by a superior intellect, there are still many divergent theories propounded to account for the accumulating clinical observations. Some of these have significantly different implications with respect to the susceptibility of a hypnotized person to purposeful influence.

The view that hypnosis is a state of artifically induced sleep has been widely held since Braid [7] invented the term in mid-nineteenth-century. Currently Pavlov [20] takes a similar position in maintaining that cortical inhibition, sleep, and hyp-

nosis are essentially identical. This view is now held throughout those parts of the world where Pavlovian theory is accepted as creed, but to the American investigator the experimental evidence against it appears overwhelming. Bass,[3] for example, has shown that the patellar—kneecap—reflex, which disappears in sleep, is not diminished in hypnosis. Wells [27] and others have demonstrated that all hypnotic phenomena can be elicited in a state bearing no resemblance to sleep, a performance which suggests the hypothesis that sleep-like aspects of hypnosis are not intrinsic to the hypnotic state but result from the hypnotist's suggestion that his subject go to sleep. Barker and Burgwin [2] have shown that the electroencephalographic changes characteristic of sleep do not occur in hypnosis except when true sleep is hypnotically induced. The findings of two Russian papers [16] which dispute this conclusion, affirming that the EEG rhythm characteristic of hypnosis resembles that of drowsiness and light sleep, have not been verified by replicating their experiments.

The concepts of suggestion and suggestibility as applied to hypnosis, introduced about 1880 by the Nancy school of hypnosis investigators, have been developed and refined in modern times. In a major monograph Hull [10] concluded that hypnosis is primarily a state of heightened suggestibility and has the characteristics of habit in that it becomes increasingly easy for a subject to enter the state of hypnosis after he has once done it. Welch,[26] in an ingenious application of the conditioning theory, pointed out that trance induction begins with suggestions which are almost certain to take effect and proceeds to more difficult ones. While the concept of suggestion does provide a bridge between the hypnotic and the normal waking state, it does not explain the peculiarity of the hypnotic process or the causes of the state of trance.

Several more recent approaches, which might be called *motivational* theories of hypnosis, hold that achievement of trance is related to the subject's desire to enter such a state. Experimentalists and clinicians who take the motivational view—including the present writer, whose conclusions on the subject of this paper are undoubtedly colored by it—believe that it accounts best for the major portion of the clinical data. Trance is commonly induced in situations where the subject is motivated a priori to cooperate with the hypnotist, usually to obtain relief from suffering, to contribute to a scientific study, or (as in a stage performance) to become a center of attraction. Almost all information currently available about hypnosis has been derived from such situations, and this fact must be kept in mind when one attempts to apply the data theoretically to situations different from these.

Hypnosis of Interrogees

The question of the utility of hypnosis in the interrogation of persons unwilling to divulge the information sought involves three issues: First, can hypnosis be induced under conditions of interrogation? If so, can the subject be compelled to reveal information? And finally, if information can be so obtained, how reliable will it be? The initial problem is then to induce trance either against the subject's wishes or without his being aware of it.

The Subject Unaware. Hypnosis has reportedly been effected without the subject's awareness in three situations—in sleep, in patients undergoing psychiatric consultation, and spontaneously in persons observing another subject being hypnotized.

The older literature is replete with references to somnambulistic hypnosis induced by giving suggestions to sleeping subjects in a low but insistent voice. No case records are cited to support these statements, however; and they appear, like many others in hypnosis literature, to have been carried over from one textbook to another without critical evaluation. In a recent study Theodore X. Barber [1] found considerable similarity between subjects' compliance with suggestions given during sleep and their reactions to ordinary hypnotic techniques. Since Barber had asked them for permission to enter their rooms at night and talk to them in their sleep, however, it is reasonable to assume that most if not all of them perceived that trance induction was his purpose. They cannot therefore be regarded as truly naive sleeping subjects. Casual experimentation by the present writer has failed to demonstrate the feasibility of hypnotizing naive sleepers. The sample consisted of only four subjects, three of whom awakened to ask belligerently what was going on. The fourth just continued to sleep.

It is frequently possible for a therapist to perform hypnosis with the patient unaware. Advising the patient to relax, suggesting that he would be more comfortable with his eyes closed, and so on, the practitioner may induce a deep level of trance in a relatively brief time without ever using the term hypnosis. Even though the subject has not explicitly consented to be hypnotized, however, his relationship to the hypnotist, here a man of reputation and prestige, is one of trust and confidence, of justifiably anticipated help.

Observers of hypnotic demonstrations may spontaneously enter trance. One of my own psychotherapy patients has reported that she went into a trance while watching me demonstrate hypnotic phenomena on television. This spontaneous hypnosis occurred despite the fact that the patient was in the company of friends and it was therefore a source of embarrassment to her. But here again we are dealing with a subject in sympathy with the purposes of the hypnotist and one who feels himself to be in a safe situation. It has been noted clinically that persons with negative attitudes about hypnosis are not susceptible to spontaneous trance.

The Subject Antagonistic. In experiments conducted by Wells,[29] Brenman,[8] and Watkins,[25] subjects making an effort to resist trance induction were unable to fight it off. Space does not permit a full review of these experiments here, but in all three the subject had had previous trance experiences with the hypnotist, which, we may assume, initiated a positive relationship between subject and hypnotist. The subject was instructed to resist hypnosis, but in the context of participating in an experiment to test this issue. It seems possible that his response was one of compliance with a supposed implicit desire on the part of the experimenter that he collaborate in demonstrating that trance can be induced in the face of resistance. The demand characteristics of the situation—those influencing the subject to partake of the experimenter's purposes—may have been such that his prescribed attitude of overt resistance was unable to prevail over the more fundamental attitude of cooperation in an experiment to show that trance can be brought on against a subject's will.

Orne [18] has shown that the demand characteristics of an experimental situation may greatly influence a subject's hypnotic behavior. It is clear that at some level any cooperative subject wishes an experiment to "work out," wishes to help fulfill the experimenter's expectations. If he grasps the purpose of the experiment or the bias of the experimenter, he is disposed toward producing behavior which will confirm the experimenter's hypothesis. This is particularly true in a hypnotic relationship.

We are led to the conclusion that the many apparent cases of hypnosis without the subject's awareness or consent all seem to have depended upon a positive relationship between subject and hypnotist. The most favorable situation is one in which the subject expects to derive benefit from his association with the hypnotist and trusts in the hypnotist and his ability to help. This would not be the situation in an interrogation wherein the hypnotist is seeking to extract information which the subject wants to withhold. The possibility of using hypnosis would therefore seem to depend on success in the slow process of nurturing a positive relationship with the interrogee or in perpetrating some kind of trickery.

Obedience in Trance

Assuming that an interrogator has circumvented these problems and hypnotized a subject who wants to withhold information, to what extent might the subject retain control of his secrets even in deep trance? This is an area where wide disagreements prevail among authorities and where experimental evidence is highly contradictory. Young,[30] for example, reports that subjects resist specific hypnotic suggestions if they have decided in advance to do so, while Wells [28] reports that none of his subjects were able to resist a prearranged unacceptable command or indeed any other.

Most work on this problem has focused on the more specific question of whether a person can be induced under hypnosis to commit some antisocial or self-destructive act. Supporting the negative view is the classic experiment by Janet,[11] who asked a deeply hypnotized female to commit several murders before a distinguished group of judges and magistrates, stabbing some victims with rubber daggers and poisoning others with sugar tablets. She did all this without hesitation. As the company dispersed, however, she was left in the charge of some young assistants, who took a notion to end the experi-

ments on a lighter note. When they told her that she was now alone and would undress she promptly awakened. The murders were play-acted, the undressing would have been real; and the subject had no difficulty discerning the difference.

Wells,[20] on the other hand, caused a subject to commit the post-hypnotic theft of a dollar bill from the hypnotist's coat. The subject was unaware of his action and denied vehemently that he had stolen the money. Wells argues that other failures to compel such acts do not disprove the possibility of doing it, whereas even one success demonstrates that it can be done. Schneck and Watkins, also, cite evidence that behavior ordinarily constituting a crime can be produced by hypnosis. Schneck [22] inadvertently caused a soldier to desert his duty in order to carry out a suggestion for post-hypnotic action. Watkins [24] induced a soldier to strike a superior officer by suggesting that the officer was a Japanese soldier, and he obtained from a hypnotized WAC some information classified "secret" which she had previously told him she would not reveal.

Although these demonstrations appear convincing, there are deficiencies in their experimental conditions. Since both Schneck and Watkins were Army officers, the offenses committed could not possibly result in any serious damage. At some level, the subjects must have been aware of this. This same reasoning applies in experiments requiring a subject to hurl acid at a research assistant or pick up a poisonous snake: the participants are protected by invisible glass, a harmless snake is substituted for the poisonous one, and so forth. The situations are clearly experimental and the hypnotist who requests the homicidal or self-destructive behavior is known to the subject as a reputable man.

From real life there are a fair number of cases on record dating before 1900, particularly among the German-speaking peoples, claiming hypnotically induced criminal behavior, mostly sex offenses. It is hard to evaluate these cases scientifically at this late date; frequently it was relatives of the subject, rather than the offender himself, that charged hypnotic influence. Within recent years, however, three documented cases in which hypnosis is said to have played a role in criminal behavior have been reported—by Kroener,[13] Mayer,[14] and Reiter.[21] These three cases have a common element: in each a dissatisfied person found gratification through the individual who later became his seducing hypnotist. It will be sufficient to examine one of them.

In the case reported by Kroener a young and sensitive unmarried male schoolteacher came under the hypnotic influence of a neighbor. Beginning with neighborly hospitality, the neighbor built up the relationship to the point where he was able by hypnotic suggestion to get the schoolteacher to give or lend him small sums of money and goods. As a test of his power he then implanted the post-hypnotic suggestion that the schoolteacher would shoot himself in the left hand. The schoolteacher actually did shoot himself in the left elbow, subjectively perceiving the event as an accident. Finally the hypnotist caused his victim to confess to crimes that he himself had committed. Throughout the entire affair, lasting five years, the schoolteacher had no recollection of the hypnotic sessions. He was convicted on the basis of his post-hypnotic confession, but through a chance remark began to suspect the nature of his relationship with his neighbor. After many appeals, he was recommended for examination to Kroener, who eventually uncovered the true course of events by rehypnotizing him and causing him to remember the hypnotic experiences with his neighbor.

It is evident that a case like this offers little encouragement to the interrogator hoping to extract secrets by hypnosis. When the relationship between two individuals is marked by intense feelings and a strong tendency in one to comply with whatever requests are made of him by the other, it is in fact hardly necessary to invoke hypnosis to explain the resultant behavior. In the interrogation setting this emotional relationship of subject to hypnotist is not likely to exist.

Accuracy and Veracity

Supposing, however, that an interrogee has been hypnotized and induced to divulge information: how correct is this information likely to be?

Accuracy in Recall. A great deal has been written, especially in the press, about the perfect memory and unfailing accuracy of recall people display in hypnosis. Statements have

frequently been made about their ability to recall anything that has happened to them even while infants, and according to some even prior to birth.[12] Hypnotic age-regression is a mechanism frequently used for this purpose. The subject is "taken back" to, say, the age of six. He begins to act, talk, and to some extent think in the manner of a six-year-old. He hallucinates the appropriate environment and gives details about people sitting next to him in school, his teacher's name, the color of the walls, and so on. His actions are exceedingly convincing, and it has frequently been assumed that an actual regression in many psychologic and physiologic age components to the suggested year takes place.

There is little evidence for the genuineness of hypnotic age-regression, even though there have been a number of studies, mostly based on single cases. Young [31] demonstrated that performance on intelligence tests was not appropriate to the suggested age. Unhypnotized control subjects were more successful than subjects under deep hypnosis in simulating their age. Using the Rorschach test and drawings in a study of hypnotic age-regression in ten subjects, Orne [17] demonstrated that while some regressive changes appeared, non-regressive elements were also present, and changes toward regression showed no consistency from subject to subject. The drawings did not resemble the work of six-year-olds, being characterized by Karen Machover as "sophisticated oversimplification." Drawings actually done at the age of six by one subject were available for comparison, and there was not even a superficial resemblance. Subjects often gave with great conviction the name of the wrong teacher, one they had had at a later age. Studies by True and Stephenson,[23] and McCranie, Crasilneck, and Teter [15] failed to find in electroencephalograms taken during hypnotic age-regression any change in the direction of a childhood EEG. Similarly they report no increased heart rate, as characteristic of infants, or other changes in electrocardiograph tracings.

Hypnotic Veracity. Considerably less data is available on the veracity of information furnished in trance. I have been able to find in the professional literature only one author—Beigel [4,5]—who deals with prevarication under hypnosis. He writes in a personal communication that people

may lie, refuse to answer, or wake up when asked direct questions on sensitive matters. Our own clinical work has amply convinced us that hypnotized subjects are capable of lying when they have reason to do so.

It is therefore possible that information obtained from an interrogee by hypnosis would be either deliberate prevarication or an unintentional confusion of fantasy and reality. The correctness of any information so obtained would thus have to be established by independent criteria.

Prophylactic Hypnosis

Three suggestions have been made by Estabrooks [9] for what might be called defensive uses of hypnosis. He proposed that it might be used to make personnel hypnosis-proof on capture by the enemy, to induce in them amnesia for sensitive material in the event of capture, or to help them resist stress, particularly pain, in captivity.

As we have seen, there is little or no evidence that trance can be induced against a person's wishes. Proofing personnel against hypnosis attempts which they could successfully resist without this conditioning would seem a practice of doubtful utility. The hypnosis undertaken in order to suggest that they resist trance induction upon capture might in fact possibly precondition them to susceptibility. It might be better simply to warn them of the techniques of trance induction and inform them that they can prevent it.

Providing by hypnotic suggestion for amnesia upon capture is an intriguing idea, but here again we encounter technical problems. It is well known that the effectiveness and permanence of hypnotic suggestion is directly related to the concrete definition of a specific task. General suggestions such as blanket amnesia have unpredictable effects even on very good subjects. Moreover, even if it would work to suggest that a soldier remember only his name, rank, and serial number, there is the serious question whether this might deprive him of information vital to him during captivity. It would artificially induce a state of severe psychopathology, which if adaptive to his situation in some respects might be extremely disturbing in others. The impoverishment of his knowledge and his loss of ego-control would give his interrogator a very

effective means of controlling him, possibly leading to a quasi-therapeutic relationship in which the captive would turn to the interrogator for "treatment" to relieve his distress.

This method has other serious drawbacks: offensive action, such as attempts to escape or schemes for cooperation among prisoners to obstruct interrogation, would be severely handicapped. It could be far safer to rely on the soldier's own ego-control to decide what information ought not to be revealed to an enemy than to make this decision for him in advance by hypnotic means.

Conditioning individuals not to feel stress, particularly pain, would seem to hold promise of protecting them as captives subject to interrogation. Laboratory experiments have demonstrated that although subjects under hypnotic analgesia continue to respond physiologically much as they do in the waking state, they do not report experiencing pain. It appears that hypnosis works best in situations of high anxiety and probably has its major effect on the anxiety component of pain.

Such a procedure might be undertaken in particular instances, but probably is not feasible as general practice. Only a relatively small number of individuals will enter a sufficiently deep somnambulistic state to produce profound analgesia. Furthermore, though major surgery has been performed under hypnosis proper, I am unaware that major surgical procedure has ever been undertaken during post-hypnotically induced analgesia. In some individuals, I am sure, this would be possible, but clinicians working with hypnosis generally believe that the hypnotic state itself is more effective than post-hypnotic inductions.

If this should be tried, what type of suggestion should the subject be given? The post-hypnotic suppression of *all* pain might be dangerous to the individual, since pain serves as a physiological warning signal; and it is doubtful that such a blanket suggestion would be effective anyway. It would be better to focus the suggestion on inability to feel pain at the hands of captors. Even this suggestion, however, would rapidly break down if the captured subject felt any pain at all, as is likely in all but a very few instances. The soldier who had been taught to rely on hypnosis as an analgesic and found it ineffective in certain situations might be considerably worse off than if he had not trusted this device in the first place.

Pseudo-Hypnosis as Interrogation Aid

People do undergo physical and mental suffering to withhold information from an interrogator. Without attempting to discuss the psychodynamics of capture and interrogation—which obviously will vary widely from captive to captive—we would hazard the suggestion that at the core of their resistance is the sense of extreme guilt which would be activated by collaboration with the enemy while still in control of one's faculties. The alleviation of this sense of guilt, therefore, might be extremely useful to the interrogator. Both the hypnotic and the hypnoidal states induced by certain drugs are popularly viewed as ones in which a person is no longer master of his fate. This fact suggests the possibility that the *hypnotic situation,* rather than hypnosis itself, could be used to relieve a person of any sense of guilt for his behavior, giving him the notion that he is helpless to prevent his manipulation by the interrogator.

A captive's anxiety could be heightened, for example, by rumors that the interrogator possesses semi-magical techniques of extracting information. A group of collaborating captives could verify that interrogees lose all control over their actions, and so on. After such preliminary conditioning, a "trance" could be induced with drugs in a setting described by Orne [19] as the "magic room," where a number of devices would be used to convince the subject that he is responding to suggestions. For instance, a concealed diathermy machine could warm up his hand just as he receives the suggestion that his hand is growing warmer. Or it might be suggested to him that when he wakes up a cigarette will taste bitter, it having been arranged that any cigarettes available to him would indeed have a slight but noticeably bitter taste. With ingenuity a large variety of suggestions can be made to come true by means unknown to the subject. Occasionally these manipulations would probably elicit some form of trance phenomenon, but the crucial thing would be the situation, not the incidental hypnotic state. The individual could le-

gitimately renounce responsibility for divulging information, much as if he had done it in delirium.

The correctness of information so obtained, however, would be no surer than that of information obtained from hypnosis itself. Further, the interrogator would have to act in his relationship with the captive as though he were confident that it was all correct, except as he could detect falsehoods with certainty. Any doubt he betrayed would increase the subject's feeling of control and so decrease the effectiveness of the hypnotic situation. Cross-examination, upon which much of his success in deriving accurate information ordinarily depends, would be denied him. Once the prisoner loses his feeling of responsibility for his behavior, he also is relieved of responsibility for giving accurate and pertinent information.

An effective defense against this hypnotic situation, as against hypnosis, could be provided by raising the level of sophistication of those who might be exposed to it. Even one or two lectures warning them of possible devices to trick them into believing themselves hypnotized could show them that people cannot be hypnotized against their will and cannot be compelled even under hypnosis to tell the truth or to follow suggestions really contrary to their beliefs.

Findings

In summary, it appears extremely doubtful that trance can be induced in resistant subjects. It may be possible to hypnotize a person without his being aware of it, but this would require a positive relationship between hypnotist and subject not likely to be found in the interrogation setting. Disregarding these difficulties, it is doubtful that proscribed behavior can be induced against the subject's wishes, though we must admit that crucial experiments to resolve this question have not yet been performed. The evidence also indicates that information obtained during hypnosis need not be accurate and may in fact contain untruths, despite hypnotic suggestions to the contrary.

Hypnosis as a prophylaxis against interrogation, whether to prevent hypnosis by captors, to condition against stress and pain, or to create amnesia for sensitive information, would function as an artificial repressive mechanism with the serious disadvantage of diminishing the captive's mastery of the situation. Finally, the hypnotic situation, rather than hypnosis itself, seems likely to be a more effective instrument in interrogation.

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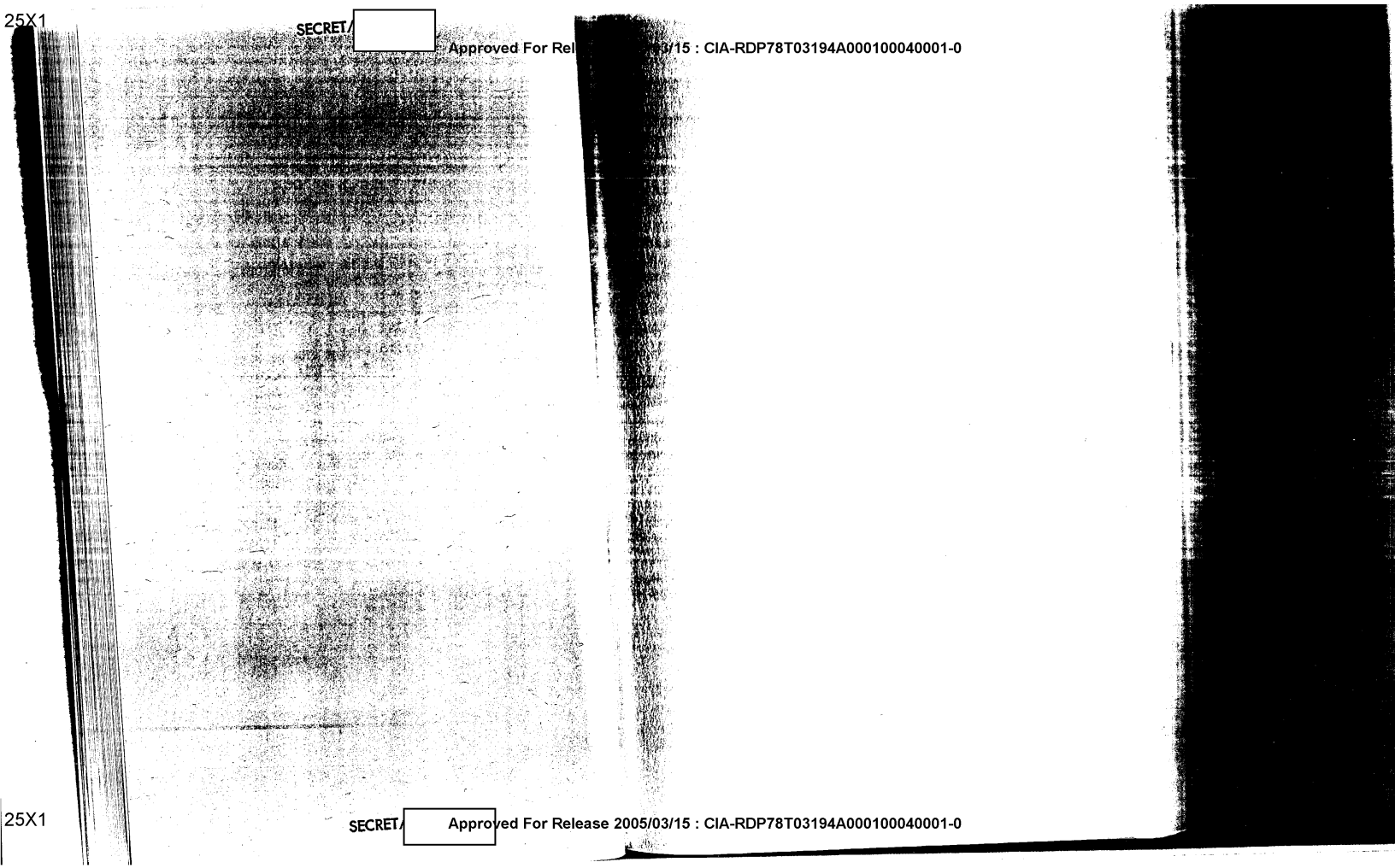
Articles and book reviews on the following pages are unclassified and may for convenience be detached from the classified body of the *Studies* if their origin therein is protected. The authors of articles are identified in the table of contents preceding page 1.

The editors gratefully acknowledge the assistance of Mr. Walter Pforzheimer, Curator of the CIA Historical Intelligence Collection, in scanning current public literature for intelligence materials, and of the many intelligence officers who prepared book reviews for this issue of the *Studies*. Most noteworthy in this respect are the following:

Military Intelligence in World War II . . Lyman Kirkpatrick
In the American Revolution . . . . . Walter Pforzheimer
Deriabin's *The Secret World* . . . . . [redacted]
Books by Levine and Wolfe on Trotsky . . . . . [redacted]
Boucard's *Les Dessous de l'Espionnage* . . . . . [redacted]
Furman's *Be Not Fearful* . . . . . [redacted]



FROM THE CIA CORNERSTONE CEREMONIES

America's fundamental aspiration is the preservation of peace. To this end we seek to develop policies and arrangements to make the peace both permanent and just. This can be done only on the basis of required information.

In war nothing is more important to a commander than the facts concerning the strength, dispositions and intention of his opponent, and the proper interpretation of those facts. In peacetime the necessary facts are of a different nature. They deal with conditions, resources, requirements and attitudes prevailing in the world. They are essential to the development of policy to further our long term national security and best interests. To provide information of this kind is the task of the organization of which you are a part.

No task could be more important.

Upon the quality of your work depends in large measure the success of our effort to further the nation's position in the international scene.

By its very nature the work of this agency demands of its members the highest order of dedication, ability, trustworthiness and selflessness—to say nothing of the finest type of courage, whenever needed. Success cannot be advertised; failure cannot be explained. In the work of intelligence, heroes are undecorated and unsung, often even among their own fraternity. Their inspiration is rooted in patriotism—their reward can be little except the conviction that they are performing a unique and indispensable service for their country, and the knowledge that America needs and appreciates their efforts. I assure you this is indeed true.

The reputation of your organization for quality and excellence, under the leadership of your Director, Mr. Allen Dulles, is a proud one.

Because I deeply believe these things, I deem it a great privilege to participate in this ceremony of corner-stone laying for the national headquarters of the Central Intelligence Agency. On this spot will rise a beautiful and useful structure. May it long endure, to serve the cause of peace.

—DWIGHT D. EISENHOWER

The laying of this cornerstone marks an important stage in the growth of the Central Intelligence Agency. We will soon have a home of our own, in these inspiring surroundings high above the Potomac.

The Agency was established 12 years ago by the same Act of Congress which created the National Security Council and the Department of Defense. Thus the Central Intelligence Agency was recognized as one of the important elements in our national security structure.

World War II and its aftermath and the international communist threat had already brought home to us that our vital interests were at stake in places as distant as Korea and Laos, in Africa and the Islands of the Pacific, as well as in this Hemisphere and in Europe.

Since then, our country's ever expanding responsibilities have increased the need for better information from the four corners of the earth and for sound analysis of that information.

The law creating the Agency was voted by a Congress in which there was a Republican majority. It was sponsored and signed by a Democratic President. For the past crucial years it has had the unfailing support of a Republican President and a Democratic Congress.

Facts have no politics.

Our charter, in the carefully drafted provisions of the National Security Act, has undergone no change. It provides that, under the direction of the President and of the National Security Council, the Agency shall correlate and evaluate intelligence relating to the national security, and perform such additional services of common concern in this field as the National Security Council may direct.

Wisely this legislation provides that we should have no domestic internal security functions. Yet the scope of the jurisdiction granted is ample. Our work is broad and comprehensive enough to enlist the interest and to inspire the devotion of those who choose, and are chosen, to enter upon it.

Laws can create agencies of government; they cannot make them function. Only the high purpose and dedication of all serving them can weld them into effective instruments for our national security.

In this work of intelligence we must not forget that human beings are largely the creatures of their beliefs. As individuals we tend instinctively, and sometimes wistfully, to become attached to causes, to theories, to solutions.

If they be sound and enduring, based on the deep moral strivings of man and the highest conception of our national interests, let us cling to them. But in the field of our relations with our fellowmen abroad, let us assure ourselves, through accurate intelligence, that our attachments to policies are soundly based.

It is the particular duty of this Agency to help perform this function in a world where change is the rule rather than the exception. This task must be carried out fearlessly, without warping to meet our prejudices or our predilections or even the tenets of existing policy.

As we build a new edifice in which to house, to concentrate and coordinate our work, we must rededicate ourselves to this high purpose.

The guiding motto to be inscribed on the face of this building will be the words taken from the Gospel according to St. John: "Ye shall know the truth, and the truth shall make you free."

The President of the United States has graciously consented to lay the cornerstone.

—ALLEN W. DULLES

The editors particularly invite readers to offer suitable manuscripts based on their own work or experiences. These need not be ambitious pieces, but may for example simply describe some not well known methodology, suggest or tell of procedural innovations, discuss successes or frustrations in getting efficient working relationships along some production line, show the complexity of an administrative process peculiar to intelligence, or supply some bit of intelligence history that should be recorded. The views of intelligence officers about the problems they live with are likely to be more useful than the constructions of those who theorize about them.

Manifest characteristics of climax in scientific research which may betray areas of future breakthrough.

THE SYMPTOMS OF SCIENTIFIC BREAKTHROUGH

Scientific intelligence has the responsibility for guarding this country from scientific or technological surprise, and to that end tries within practical limits to maintain constant surveillance over all foreign research and development. The evaluation of what is actually being done or published in a scientific field is certainly the best basis for detecting the imminence of a breakthrough there. But it is clearly impossible to keep all the many facets of modern scientific research under constant surveillance, and intelligence analysts must in practice confine their work to the major fields of obvious importance. A significant advance in some obscure field of basic science may thus go unrecognized until its application brings it to the forefront of world attention.

There may be a way, however, to mount a less exhaustive watch which would have some chance of uncovering research of potential breakthrough caliber even in obscure fields. If we can identify a group of common factors—general attributes of the research, of the scientists involved, of the environment—which characteristically tend to be associated with scientific breakthrough, we could set these up as tentative criteria for areas in which breakthrough may be impending. Research seeking to identify such common factors was done at Teachers College, Columbia University, in 1957–58 by six Ph.D. candidates in the physical and natural sciences. This article summarizes the results of their study.[1]

Methodology

The researchers selected for study certain breakthroughs in four fields—biology, medicine, chemistry, and phys-

[1] Entitled *A Study of Patterns Which Have Characterized Certain Major Scientific Breakthroughs of the Twentieth Century*, by Laurence J. Grassman, O.S.B., Eugene V. Petrik, John H. Rosengren, Mrs. Esther B. Sparberg, Herbert H. Stewart, and the author.

ics—which came to fruition during the twentieth century and have had a marked effect upon western culture. From lists of major scientific discoveries, some assembled from reference works and some submitted by members of a panel of 15 expert consultants, they made their final selection with an eye both to the apparent importance of the discoveries and to the availability of detailed information on them. The four breakthroughs selected were the following: relativity and the quantum theory; atomic energy; chemotherapy; and plant auxins.

The first of these comprised three major *theoretical* advances, Max Planck's quantum theory in 1900 and Einstein's special and general theories of relativity in 1905 and 1915. The others were all characterized by successful *experimentation*. The atomic energy breakthrough was viewed as the result of the concentrated experimental work done by some 30 scientists between 1939, when Hahn and Strassman identified barium among the products of neutron-bombarded uranium, and 1942, when Enrico Fermi and others working under Arthur Compton constructed the first chain-reacting pile. Chemotherapy began with Ehrlich's discovery of salvarsan in 1910, and 14 scientists figure prominently in its development up through Waksman's production of streptomycin in 1944. The discovery of the first plant auxin—growth hormone—was the work of one young botanist, Frits Went, in 1926. Altogether, 50 contributions by 47 different scientists can be distinguished in these four breakthroughs.

The case histories of these contributions were reconstructed by studying the scientific papers reporting them, by examining published accounts, at first or second hand, of the circumstances surrounding them, by assembling biographical and autobiographical material, and in some cases by corresponding with the responsible scientists or their associates. A description of the approach, techniques, and equipment used in the course of a breakthrough development was supplemented by analyzing the scientific climate at the time, the stream of scientific ideas which converged at the breakthrough point, the public environment outside the scientific world, the nature and vigor of support for the scientist in his research, and the personal characteristics and circumstances

of the scientist. The fifty cases were then compared and their common features identified and assembled into a pattern which might have predictive value for use in intelligence.

The results, not startling to anyone well acquainted with scientific activity, do constitute a methodical confirmation and logical presentation of the characteristics of scientific advance, which may serve to dispel some popular misapprehensions about scientists and their work. Since the case histories were all taken from the Western world, some of their features will not be applicable to other societies, notably the Soviet. But refinement in dry-run and live application, with adjustments where necessary to Communist conditions, might make them a first step toward a predictive methodology. They can be grouped for summary in categories—the general state of affairs in science, the state of the particular scientific art, the sociological environment, the attributes of the scientist, and the immediate circumstances of the breakthrough.

The State of Scientific Affairs

The contributions to breakthrough were not made in isolation from other progress, past and contemporary, in related—sometimes not obviously related—fields. The quantum and relativity theories of the first two decades of this century, with their widespread effects in all scientific fields, were in particular one of the preconditions for the nuclear physics breakthrough. Planck and Einstein, in turn, traced their own ideas which flowered in these theories back through many scientists of the eighteenth and nineteenth centuries to their foundation on Newtonian mechanics and optics. Fleming owed his penicillin and Waksman his streptomycin to Ehrlich, Koch, Pasteur, and ultimately Galen. Went found his auxin with the help of Darwin, Loeb, Fitting, and others. The interrelations among sciences and the cumulative nature of scientific advance thus illustrated create one necessary condition for breakthrough—the free communication of scientific information. Secrecy failed to retard the military application of atomic energy only because the basic discoveries had already been made in open collaboration by scientists of many nations. New facts turned up by a scientist in one corner of the world were subjected to scrutiny and verification in an-

other, led to new questions asked of the universe in a third, and stimulated new answers in a fourth.

A related circumstance notable particularly in the many contributions to the achievement of nuclear energy release and to the development of chemotherapy was the part played by a corps of inconspicuous scientists and technicians conscientiously gathering and patiently checking data in a series of unspectacular advances toward the goal. The scientists who became famous all acknowledged their indebtedness to the many who toiled in obscurity to make possible the eventual giant stride. Another condition favoring breakthrough, therefore, especially in experimental fields, is the presence of a great army of scientific workers doing lesser jobs.

We shall discuss later the attributes of the breakthrough scientist, but one of them seems universal and important enough to include as a third element in the general state of scientific activity: the scientists studied were clearly all men driven strongly toward some goal, usually characterized by the urge to reduce complexity to a unitary understanding of the environment. The third general condition favoring breakthrough is then the presence of inspired men devoting their lives to a compelling scientific purpose.

The State of the Art

The breakthroughs were all made when the stage, so to speak, was set for them, and in fact it is something of a truism to say that a necessary condition for breakthrough is that the state of the art be such as to provide some important unanswered questions and a theoretical foundation, mathematical tools, equipment, and techniques to answer them. Viewed thus, the breakthroughs seem but the next logical step in a series of lesser advances—the relativity theory, in answer to Michelson-Morley's fruitless attempt to detect an ether drag on light, going one step beyond Lorenz and Poincare, whose steps in turn led back to Maxwell and Faraday, the fathers of field theory; the nuclear breakthrough reached in logical progression from the first exploration of the new worlds of radioactivity and the cathode ray tube, backed by the quantum theory and Einstein's mass-energy equation; the antibiotics developed by systematic experimentation; the auxins found by application of newly developed techniques to

the old problem of phototropism, once teleological explanations no longer satisfied the scientist.

This logical quality in scientific advance has led some schools of thought to say that a ready state of the art is not only a necessary but a sufficient condition for breakthrough, that an advance is inevitable when the time is ripe for it; and these people quote Einstein to the effect that the special theory of relativity would have been born about the time it was even if he himself had not. Einstein, however, thought that the same statement would not be true about the 1915 general theory of relativity; and the study of these selected cases does not support the logical inevitability hypothesis. It would have been more logical to arrive at the quantum theory through an extension of Helmholtz' work than through Planck's thermodynamics. The mathematical tools which converted the special to the general theory of relativity had been there, unused, before. The potential of penicillin lay unrecognized for a dozen years. There is no logical reason why the plant auxin could not have been isolated by Loeb or Fitting, ten or twenty years before Went found it. The state of the art made the breakthroughs possible and likely, but did not bring them about.

The Sociological Environment

Scientific activity thrives or sickens according to the kind of society in which it lives, and a generally thriving science is of course a condition favoring breakthrough. The influence of society is felt in science through education, facility of communication, financial support, and moral support or stimulus. These factors are examined with reference to the cases under study and, more broadly, to their influence on twentieth-century science as a whole.

Education. The nineteenth-century extension of education to the middle classes, broadening the personnel base of scientific activity, is reflected in the fact that almost all the 47 scientists here studied came from the middle classes. The continued democratization which has now opened the universities to all classes must be counted a principal factor in the geometric progression of scientific advance in this century.

Communication. Easy communication among scientists we established above as a condition favoring breakthrough. The

proliferation of media for scientific communication in today's society provides for this intercourse as never before. On the other hand, national antagonisms and especially wars tend to bind it with requirements for secrecy.

Support. The universities furnished not only the personnel base but also the facilities and financial support in most of the cases studied, as in scientific activity generally during this period. The funds came in large measure from government, but the use of academic institutions as disbursing agents left them free from specific controls. The current trend toward industry-supported research was illustrated in some measure in dye and drug firm help toward the development of chemotherapeutic agents. Support from industry here, like the support from government in the nuclear breakthrough, was predicated on the development of applications rather than aimed at basic research. An adequate level of support for basic research appears to be independent of general prosperity or depression; the poverty of the thirties seems not to have retarded the mounting flood of scientific discoveries. Perhaps the surplus of resources available to science in prosperity tends to be squandered in hectic technological development.

Moral Stimulus. Basic science appears indifferent also to popular acclaim or disapproval. Whether idolized as the hero of technocracy in the twenties, hooted down as the creator of depression in the thirties, or tolerated as an impractical wizard in the forties, the scientist stuck to his laboratory, stimulated by his own goals. An obstacle in public doubt and suspicion was noted only in the early history of the work on chemotherapy. The stimulus of national aims is generally not strongly felt by the notoriously unnationalistic scientist, but great causes may spur him on: the refugee scientists who contributed to the nuclear breakthrough were moved not only by their scientific purposes but by bitterness toward Naziism and apprehension of a German breakthrough in atomic energy. That social needs may provide a stimulus was evident in the development of chemotherapy and in the work on plant growth substances. And finally the great stimulator of society, war, galvanizes science too, mostly toward technological applications but with repercussions on basic research, as seen

in the course of nuclear energy development. The cold war, with its less urgent demand for immediate applications, is better than hot war in this respect as in others.

In summary, we can say that sociological conditions favoring breakthrough include the following: universal education; absence of political inhibitions on scientific intercourse; adequate funds administered by an agency, such as the universities, interested in knowledge for its own sake; compelling social needs, especially for medicine and biology; the stimulus of international competition without a division of knowledge into national compartments.

Attributes of the Scientists

The 47 scientists studied included three women, two in medicine and one in atomic energy. Eighteen were born before 1900, the other 29 between 1900 and 1920. They were of many nationalities. Statistical studies of available data on them yield the following results.

Family Background. The chances are at least 2 to 1 and probably as high as 4 to 1 that at least one of the breakthrough scientist's parents was well educated. There is an equal probability that the family was in moderate to comfortable financial circumstances or better. The chances may be as high as 4 to 1 that the scientist was reared in a religious atmosphere. Incomplete data make it 11 to 2 that he was either the youngest or the oldest of the children but 18 to 1 against his being an only child. The boys born to the scientists' parents outnumber the girls 3 to 2. The chances are rather high against the family's having another scientist, but perhaps 4 to 1 in favor of its having others engaged in some profession.

Choice of Vocation. The great majority of the scientists became interested in science early in life. Many engaged in scientific hobbies and showed exceptional ability in childhood. Although many received encouragement in the choice of this vocation from their family, friends, relatives, associates, and some from their teachers, the greatest single motivating factor was their own interest. In choosing their fields of research, their own recognition of the need for development of some field, the presentation of an opportunity, and the guid-

ance of teachers seem to have been factors of equal importance.

Education. No significant pattern was found at the elementary school level, but the chances are 3 to 1 that the scientist's undergraduate school was a large one, the same that it was state-supported, and 2.5 to 1 that it was both. More than half of them left their undergraduate school to enter a large graduate institution. All 47 attended some graduate institution; the chances are 9 to 1 that it was a large one, better than 3 to 1 that it was state-supported, and almost 2 to 1 that it was both. Most of them had a Ph.D. or the equivalent at the time of their major contribution. A few were actively engaged in their doctorate research. At least half had continued their research studies past the doctor's degree.

Private Life. The scientists' marital status conformed to the normal pattern for the population. Their economic status followed the normal pattern for college graduates: most of them were at least moderately well off. No significant pattern was found either in their religious or in their political affiliations. Most of them were reported to be in good health. Some were active in athletic sports.

Age at Time of Contribution. This study confirmed other evidence [2] that advances are made with the greatest frequency by scientists between 30 and 39 years old. There is a sharp decline from these to the next most prolific age group, 20 to 29 years old, which is then followed closely by those 40 to 49 years old. Eighty-six percent of the contributions were made before the scientists reached their fiftieth birthday.

Professional Standing at Time of Contribution. The data from these 50 cases yield a zero probability that a major scientific advance should be made by anyone except a scientist actively engaged in research. The probability is also almost *nil* that a major advance should have been made by a scientist whose talent was not recognized at least by his immediate colleagues or the person directing the research. The probability is extremely high that the scientist who made a major

[2] See Harvey Christian Lehman, *Age of Achievement* (published for the American Philosophical Society by the Princeton University Press, 1953).

discovery had already published the results of previous research. The chances are better than 2 to 1 that he was in fact an acknowledged authority in his field. The large majority of the breakthroughs were made while the scientists were engaged in their regular research in their usual places of employment. Almost all of them were connected with academic institutions; only about 10 percent were connected in any way with industrial organizations, and only 2 percent were working solely in industry.

Composite Type. The study thus gives a composite portrait of the typical breakthrough scientist as a person who early in life became interested in science and in adolescence had a scientific hobby. He came from an educated, middle-income family, where he led a normal childhood life, probably getting more than average encouragement in his choice of science as a career. He attended the usual elementary and secondary schools but showed a decided preference for the larger graduate institutions, and more than likely he continued his studies after receiving the doctorate. He became a professor or fellow actively engaged in research at an academic institution. He published a number of scientific articles, and by the time he made his major discovery he was well known, although still probably only about 35 years old. He was fortunate in having chosen a field ripe for major advances, and fortunate also in his choice of associates. He seems to have led a normal and reasonably happy life, having the intellectual rewards of achievement in his chosen field and not much worry over financial matters.

Circumstances of the Breakthrough

In an effort to arrive at a corresponding picture of the typical breakthrough situation, the data from the 50 contributions were analyzed and tabulated under two heads: First, nature and origin of the contribution, whether theoretical or experimental, whether arising out of diffused advance along a broad front or from a concentrated push on a narrow front, whether lying in the scientist's own field or not. Second, organization and support of the research work, whether done by an individual, working alone or with assistants, or a team, by whom paid for, whether hindered by lack of funds, whether controlled by the sponsor, whether helped

or hindered by location, space, or equipment, and whether helped or opposed by other scientists.

Nature and Origin. Six of the contributions were classified as pure theory, and the remainder divided about equally between pure experiment and experiment plus theory. The pure theories advanced science along a broad front, most of the others on a narrow front. One, the penicillin spore on Fleming's bacterial culture, could be classified as an accident under propitious scientific circumstances. All the other experiments which led to contributions were planned, many of them *to clarify the unexpected result of a previous experiment.* None of the contributions lay outside the scientist's major field of interest or a closely related one.

Organization and Support. Team projects outranked individual research, with or without assistants, by a ratio of 3 to 1. About 76 percent of the scientists got all or part of their financial support from academic institutions and private foundations. About 14 percent got some government funds, but only about 2 percent were entirely supported by the government. Industry helped finance about 8 percent, but entirely supported only about 2 percent. Probably fewer than 10 percent of the scientists had what might be called generous budgets, but about 80 percent were receiving adequate financial support. Another 8 to 10 percent produced their contributions under very meager financial circumstances. Little or no control was exercised over the funds made available.

Physical conditions for the research were in general adequate. The favorable location of many of the laboratories may have been an important factor. New techniques were a factor in 50 percent of the contributions, new materials in 16 percent, and new or improved equipment, in conjunction with new techniques or materials, in 10 percent. About 85 percent of the scientists, all those on whom this information could be obtained, had the benefit of some kind of encouragement from other scientists. About 15 percent, before World War I, were hindered by some form of professional opposition. Scientific discoveries of the rank under discussion are never ignored by other scientists.

Patterns for Prediction

In assembling these common elements into patterns which intelligence might use as criteria for indicating the breakthrough potential of any particular piece of current research, we should recognize that no one can predict a specific breakthrough in the sense of anticipating its essential features. Such a predictor would create the breakthrough itself. We only hope to define the conditions that make some kind of breakthrough likely in a given area, much as hurricane prediction, although it cannot foresee a particular hurricane arising at a precise point in space and time, can at least set a twenty-four hour watch on any area where certain defined conditions have been found. When the patterns which have been associated with past scientific breakthroughs are found to characterize any field of current scientific research, that area should bear watching.

General State of Science. As we have seen, a major advance, irrespective of field, is most likely to be made when there is free and untrammeled interchange of the accumulated knowledge of all the sciences, and when the leaders of science, each dedicated to his particular goals, are supported by a large corps of ordinary scientific workers and technicians.

The State of the Art. If the experimental research in some field appears to have reached a plateau whereon old data are being refined and more precise measurements made but no new evidence generated which cannot be explained satisfactorily by current theories, where the tools of the trade are being fully used and are giving satisfactory results, and where the scientists believe they know all the answers or at least what to do to get the answers, no major advance is likely to be in the offing. But when scientists in a field are developing new experimental evidence that does not fit the old factual patterns and cannot be explained satisfactorily by present theories, and realize that they are dealing with new evidence, not "experimental error," then the science will begin to advance to the extent that techniques, instruments, and the materials required become available (sometimes from the developing state of another science), and a major advance is likely as the next logical step in a series of lesser advances.

Characteristics of Current Research. No major advance will be made in an area of science where little or no basic re-

search is being done, and there is bound to be some correlation between likelihood of breakthrough and quantity of current research. Intelligence analysts can get some idea of the amount of research being conducted in a given field by merely counting the number of scientific papers produced. The fear that many research papers may be unpublished seems not to be well founded: the results of basic research seem always to get published in some journal or other, since military secrecy, beginning to operate only after the breakthrough is almost accomplished, cannot even then dam all the flow. And peripheral areas not readily recognized as pertinent often hold the key to breakthrough.

Sheer quantity, of course, is no assurance of impending breakthrough. The features common to the advances we have studied show that research most conducive to scientific breakthrough will be conducted by a group of scientists working as a team in their major field of competency, with capable technical support, to advance scientific knowledge along a narrow front. It will have adequate financial support free from control, and moral support from other scientists. It is likely to consist of experiments designed to clarify the unexpected result of previous experiments, and to feature the use of new techniques, new materials, improved equipment, or all three.

The Scientists. The most common and outstanding characteristic of breakthrough scientists, we have seen, is youth combined with experience in the field in question. The scientist 30 to 39 years old will have had 10 to 20 years of research experience. The one who makes a great discovery, most common at this age, will almost invariably have worked in it for some years during and after his study for the doctorate. He will have published articles concerning his past or present research. He is likely to be attached to an academic institution or non-profit foundation, a recognized authority in his specialty. He almost invariably has attended large, well-known academic institutions, at least for his doctorate work.

As breakthrough scientists have not appeared suddenly from total obscurity, so they have not come, either, from the lower economic strata of society nor been freaks or even infant prodigies. They have come from homes of moderate

to comfortable financial circumstances, with one or perhaps both parents well educated. They grew up without peculiarities except an early interest in science. They lead the normal family lives of well educated, upper-middle-class society.

Sociological Factors. Scientific advance is most likely when society is in sympathy with scientists and their effort and does not create artificial restraints or barriers to their intercommunication or try to make them the mere providers of comforts. The favorable economic situation is one in which adequate funds can be made available for basic research—not necessarily times of greatest prosperity, which may be too busy developing previous discoveries to feel the need for further basic work. Politically also, the need for basic research must be recognized, whatever the circumstances that bring it to attention. Some nations foster scientific research in time of war (the United States) and some do not (Nazi Germany). Some governments favor research in time of depression and forget about it in time of prosperity. One country (the USSR) incorporates it into its national philosophy, and another (the United States) fosters it to keep ahead of the other. Finally, scientific advance is most likely when education is widespread and scientific education broad, not a mere training of technicians for the development of applications.

Check-List of Criteria

The five most critical of the conditions described above might be listed in abbreviated form as a kind of prospector's wand to be tested by intelligence analysts for its value in locating a subsurface breakthrough in any current field:

1. New experimental evidence that cannot be satisfactorily explained by present theories is being discovered at a rapid rate.
2. New techniques, new materials, and new or improved equipment are being brought to bear on an old problem.
3. A group of scientists is assembled to make concentrated attack on the problem.
4. This group is composed of relatively young men well qualified in this specific field.
5. The group has adequate technical and financial support and professional encouragement.

A unit of the Department of Commerce now serves the scientific public with an intelligence community product.

PUBLICIZING SOVIET SCIENTIFIC RESEARCH

Shortly after Sputnik I jarred the nation on 4 October 1957, people began looking for someone to blame; they rapidly settled upon the Government and charged it with a total neglect of Soviet scientific information, spreading the tall tale that Soviet scientific periodicals were gathering dust on the shelves of the Library of Congress. If the nation's shock could indeed be laid to some fault of the Government, that was the wrong charge, as previous articles in the *Studies* have shown.[1] Some half million pages of translations, condensations, and abstracts from Bloc—mostly Soviet—scientific literature had been issued by the intelligence community since the beginning of 1949.

The Government's fault, if there was one, with respect to this literature, aside from its general disposition to encourage public disrespect for propagandistic Soviet emanations, was the lack of vigorous measures to acquaint the U.S. scientific public with the published results of Soviet research. The intelligence community, however, for all that its responsibilities lie in the opposite direction from publicity, had for its own selfish reasons begun efforts to repair this omission even before the epochal earth satellite was launched. In 1958, thanks to the cooperation of the Department of Commerce and the Sputnik's lubrication of Congressional purse strings, these efforts reached full fruition.

Intelligence Doffs the Veil

The history of the community's treatment of information from Soviet scientific literature is one of progressive relaxation of restrictions, ending almost in an active peddling to the public. Up through 1949 this material was stamped *Restricted*

[1] George A. Pughe, "The Dust That Isn't There," II 2, p. 71; J. J. Bagnall, "The Exploitation of Russian Scientific Literature for Intelligence Purposes," II 3, p. 45.

when it was pure dead-pan translation, *Secret* when it was tailored to meet intelligence requirements. It was not just from force of habit that such stamps were applied: the Soviet security laws of 1948 throttled the flow of Soviet scientific periodicals to the United States until it reached an all-time low of 69 titles in the winter of 1949–1950, fewer than forty of them of intelligence value, while a full hundred unclassified Soviet periodicals were unobtainable outside the USSR.

In 1950, however, this trickle began the steady increase which has brought it to its present flood tide, and the intelligence community now recognized the periodical literature as its major and indeed only encyclopedic source of information on Soviet scientific organization, activities, and personnel. The need for classification faded with the softening of Soviet security practices, and it began to be more and more desirable for community purposes to issue this information in unclassified reports. The reasons an unrestricted availability is desirable lie in the difficulties of scientific intelligence production: the range of subjects that must be covered is all out of proportion to the number of scientific hands available in the community. A tremendous number of pin-point specialists in numerous divergent disciplines are required to evaluate the foreign data. Scientific intelligence, in fact, seems to be best served when *all* U.S. scientists are well informed about research conducted abroad, notably in the USSR, in parallel with their own specializations.

The reports were therefore declassified in 1950, and in 1953 came the first diffident move to make them publicly available: they were anonymously deposited in the Library of Congress, the Department of Agriculture Library, the Crerar Library in Chicago, and some others. This was a step in the right direction, but the producers of scientific intelligence, whether in Air Force, Army, Navy, AEC or CIA, still had difficulty getting the translated data to all the many scientists and contractors assisting them. Two or three years later the National Science Foundation, acting for the U.S. scientific community, began to help: in cooperation with several learned institutions it sponsored translations to be sold by subscription at a modest fee. The National Institutes of Health began a parallel program for medical translations, and together the

two now offer more than 50 Soviet scientific periodicals translated from cover to cover. The intelligence community advised and assisted in setting up both these programs.

The OTS Solution

In the search for a more comprehensive solution a meeting of the various processors and users of Soviet scientific data was held under National Science Foundation auspices on 3 October 1957, one day before Sputnik I. The Department of Commerce, which has the legal responsibility for disseminating technical information to the public but had no appropriation to handle the massive quantities of Soviet scientific literature, was invited to send a representative. It was unanimously agreed at this meeting that the intelligence community should make the material available, unclassified, to Commerce's Office of Technical Services, and that the Department should request from the Congress the funds to publish and disseminate it. In due course, with help from the Sputnik, OTS got the money, and since 1958 U.S. scientists have at a nominal cost had access through this channel to large volumes of data translated from Bloc sources.

The OTS intake, in its second year now, is a huge and growing one. The intelligence community's product has grown seven-fold from its low in 1948 to nearly 150,000 pages of abstracts and translations in 1959. To this flow contribute eight principal intelligence components—Air Force's Air Information Division in the Library of Congress and its Air Technical Intelligence Center, Army's ACSI, Corps of Engineers, Signal Corps, and Ordnance Corps, the Atomic Energy Commission, and CIA's Foreign Documents Division. Yet another 50,000 pages are supplied from outside the community by the translation programs of the NSF, the NIH, the Joint Publications Research Service, the Consultant's Bureau, Pergamon Press, and others.

For controlling and researching this total of some 200,000 pages of translated Bloc studies arriving annually, OTS sells a semi-monthly listing of "Technical Translations" done in and out of government and the semi-monthly "Scientific Information Report" produced by CIA, which presents the highlights of research published in nearly a thousand Sino-Soviet Bloc periodicals. Complete tables of contents of Bloc periodicals

are contained in the "Monthly Index of Russian Accessions" and "Monthly Index of East European Accessions" available at the Library of Congress and in the "Current List of Medical Literature," at the National Library of Medicine. Finally, CIA still produces the venerable "Consolidated Translation Survey," now in its eleventh year. Not generally available to the public, to be sure, it is nevertheless unclassified and may be sent to individual scientists when government needs are thereby served.

The intelligence community, which has neither the function nor the funds to publish reports for the general public, has thus in its own interest done the next best thing—helped arrange and supported appropriations for others to disseminate the information, making available all its unclassified production on a regular basis for public use.

A historical object-lesson on the consequences of letting ill-considered intelligence assumptions determine a course of action.

PORTUGUESE TIMOR: AN ESTIMATIVE FAILURE

The preparation of U.S. intelligence estimates has become an organized and methodical process. In response to a change in the international situation or in accordance with a more or less regular schedule, an estimate is laid on by the USIB. Terms of reference are circulated to members of the intelligence community, agency contributions are made, and a composite draft is produced by an estimates staff. After consideration and revision by representatives of the agencies, a final draft is presented to the USIB for concurrence in the National Intelligence Estimate of a given situation, provided to guide American military and political policy. Under special conditions this process is shortened, but not essentially changed. A similar process goes on in the governments of a number of Western countries, and we can probably assume that equivalent joint intelligence exercises are undertaken by the Soviet Party and Government.

This unhurried and systematic mobilization of available intelligence resources to bear on a given problem is a relatively recent phenomenon, one which can be said to have begun during World War II. Before that time intelligence estimating in most countries was a pretty haphazard affair. Strategic intelligence as a function distinct from policy-making was usually regarded as superfluous to the extent that it was regarded at all. Accordingly, until well into World War II, intelligence estimates appear to have played only a very modest role in the making of political and military decisions.

Of the many examples that could probably be drawn from the earlier years of World War II to show the disastrous consequences that followed from operational plans based on inadequate intelligence consideration, one of the most poignant, it seems to me, was the Dutch-led occupation of Portuguese Timor, the isolated overseas territory of neutral Portu-

gal. This rather sparsely inhabited eastern half of Timor, the easternmost large island in the Lesser Sundas, lies almost 2,000 miles southeast of Singapore but only about 500 miles from the north coast of Australia. Its proximity to Australia gave the otherwise remote and unimportant territory a disproportionate strategic value which, in the fall of 1941 and early 1942, brought it an unwelcome prominence not known before, or since.

The "Estimate"

The nature and extent of Japanese interest in Portuguese Timor in 1941 are not fully known. At that time, however, Japanese interest in the East Indies was primarily attracted to Sumatra, Borneo, and Java, where major sources of strategic raw materials were to be found; and the fact that Japanese operational plans in Southeast Asia prepared in 1941 did not originally envisage a landing in Australia removed what would have been the principal attraction for them in the Portuguese territory.

Dutch archives for this period are not open to the public, and we are therefore thrown back on official histories to shed some light on this recondite corner of the history of World War II strategic planning. A Dutch official history of the period, *Nederlands-Indie Contra Japan*,[1] states that Japanese interest in an air service with Portuguese Timor

> aroused great concern among the Allies. Timor, indeed, formed a very important link in the defense chain which linked Malaya, the Netherlands Indies, and Australia. A Japanese air base in Timor could form a very dangerous starting point for further actions against Dutch and Australian territory.

The Dutch history goes on to note that Dili, the capital of Portuguese Timor, "which lent itself so well to the establishment of a base for amphibious aircraft, was only weakly held by the Portuguese, largely with native troops." The Portuguese "garrison," in fact, consisted of a company of indigenous scouts—*cazadores*—and a platoon of "Frontier Police" apparently assigned to immigration duties along the Dutch territory border.

[1] Historical Section, General Staff of the Royal Netherlands Army (Bandung, 1950). Vol. II, pp. 230–232.

The Dutch history continues:

> These troops were not in a secure enough position to undertake with their own small strength to oppose a Japanese attack. The Netherlands Indies Government was thereby faced with a difficult decision. On the one hand was the danger of a Japanese occupation of Portuguese Timor, on the other hand occupation of this territory by us meant aggression against the territory of a friendly power. Since it could be foreseen practically with certainty that Japan would not hesitate to aim at Timor-Dili as a point of support, it was decided in November, 1941, to occupy the place with Dutch and Australian troops and thereafter to offer the Portuguese Government protection for that territory.

This November decision was apparently contingent upon an actual outbreak of war in the Pacific.

The Dutch history does not make clear whether any more detailed intelligence estimate was formulated on this point. Given the relatively primitive development of intelligence estimating at the time, it seems unlikely that the question was considered at any great length. Faced with an imminent Japanese assault in great force on the Netherlands Indies—which seemed virtually inevitable following the failure of the Dutch-Japanese trade talks in June 1941—the Dutch appear to have assumed that the Japanese would opt simultaneously for all the strategic alternatives open to them and attack across the board, from Sumatra to Timor.

Yet in the economic and trade negotiations of 1940 and 1941 the Japanese had shown little interest in Timor, emphasizing rather their desire to obtain additional supplies of the raw materials produced in Sumatra, Borneo, and Java. The few signs of Japanese interest in Portuguese Timor cited by the Dutch history hardly constitute convincing evidence of Japanese intent to occupy the territory. Nor do other available sources provide such evidence in recording Japanese economic interests there. A semi-official Portuguese source, *Timor Portugues*,[2] states that Japanese firms began to invest capital in Portuguese Timor in 1934 and that in 1938 a Japanese Consulate was opened in Dili. There is no indication that these Japanese interests were more than purely commercial. Portuguese Timor was and is a producer of modest consequence

[2] By Capt. Helo Felgas, Agencia Geral do Ultramar (Lisbon, 1956) pp. 287–288.

of high-quality *Arabica* coffee. After the opening of the Japanese Consulate in Dili an Australian Consulate was also established there.

Even the efforts made by the Japanese to obtain landing rights in Dili need not have been considered particularly ominous, for an air route from Japan to Australia via the Palaus and Portuguese Timor is fairly direct, avoiding the long detour to the west through Hong Kong, Singapore, and Batavia. Moreover, an airline operating from Japan to Australia via Singapore and Batavia would have faced heavy competition from the British-owned Imperial Airways, particularly on the Singapore-Australia segment. The Dutch estimate of Japanese intentions towards Portuguese Timor, therefore, appears to have been both hurried and poorly done. The extent of Australian participation in this estimate and the consequent decision to occupy the neutral territory is not known, but Australian agreement to the action must have been obtained.

The Action

If the estimate was poorly done, the operational response was even worse. After the outbreak of hostilities on December 8, the Royal Netherlands Indies Army prepared to occupy Portuguese Timor. The action was carried out on December 17 by a combined force of about 600 Dutch-led Indonesian troops and some 300 Australians. The combined force was equipped with four 75-millimeter field guns, six sections of machine gunners and three squads of light mortars, in addition to the usual small arms with which infantry companies were then equipped. The force had no tanks, no anti-tank guns, no provision for air or sea support.

This action was undertaken at a time when the forces available for the defense of the far more important islands of Java, Sumatra, and Borneo were already much too slender to oppose the avalanche of Japanese troops pouring into Southeast Asia. The size and weight of the forces already poised to attack the Philippines, Malaya, and the Netherlands Indies were reasonably well known to the Dutch and the other Allied countries, and against this background the absurdity of the unsupported and ill-equipped 1,000-man expedition to occupy Portuguese Timor stands out clearly.

The Portuguese response to the Dutch-Australian invasion was non-violent, but the Portuguese Prime Minister, Dr. Salazar, immediately protested to the British government. He apparently sought British assurances that the Allied invasion forces would be withdrawn upon arrival of Portuguese East African troops to be dispatched from Lourenco Marques in Mozambique to reinforce the Timor garrison.

The Aftermath

Whatever the arrangements between the Portuguese and the Allied nations, the presence of an Allied force in Portuguese Timor inevitably drew the attentions of the Japanese. As their invasion forces moved deep into the Netherlands Indies in late 1941 and early 1942, they undertook preparations for the assault on Timor. On February 20, 1942, simultaneously with a landing near Kupang, capital of Dutch Timor, Japanese troops of the 228th Infantry Regiment, supported by destroyers, went ashore near Dili and met only light resistance. The Dutch troops withdrew towards Dutch Timor, where they were eventually forced to surrender, and the Australians retreated to the center of the island. From there they carried out guerrilla operations throughout 1942, but in February 1943, after suffering heavy casualties, they were withdrawn to Australia by submarine.

From a faulty intelligence estimate to an ill-considered operational plan, the Allied occupation of Portuguese Timor presents a sorry spectacle. Much the worst of it is the fact that this performance probably brought on the Japanese invasion of the territory. It cannot be said with certainty that the Japanese would otherwise not have taken action, but it should be noted that they respected the neutrality of another Portuguese territory in the Far East, Macau, which remained wholly in Portuguese hands throughout the war. Although a British consul was resident in that territory during the war years, no Allied troops were ever stationed there. Given its relatively few attractions, it seems reasonably plausible that the Japanese would have left Portuguese Timor alone also, if the Allied nations had not been the first to occupy it.

For the balance of the war a fairly large Japanese occupation force remained in Portuguese Timor. This force, in turn, presented an attractive target to Allied bombers, based less

than 500 miles away in Darwin, Australia: Dili was virtually flattened by Allied bombardments. Late in 1942 the Governor of the territory, Sr. Manuel Ferreira de Carvalho, ordered Portuguese citizens (as distinguished from the indigenous "protected persons") in Timor to concentrate in an area west of Dili, on the north coast. There, he felt, he could provide them some measure of defense against the depredations of the occupation force and the indigenous bandit gangs encouraged by the Japanese. While this move gave them some protection, their supplies of food, medicine, and clothing steadily dwindled in quantity and quality throughout the rest of the war, and eventually 50 of them, out of a total of some 300 in the territory, died. Several thousand indigenous inhabitants died from causes directly or indirectly connected with the Japanese occupation.

Although the certificates of death issued for these people (if, indeed, any certificates were made) may have given malaria, beri-beri, or complications of dysentery as the immediate cause of death, the real cause they might have cited was "Bad intelligence estimate."

INTELLIGENCE IN RECENT PUBLIC LITERATURE

MILITARY INTELLIGENCE IN WORLD WAR II

THE LONGEST DAY. By *Cornelius Ryan.* (New York: Simon and Schuster. 1959. Pp. 350. $3.95.)

D Day. By *David Howarth.* (New York: McGraw-Hill. 1959. Pp. 251. $4.95.)

INVASION: 1944. By *John Froyn Turner.* (New York: G. P. Putnam's Sons. 1959. Pp. 248. $3.95.)

The fifteenth anniversary of the greatest triphibious assault in history was marked by the publication of these three books devoted exclusively to the events of that sixth day of June, 1944. By far the best written, most concerned with intelligence aspects of the action, and most skillfully put together is Ryan's *The Longest Day.* Like Howarth, Ryan bases his story largely on the personal accounts of participants, but by concentrating on fewer individuals and developing some new material he has produced a better narrative.

The Longest Day tells how the senior German commanders were scheduled, ironically, to attend a Kreigsspiel at Rennes on 6 June to war-game the theoretical invasion of Normandy. It devotes a chapter to the two-part signal broadcast by the BBC to notify the French underground that the invasion had begun—how Admiral Canaris had learned of the code phrases in advance and correctly interpreted their meaning, how Lt. Col. Hellmuth Meyer, intelligence officer of the German Fifteenth Army, picked them up when broadcast, and how the Fifteenth Army was thus put on the alert while the Seventh Army, which held Normandy, was not. It shows how, after the action had begun, the German High Command was split on its evaluation, some believing it a feint to draw the defenders away from the Pas de Calais, the real objective of the main assault.

Howarth's *D Day* describes in greater detail the individual battles fought at the sites of air drops and on the beaches, supplying fewer personal anecdotes than Ryan's book. Al-

though Howarth pays less attention to intelligence, he gives several pages to a description of British beach reconnaissance: in the preceding months men had been secretly landed on some 30 French beaches to determine the precise characteristics of the landing areas.

Turner's *Invasion: 1944*, "The First Full Story of D-Day in Normandy," is much more detailed than the other two, but far less interesting. Turner concentrates on logistic aspects of the operation, devotes the first half of his book to planning and preparations, and has little to say about intelligence.

BATTLE: The Story of the Bulge. By *John Toland*. (New York: Random House. 1959. Pp. 400. $5.00.)

This is a superbly organized and excitingly written book about the battle in the Ardennes, from 15 December 1944 to 23 January 1945, in which three German armies smashed through a lightly held Corps sector of the United States First Army and were ultimately thrown back by the First and Third U.S. Armies plus a British Corps. Mr. Toland indicates that he travelled a hundred thousand miles and talked to more than a thousand participants in order to write this hour-by-hour account of the engagement. He has done a magnificent job in making a cohesive picture of the multitude of clashes (between units ranging in size from patrols to armored divisions) that collectively were the Battle of the Bulge—a struggle in which there was seldom a defined front and where knowledge of the enemy's location was certain only upon contact with him.

The author gives short shrift to the controversial question of whether the initial success of the Germans in the Ardennes was the result of a major breakdown in the Allied intelligence effort. At the beginning of his story he notes that on the night of 15 December "no Allied commander seriously feared a major German attack." A woman who came through the lines of the 28th Division did report having seen a mass of German tanks behind the Siegfried Line, and she was sent to Corps and then to Army to tell her story. Col. Dickson at First Army predicted there would be an all-out German offensive, and in the Ardennes; but his associates said he was a notorious pessimist, and overworked. The 12th U.S. Army

Group said attrition was sapping the German strength. Montgomery was of the opinion that the Germans "cannot stage major offensive operations," and the SHAEF G–2 said the Germans were all but finished.

After describing the 38-day battle that caused 75,000 casualties, Mr. Toland concludes:

> Much has been written of the failure of American G–2 officers to foresee the battle. The rather primitive, naive American intelligence system, based largely on procedures used by the Pinkertons in the Civil War, was not at fault; the sophisticated British system was just as blind. The blame should not even fall on Hodges, Bradley and Eisenhower, nor on the architects of strategy, Roosevelt and Churchill. The entire Allied world must share the blame. On the night of December 15, 1944, it breathed the air of complacency, optimism and self delusion.

Although Mr. Toland's graphic description of one of the decisive battles of movement in modern warfare is fascinating reading, particularly for those who fought in the Bulge, its intelligence interest is limited to this brief treatment of the estimative failure and a presentation of some challenging situations for the combat intelligence officer.

THE CLOCK WITH FOUR HANDS. By *James Leasor*. (New York: Reynal & Company. 1959. Pp. 314. $5.00.) Published in England under the title, "War At The Top."

With some interpolations by Mr. Leasor, this book is in effect the diary of Sir Leslie Hollis, who was in an exceptionally advantageous position to observe the making of high British policy before and during World War II: as one of the secretariat of the British Joint Chiefs of Staff he attended some 6,000 meetings of that body. Unfortunately, the book does not live up to the potential of that experience, either in depth or in balance. It is rather a collection of anecdotes, some amusing but all highly opinionated, tied together by the thread of history. If Sir Leslie's diary contained more of what could be expected of it than appears here, or if he still had access to the Joint Chiefs' minutes, he would have done better to publish his own memoirs.

There are, however, some interesting tidbits here for the professional intelligence officer, telling for example how the British Government in the thirties refused to listen to intel-

ligence reports on the growing strength of Germany, and how its surprise at the Japanese attack on Pearl Harbor equaled that in the United States. British intelligence correctly predicted the German attack on Greece. On the other hand, it so exaggerated German industrial production (which actually was less than British) that it seriously inhibited the planning for the second front.

A useful chapter devoted to topographical intelligence and the organization of the Inter-Service Topographic Department describes the way it had to scrounge for information. There was scarcely enough to brief the R.A.F. for a raid on the Dortmund-Ems Canal. When the army had to be evacuated from Dunkirk so little data was available about the beaches that travel agencies were asked for brochures, and then destroyers were sent for an on-the-spot look. The BBC broadcast an appeal for photographs taken by tourists, expecting to get eight or ten thousand, and were inundated by nine *million*.

"Know Thine Enemy." By Captain *J. V. Heimark*. (U.S. Naval Institute Proceedings, Vol. 85, No. 8, August 1959. Pp. 65–71.)

Shows how good intelligence—primarily reconnaissance—on the part of the U.S. forces at Midway and ignorance of the enemy's whereabouts at Pearl Harbor, in the Coral Sea, and in the Philippine Sea had a decisive influence on the outcome of these naval actions.

IN THE AMERICAN REVOLUTION

TURNCOATS, TRAITORS AND HEROES. By *John Bakeless*. (Philadelphia: J. B. Lippincott. 1959. Pp. 406. $6.50.)

In the past twenty years, since the publication of Morton Pennypacker's *General Washington's Spies on Long Island and in New York*[1] and Carl Van Doren's *Secret History of the American Revolution*,[2] more and more facts and documents concerning British and American intelligence in the American Revolution have come to light. Colonel Bakeless' misleadingly titled book is the first attempt to synthesize this new material with the old in a comprehensive intelligence history of the Revolutionary War.

The generally conceded fact that American intelligence on a large and organized scale dates only from World War II should not be allowed to obscure the wealth of espionage activity which the Revolution developed from casual and amateurish beginnings until it reached a point of considerable sophistication, with backed-up cover, secret writing, couriers, cutouts, double agents, and deception operations. It is evident that George Washington himself was a masterful intelligence officer. He gave close personal attention both to the operational details of espionage and to the reports of his agents, whom he sometimes called "my intelligencers." He had a preference for spies "who live with the other side; whose local circumstances, without subjecting them to suspicions, give them an opportunity of making observations"; he noted that it was "necessary to be circumspect with double spies."

Washington had competent intelligence staff officers, but he himself planned many operations and made his own evaluation of the product. Colonel Elias Boudinot recalls how, after reporting some newly arrived intelligence, he repeated his own interpretation of it three times to the apparently uncomprehending General Washington, who then gave it a diametrically opposite evaluation. When the General proved

[1] Brooklyn: Long Island Historical Society, 1939.
[2] Garden City: Garden City Publishing Co., Inc., 1941.

to have been correct, "I then said," wrote Colonel Boudinot in admiration, "that I never would again set up my judgment against his."

Washington initiated many intelligence deception operations, planting false strength figures and other information which he often compiled himself, advising his agents what could be safely passed along. The hero of the cherry tree legend could tell some whoppers. He made a practice of planting the same false story in several widely separated places, thus providing the enemy with "independent confirmations." One such plant was so successful that when a British intelligence officer laid the facts before General Howe, the British commander treated him "with contempt & Severity" for such bad reporting.

General Washington's view of intelligence as a matter to be kept "as secret as possible. For upon Secrecy, Success depends in most Enterprises of the Kind . . ." is illustrated in the realistic American use of cover. Agents sent into the British lines as Tories and deserters were officially listed as such, rewards were sometimes offered for their capture alive, and their families often suffered public opprobrium. In 1781, after five years of being hoodwinked, the British ordered no further protection for deserters; but then it was too late.

Turncoats, Traitors and Heroes attempts with indifferent success to tell its history chronologically, beginning in the fall of 1774 with Paul Revere and his friends in the Boston area, "the first American intelligence net," real amateurs. A little later, the Americans in Georgia are shown perpetrating a deception: they intercepted a letter from the Royal Governor there to the British commanders in Boston and substituted forged documents of contrary purport before sending it on. At Lexington and Concord, American intelligence was not bad; the British was probably better. And even the French introduced a couple of agents into the Boston area to see how the American cause was progressing.

By 1776, when the American Army had suffered many reverses, intelligence was improving; and an espionage-deception operation now brought a victory. John Honeyman, sent by

Washington into Trenton as a butcher and horse trader,[3] daringly brought back critical intelligence on the defenses of Trenton. Then, "escaping" from Washington's headquarters, he returned to Trenton and assured the Hessians that no action was to be expected from the Americans. It was with this intelligence preparation that Washington crossed the Delaware on Christmas night to the victory at Trenton.

General Washington's most important intelligence net was probably that of the "Culpers" in British-occupied New York City and Long Island. From the City the merchant Robert Townsend (Culper, Jr.) sent reports by courier (usually Austin Roe) to Samuel Woodhull (Culper, Sr.) on Long Island. There they were transferred to Caleb Brewster, whose whale boats took them across Long Island Sound to Fairfield, Connecticut, to one of Washington's finest intelligence officers, Major Benjamin Tallmadge, a Yale classmate and friend of Nathan Hale.

These reports, Colonel Bakeless indicates, were handled also by Alexander Hamilton, on Washington's staff. The book gives nothing further on Hamilton's intelligence activities, the extent of which has yet to be revealed. They may in fact have been negligible; but some historians say he served as an intelligence staff officer, and this reviewer has seen one document which reports the dispatching of spies, "Agreeable to Colo: Hamilton's request." The identity of the Culpers was a well-kept secret for a century and a half, until Pennypacker established it. Culper, Jr., continued to masquerade in New York as a Tory merchant until the war's end. The British knew that intelligence was leaking from New York, that many of the reports were written in secret ink, and that Caleb Brewster's whale boats ferried them across the Sound, but were unable to catch Brewster or discover the sources.

Colonel Bakeless adds comparatively little to what Pennypacker wrote about the Culper net, and he contributes nothing material to the history of Hercules Mulligan,[4] the Arnold-André affair, or the case of Nathan Hale. But he does help

[3] See "A Spy for Washington," in *American Heritage*, Vol. VIII, No. 5, August 1957, pp. 58–64.

[4] O'Brien, *Hercules Mulligan: Confidential Correspondent of General Washington*. New York: P. J. Kenedy & Sons, 1937.

unravel the threads of another American intelligence net, that established from New Jersey by Joshua Mersereau to operate behind the lines in Staten Island, showing among other things that there was a third Mersereau in addition to the two previously known. Joshua Mersereau is cited in General Washington's account books as paid "for Exp. & rewards of himself & others (whom he was obliged to employ) to open & carry on a Correspondence with persons within the Enemy Lines by the way of Staten Island." But money was sometimes short and agents complained. One wrote to Mersereau from Staten Island:

> . . . as soon as you fulfil that Request of mine, a regular Correspondence shall take place & unless you indulge me in that, I could not resume my Pen on a Subject of this Nature with any degree of Propriety; for give me Leave to remark that altho my Breast throbs with the purest & most fervent Love to my country, that can inspire to Noble actions, & banishes from my Soul every *lucrative* Passion; Yet a laudable Ambition requires that I Should Secure the Approbation of my Country; e'er I enter on So dangerous an Undertaking . . . Before I bid you farewel, I must beg it as a particulor favour that you will be careful of my Letters, as you value the Safety of your Friend . . .

Colonel Bakeless also relates in detail for the first time the role of an intelligence agent at the Battle of Saratoga. It will be recalled that the first battle for Saratoga was fought with inconclusive results in mid-September 1777. Then on October 7 the British attacked at Bemis Heights, were repulsed, and withdrew to the plain at Saratoga, where they surrendered ten days later. There has now come to light an affidavit made in 1852 by one Daniel Bryan, recounting the role played by his father, Alexander, in the battle of Saratoga. Alexander Bryan is said to have been asked by the American commander, General Gates, to go into General Burgoyne's lines and get information "as to the heft of the artillery" and the strength and contemplated movements of the enemy. Inside the British lines, he "purchased a piece of cloth for a trowsers when he went stumbling about to find a tailor and that thus he soon learned the strength of the artillery and the number of the Army . . ." as well as the plan to take Bemis Heights the next day. With this intelligence, General Gates was able to fortify himself on Bemis Heights and then counterattack and defeat the British.

There seems little reason to doubt this story, and if it is reasonably correct Bryan's venture was a one-shot espionage job which may have changed the course of history. Saratoga is generally considered one of the decisive battles in world history: had the British won, the colonies would have been split in two at the Hudson River, and the American victory was an important factor in the French decision to enter the war. It is nevertheless difficult to go along with Colonel Bakeless' nomination of Bryan as "the most successful spy in history" and "the man who really won the American Revolution." The author, in this reviewer's opinion, also errs in dating Bryan's espionage in September before the first inconclusive battle of Saratoga. The internal evidence seems to place it before the second battle, fought on October 7. And Benson J. Lossing, in his *Pictorial Field-Book of the Revolution*,[5] describes how a sergeant arrived at the headquarters of the American commander, General Gates, just before the British attack of October 7, "with intelligence of the movement of the British army." This sergeant may have been Alexander Bryan.

Turncoats, Traitors and Heroes also treats the activities of British intelligence in America during the Revolution. There were many (including Benjamin Franklin's son William, Royal Governor of New Jersey) whose loyalty to the British Crown was not shaken by rebel activities, and many loyalists were fruitful sources of intelligence. Even before the Revolution broke out, the British had established a high-level penetration of patriot activities in Boston. Their agent was Dr. Benjamin Church, Jr., a member of the Massachusetts Provincial Congress, privy to the patriots' innermost councils, and ultimately General Washington's Director General of Hospitals, whose long successful operations show up the early lack of American counterintelligence. But finally an indiscreet ciphered letter from him fell into patriotic hands; his courier-mistress, "an infamous hussy" but "subtle, shrewd jade," was interrogated by Washington himself and forced to reveal her principal's name; and the cipher was broken by Washington's specialists. Historians of the period have noted before that Dr. Church must have begun to feel shaky, for he had found out that an American spy deep in Cabinet levels in London, whose name

[5] New York: Harper Brothers, 1851. Vol. I, p. 60.

has never come to light, was learning the identities of British agents in America. In November 1774, Paul Revere had been advised that there was a leak somewhere high in the patriot group. Still suspicion was not fixed on Church, even when it was observed in 1775 that he was spending beyond his apparent means and keeping a mistress. When he showed Revere his blood-stained stocking the day after the battle of Lexington, Revere was fully convinced of his loyalty; he didn't stop to think that the Doctor had had twenty-four hours to change to clean stockings. American security had not come of age, and the full extent of Church's treason was not known until General Gage's papers became available in the Clements Library at the University of Michigan in 1930. Much of Colonel Bakeless' account had already been told in Allen French's *General Gage's Informers.*[6]

General Gage had numerous agents working out of Boston, and his intelligence for Lexington and Concord was good. "There is one evil that I dread," wrote General Washington of the British, "and that is, their spies." And again of the British commander in New York: "General Howe has every Species of Intelligence he can wish for . . ." One of Howe's best agents was James Moody, who doubled as a guerrilla raider in New Jersey and published a book about himself afterwards.[7]

Women were not overlooked as agents by either side in the Revolution. One of the must successful was Ann Bates, who worked for the British under peddler cover. (This was also the cover occasionally used by the American spy Enoch Crosby,[8] the prototype of James Fenimore Cooper's Harvey Birch in *The Spy*). Colonel Bakeless' superlatives for Ann—"the most successful female spy in history"—are attributable to the fact that she remained anonymous until his own researches identified her as "the Woman" in British General Sir Henry Clinton's intelligence files.

[6] Ann Arbor: University of Michigan Press, 1932.

[7] *Lieut. James Moody's Narrative of his Exertions and Sufferings in the Cause of Government, Since the Year 1776.* London: 1782.

[8] Barnum, *The Spy Unmasked; or, Memoirs of Enoch Crosby, alias Harvey Birch.* . . . New York: J. & J. Harper, 1828.

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Recent Books: American Revolution

Much of the intelligence work for General Clinton was directed by Major John André, whose ability in this field seems to have been high until he took to the road himself and was hanged for his pains. Clinton's spies were quite effective, but two of them turned out to be captains in the American Army, working for the British on Washington's orders. Even at this late date they were hard to detect; Colonel Bakeless wrote to a friend who had seen an early draft of his book:

> I have had to do a great deal of re-writing since I saw you—part of it because one of Sir Henry Clinton's prize agents turned out to have been working for Washington with the rank of Captain, all the while. If my face is red (and it is!) think of Sir Henry's.

Colonel Bakeless is well qualified in the subject of his book. He had military experience in both World Wars, much of it in intelligence work; he is a good scholar and writer; he spent four years of intensive research on this work, and his examination of primary sources appears to have been fairly exhaustive. It is too bad that he did not have access to the extensive files which the late General William J. Donovan had amassed in the hope of writing on intelligence in the American Revolution.

Yet the most evident weaknesses of *Turncoats, Traitors and Heroes* stem not from scarcity of sources but from the wealth of insufficiently integrated material. "It was . . . a surprise to find," Colonel Bakeless writes in his preface, "how embarrassingly abundant the supposedly lost documents really were . . . it became necessary to reduce the scope of the work five times." The author sensibly eliminated the story of British and American espionage overseas, another volume in itself. (The British intelligence penetration of Benjamin Franklin's mission in Paris was very thorough;[9] and no one has satisfactorily done the story, for example, of James Aitken —John the Painter—the only American to commit an act of sabotage in Great Britain during the Revolution, who was tried and hanged in 1777 for setting fire to naval stores and

[9] See Bemis, "British Secret Service and the French-American Alliance," in *The American Historical Review,* Vol. XXIX, No. 3, April 1924, pp. 474–495.

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the Rope House in Portsmouth Navy Yard).[10] He also has limited his coverage of well-known figures like Nathan Hale and of the André-Arnold affair, on which a good book already exists.[11]

Even so, the book is often choppy and uneven; at times it becomes almost a mere catalog, as the author crams in names and incidents in indigestible profusion. It wavers uncertainly between the chronology of the War and the sequence of action in different espionage operations; perhaps it might have been more easily organized around General Washington's headquarters, as a focal point from which most of the remaining material would drop into place. Nevertheless it is an important book, the first to deal comprehensively with the material now available on its subject; and future treatments of this material should be the better for it.

[10] [AITKEN]. *The Trial (At Large) of James Hill. . . .* London: G. Kearsley and Martha Gurney, [1777].

[11] Flexner, *The Traitor and the Spy.* New York: Harcourt, Brace and Company, 1953.

THE SOVIET INTELLIGENCE SERVICES

THE SECRET WORLD. By *Peter Deriabin* and *Frank Gibney.* (Garden City, N.Y.: Doubleday. 1959. Pp. 334. $4.50.)

Here is another book about Soviet intelligence, about the men who make it tick, and about those who—for one reason or another—get tired of the ticking and defect to the West. Its world is really not so secret any more, thanks to books like this which publicize its objectives and techniques, reminding any readers who need it that the KGB is still very much with us, whatever we may think of Mr. K's real intentions. Lay readers having no special knowledge of Soviet operations, if they have not been habitual devotees of cloak-and-dagger stories, may derive a good bit of new information from this book. Certainly they will be impressed, even if they realize that no intelligence service falls in the Sunday school category, with the repulsiveness of the Soviet system of *internal* intelligence; and the achievement of this effect was apparently the main aim of the authors.

The book describes Deriabin's early life in the Altai region of southwest Siberia, traces his teen-age career in various Soviet youth oganizations, crowned by appointment to a political post with the Army, shows him in action in the Battle of Stalingrad and, after the war, working for State Security in Siberia. In a chapter entitled "The Shape of Terror" there is factual material which the professional reader will recognize as authentic on the internal structure of the KGB and the scope of its activities.

Deriabin's transfer to Moscow occasions some good passages describing life in the Soviet capital from the vantage point of a security officer. A list of numerous security installations in Moscow is also conveniently supplied, and something is told about Soviet interrogation techniques. Soviet foreign intelligence is portrayed as the "cleanest" part of the security organization, being staffed by "some of the most intelligent, technically accomplished and sophisticated members of Soviet society."

A chapter on the "Hidden War in Germany" tells of the Linse kidnapping and the Otto John case, and one entitled "Cold Storage Agents and Satellites" devotes quite a bit of space to Allen Dulles. Deriabin is said to have noted, in a pamphlet on American intelligence he edited, that "in 1944, Dulles already foresaw the breakdown of the anti-Hitler coalition and . . . began to make plans for intelligence activity against the Soviet State." Another old Soviet pamphlet is said to treat the CIA, the CIC, Naval and Air Force Intelligence, and even the FBI as components of a single organization.

There are a number of chapters on the misdeeds of the Soviet upper crust—"Moscow Executive Suite," "The New Class," "Soviet Immorality," and the struggle of the Stalin succession. Khrushchev is pictured as no great improvement over Stalin, it being suggested that Malenkov might have made a more reliable co-existence partner. A chapter on "Vienna" has much authentic quadripartite flavor, and one entitled "Agents and Escape" tells about Austrian operations involving émigrés and would-be returnees. Deriabin himself escaped in 1954.

The book has four appendices, one illustrating the development of a Soviet surveillance case, one on provocation techniques, one a lengthy and tedious discussion of "some pitfalls of Socialist 'legality,' " and a fourth giving the organizational diagrams of the several elements of the State Security organization.

For the professional reader the shortcomings of *The Secret World* are obvious—the sensationalism of its "terrifying report," its deceptive cloak of authorship, its exaggerations and misstatements of fact. It isn't a book by Deriabin and Gibney or even one by Deriabin "as told to" Gibney. For all Mr. Gibney's protestations to the contrary, it is a book by Frank Gibney *about* Deriabin and several other things, including what Mr. Gibney thinks of the Soviet Union—which evidently isn't much.

Here are some examples of his purposeful extravagances. On Soviet morality:

> [On] the high level of the "New Class" Soviet society . . . debauchery is organized and beyond criticism. . . . A clinical study of Soviet social life might easily dwarf The Lost Weekend and make the Kinsey Report look like a Parents Magazine anthology.

Describing Stalin's exits from the Kremlin:

> The only warning . . . would be the amber lights blinking . . . and the sudden screaming cavalcade with Colonel Kirilin of the Guard shrieking obscenities and frequently spitting in the faces of passers-by.

On the right of the Soviet voter to cross out names of candidates he doesn't like:

> Compared to the Soviet voter, even a Negro voter in Mississippi could be said to enjoy a thoroughly democratic franchise.

Of the Ukraine:

> . . . this huge and sensitive Russian subsidiary.

On housewifely Mrs. K.:

> It is doubtful if Mrs. Khrushchev has seen the working end of a kitchen for a good many years.

The author's sense of mission also leads him into oversimplifications and some substantial errors in fact:

> At the beginning of the Revolution and for some years thereafter . . . the reins of leadership were held by intellectuals of bourgeois or even noble background, like Lenin and Trotsky.

Trotsky a Russian nobleman!

> Admiral Canaris' Abwehr . . . was strongly anti-Hitler until it was absorbed by the Gestapo after Canaris' arrest and execution.

> One of [Deriabin's] teachers . . . had managed to keep a large library from the old days. . . . So it was that The Last of the Mohicans, Tom Sawyer, and Huckleberry Finn became a part of one young Russian's education, although he scarcely included them on his Komsomol reading lists.

The exceptional Russian student would be the one *not* acquainted with these books.

> The decision to "de-sanctify" Stalin was probably taken late in 1955 by Khrushchev, who was aware of the void left by the great dictator. Just as people in the early Stalin period had grumbled that "things wouldn't be like this if Lenin were alive," a tendency had grown to look wistfully back to the Stalin era whenever the regime showed shortcomings.

A nostalgic concept, the good old days of Stalin.

Mr. Gibney's views on foreign policy and estimate of the Soviet Union can be illustrated by two final quotations from his work:

> [During] the Time of Troubles, from 1953 to 1956 . . . had the USSR been faced with an aggressive American diplomatic policy on the international scene, the Party leaders might have been in real trouble.
>
> American tourists can come back from Moscow with stories of a society straining at its old controls. Cultural exchanges can multiply. The Soviet people can inch a few more steps forward toward a better and freer life. But in the last analysis, all efforts to produce a real thaw in the USSR will fail as long as State Security maintains its position as the ultimate executive arm of the regime.

History will have to tell us whether even Soviet-style intelligence can so decisively govern a nation's course.

THE MIND OF AN ASSASSIN (The Man Who Killed Trotsky). By *Isaac Don Levine*. (New York: Farrar, Straus and Cudahy. 1959. Pp. 232. $4.50.)

THE GREAT PRINCE DIED. By *Bernard Wolfe*. (New York: Scribner. 1959. Pp. 398. $4.50.)

Whether assassination is the same thing as murder depends, as the saying goes, on where you are sitting and what cards you hold. For those who hold Communist Party cards, the assassinations which have been carried out all over the civilized world by the "organs of State Security" have merely executed the sentences of competent judicial organs without benefit of the legal nicety of extradition. But even the Communist who sees them in this light must admit that there have been some spectacular remote-controlled executions in the history of Soviet jurisprudence.

The execution of the death sentence passed by the Soviet organs on Ignace Reiss, the Soviet senior spy in Western Europe who broke in revulsion over the Moscow show trials of the late thirties, brought an exaggerated bit of Chicago to a quiet Swiss country road. Reiss' body was literally cut to pieces by heavy machine-gun fire. The case of General Walter Krivitsky, Soviet espionage boss in Western Europe who fled to safety in the United States after breaking at about the same time as Reiss, is a classic illustration of the homely proverb

of the State Security *apparatchiks* that anyone can commit a murder, but it takes a real artist to arrange a good suicide. Krivitsky was found dead in a Washington hotel room, a suicide note by his side, shortly after he had told a friend never to believe any evidence of suicide on his part, because he would never kill himself. Lev Davidovich Trotskiy is probably the only man in history to die by ice axe in execution of a death sentence passed by a court.

The tradition of this form of retribution against traitors to the movement is so strong that the widow of Richard Krebs (better known, since the publication of his book *Out of the Night*, as Jan Valtin) told a friend in 1958 that she was not at all certain Krebs had died the natural death officially pronounced by Maryland doctors at New Year's 1951. Clara Krebs was born and raised on the Eastern Shore and never had anything to do with Communism, but almost lost her mind in the year her late husband's friends, including some ex-Communists and some professional anti-Communists, spent looking for clues and speculating about an assassination in his case.

Those who would like to believe that assassinations of this sort belong to the age of Stalinism should note that the denunciation of Stalin crimes (or "errors") has been confined to those committed against good comrades, not against traitors. And they might usefully contemplate the mysterious death of Stefan Bandera, the legendary anti-Soviet Ukrainian partisan leader. Bandera was poisoned in Munich, Germany, in October 1959, in this age of peaceful coexistence.

The murder of Lev Davidovich Trotskiy, popularly known as Leon Trotsky, was not a case of "whodunit," but of "whobeit." The mystery was not who committed the murder, but who the murderer really is. The best published study of the Trotsky assassination has been that by Leandro A. Sanchez Salazar, the Mexican police official who conducted the investigation.[1] Latterly the impending release of the killer, whose twenty-year sentence will have been served on 20 August 1960, is apparently at least partly responsible for the appearance of these recent books by Isaac Don Levine and Bernard Wolfe.

[1] *Murder in Mexico* (London: Secker and Warburg. 1950).

Don Levine is a vigorous anti-Communist and a man who makes his living by producing and ghosting books that will sell well, not necessarily ones characterized by objective and meticulous scholarship. Richard Krebs, after trying in vain to sell *Out of the Night* to a number of publishers in the United States, finally gave the manuscript and all American rights to Levine for a pittance. Later Krebs complained of a number of inaccuracies and errors in fact which stemmed from Levine, and it was not until shortly before Krebs' death that a personal reconciliation of the two men was effected. On the other hand, Levine has been responsible for the publication of a number of highly interesting memoires by Communist defectors (among them Walter Krivitsky's *In Stalin's Secret Service*[2]) and for bringing some of these defectors together for the intellectual and moral stimulation of exchanging ideas. Krebs has spoken with enthusiasm of a fascinating night he spent at Levine's home talking without let-up through the night and into the morning with Walter Krivitsky after Levine had helped them overcome their mutual mistrust.

The Mind of an Assassin does not live up to whatever misgivings one may have about the author. It is a good story, well researched and interestingly told. The factual errors (insistence, for example, that Vittorio Vidali's real name is Carlos Contreras) are neither so frequent nor so glaring as to disturb the knowledgeable reader greatly. Levine makes too much at this late date of the mystery of the killer's identity, which has not really been a mystery for the past five years or so, but he does perform a useful job in pulling together some of the scattered material on the subject which has appeared over the years, and he makes an interesting new contribution in the final chapter, "The Mother Speaks."

This last chapter is a communication which Levine says he received unsolicited from Enrique Castro Delgado after the manuscript for the book had gone to the printer. Castro was a hero of the Spanish Communist movement, lived in Moscow after the Spanish Civil War, broke with Communism in 1944, and after a number of very precarious months managed to escape from the USSR. While in Moscow, Castro heard from

[2] New York: Harpers. 1939.

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Recent Books: Soviet Services

the lips of the assassin's mother, an old-time Spanish Communist and Soviet agent, part of the story of the assassination. He says in his letter to Levine that he had never told it to anyone before.

It is evident from the title of the book that it deals more with the assassin than with Trotsky. Two of the chapters, "Prisoner against Psychologist" and "Portrait of an Assassin," deal with the years-long analysis of the murderer by Mexican doctors and psychologists. Here one is tempted to borrow a pun from a famous music commentator and critic: Levine played Freud, Freud lost. These chapters are boring and appear to a non-professional somewhat far-fetched (*e.g.*, the killer idolized his mother, hated his father, was able to kill Trotsky as a father-symbol). Not so, however, the story of the murderer, the role played by his mother and many others (such as Louis Budenz and Sylvia Ageloff), the State Security masterminding of the execution by Soviet General Leonid Eitingon, and related stories like that of the death of Trotsky's son Leon Sedov in Paris and of the Soviet penetration agents in the Trotsky movement, Jack Soble and Mark Zborovsky.

From former close associates of Trotsky we know that during the whole period of his exile in Turkey, France, Norway, and Mexico the father of the Red Army was a hunted man. After his son died mysteriously in Paris in February 1938, Trotsky seemed to wait more resignedly for his own end. His widow Natalia is quoted by Levine as having written, "Both ... knew that the verdict of the Moscow court was not platonic and that it would be carried out in one way or another." The way it was carried out is well told in Levine's book, although the titular mind of the assassin has eluded him.

Bernard Wolfe, for reasons best known to himself, has chosen to tell parts of the story of Trotsky's Mexican exile in fictional form. This permits him, it is true, to deviate from the facts when he does not know them (as in places he obviously doesn't) or when the truth is neither stranger than fiction nor as interesting. Because its hero Victor Rostov is a so thinly disguised Trotsky, *The Great Prince Died* is both tantalizing and frustrating for a reader familiar with the story of the Mexican exile.

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Wolfe, who as a young man did spend some time at Trotsky's exile headquarters in Mexico, has developed the hypothesis that Trotsky's later years were plagued by a gnawing sense of guilt regarding his role in suppressing the Kronstadt uprising. Wolfe suggests that Trotsky was struggling with an increasingly strong awareness of his own betrayal of a revolution. It is interesting as a hypothesis, but others who were closer to Trotsky in this period have seen no traces of this struggle of conscience.

If *The Great Prince Died* could be read as straight fiction, it would not be a bad book. The story is well told, the writing tight and professional. There is plenty of suspense to hold the reader's attention. For this reviewer, however, it has not been possible to achieve the necessary detachment from his knowledge of true events to read it as straight fiction, and such a conflict within the reader spoils the whole book. The only part which could be read under these circumstances without any trace of annoyance is the section entitled "Author's Notes," pp. 383–398. This is not enough to compensate for the frustrations of the rest of the work.

ESPIONAGE AND PARAMILITARY TALES

LES DESSOUS DE L'ESPIONNAGE: 1939–1959. By *Robert Boucard.* (Paris: Editions Descamps. 1958. Pp. 249. 750 frs.)

M. Boucard, who has published several books on intelligence subjects and services, dedicates this one to the memory of René Dubois, formerly Attorney General of Switzerland, who took his own life in 1957 after the clandestine contacts of high Swiss officials with an attaché in the French Embassy were publicly exposed. The promise in its title of the inside story of espionage for the past twenty years, however, is poorly to indifferently fulfilled. Although it presents vignettes from many interesting cases, both details and material substantiating its purported revelations are sadly lacking.

In summarizing the story of the famous German agent Cicero, for example, the author says that the Turkish secret service arranged his employment by the British Embassy in Ankara and helped him in his project with the ambassador's secret papers. It would be good to know whether there is some evidence other than presumptive indications in his operations that Cicero worked for the Turkish service. Elsewhere, as when he offers "the truth about the Gleiwitz affair," wherein the Nazis had prisoners in Polish uniforms attack a German transmitting station to give pretext for the invasion of Poland, Boucard's exposés are sometimes quite old hat.

One of the most tantalizing stories in *Les Dessous* is that of a Japanese general, military attaché in Ankara, Sofia, Madrid, and Stockholm, whom Boucard calls Yamato Ominata. The American authorities, it is said, discovered in the Sicherheitsdienst archives a message, No. 392–B–M from Stockholm to Berlin, in which Ominata, under the cryptonym "Eierkopf," proposed to "Senior" (Himmler's *nom de guerre*) the sale of Brazilian, Portuguese, Turkish, Vatican, and Yugoslav codes for 28,000 Swedish crowns or 20,000 U.S. dollars. Boucard says that Ominata was also in contact with Admiral Canaris, the British service, and OSS. These bits of information strongly

suggest that Yamato Ominata is none other than Major General Makoto Onodera, Japanese military attaché in Stockholm with responsibility for espionage in the Scandinavian countries from February 1941 to the end of the war. A Swedish newspaper article which appeared on 11 January 1953 when Onodera was on a business trip to Sweden mentioned that he had been known to the Germans as "Eierkopf" and had made a large amount of money selling foreign codes to the Germans.

A PERSON FROM ENGLAND (and Other Travellers to Turkestan). By *Fitzroy MacLean*. (New York: Harper. 1959. Pp. 314. $5.00.)

Bokhara, Samarkand, Khiva and Merv are here brought back in a series of true episodes which make good bed-time reading for romantics, lay historians, and connoisseurs of bold and curious men. A rabbi's son who astounded the Emir of Bokhara by arriving from England to demand single-handed the release of two of his countrymen, a gifted Hungarian linguist disguised as a dervish from Turkey, a New York reporter who caught up with the Russian forces in time to enter Khiva with General Kauffmann, and a British correspondent elected Khan of Merv as human symbol of the British Crown to stay the Russians—these were four who lived to describe their adventures in forbidden territory during the Great Game between England and Russia in Central Asia.

The story of the fifth, a British colonel for whom Bolshevist Tashkent became too dangerous in the fall of 1918, is of particular interest to collectors of intelligence tales. After wearing thin an astonishing variety of disguises he enrolled as an Albanian lepidopterist in the Bolshevik intelligence service and was sent to spy on briefly independent Bokhara, where fifteen previous agents had vanished without a trace. He managed to obtain asylum there until he could escape with other refugees in a hazardous desert trek to the Persian border, where the Bolsheviks claimed to have killed him in a skirmish at the river crossing. He reported to the British command at Meshed in January 1920.

THEY CAME IN THE NIGHT. By *Brede Klefos*. (Greenlawn, New York: Harian Publications. 1959. Pp. 207. $3.75.)

This is the personal account of a young Norwegian cadet's contribution to his country's liberation from the Nazis. It includes what he could observe in Norway of the growth of resistance from spontaneous impudences to an organized and security-minded movement, his confession to a naive venture in military espionage in Stockholm, and details on his commando training in Scotland. Intelligence officers may find these items useful; more likely they will want to use them as an excuse to read an honest and unglamorized story of exalted human enterprise in the service of a cause, followed by inevitable disillusionment when the cause is won.

EVASIONS AND ESCAPES

BE NOT FEARFUL. By *John Furman.* (London: Anthony Blond, Ltd. 1959. Pp. 224. 18/—.)

This account of a British army officer's escapes and prolonged evasion in Italy during World War II, in some respects a story much the same as many previously published, is unique in its pertinence to organizational aspects of large-scale evasion activities and for the light it throws on wartime intrigues in and around the Vatican.

Mr. Furman was one of the many Allied prisoners of war who escaped from camps in Italy during the brief period of confusion in 1943 between the Italian surrender and the consolidation of German authority in northern Italy. Aided by sympathetic Italians, thousands of these men remained at large behind German lines, moving southward in the hope of reaching Allied-controlled territory. Opportunities for crossing the front were limited, however, and caution, inertia, and official directives encouraged the escapees to remain where they were until the front overran them: "It will only be a matter of days or at most a few weeks," they said. But as the weeks rolled into months and food became scarce, evaders found it increasingly difficult to keep alive and in hiding.

To meet the exigencies of this situation, a Roman Catholic priest, Mgr. O'Flaherty, organized from the Vatican a supply and billeting service in which the Italian-speaking Furman became a key Rome coordinator. At the peak of its activity this group provided aid to some 3,000 evading ex-POW's within a forty-mile radius of Rome, among other things dispensing subsistence money at a rate that reached some 4,000 *lire* per man per month. The records of the organization remained within the safety of the Vatican along with its director, an arrangement that raised and still raises some thorny questions of law, ethics, and policy. Eventually captured by the Gestapo, Furman escaped from a train conveying him to Germany and made his way back to Rome, where he resumed work for the O'Flaherty organization. He continued with this operation until Allied forces entered the city.

Successful clandestine activities require luck; and Furman and his cohorts had a full, almost too full, share. Nevertheless, the author's two breaks from POW captivity, both of them conceived, planned, and carried to completion in a matter of hours, are classics of quick thinking and good timing. And it was not a matter of luck that he achieved fluency in Italian in a relatively short time by taking advantage of his residence in Italian households.

Be Not Fearful fills gaps in the open-source history of evasion during World War II. Its not having been published until fifteen or sixteen years after the events it describes is probably due in part to the delicacy of its revelations about the wartime use of the Vatican.

PIMPERNEL IN PRAGUE. By *Donald Campbell-Shaw.* (London: Odhams Press. 1959. Pp. 192. 18/—.)

Leisurely account, generous with relevant and irrelevant detail, of how the author arranged privately for the 1950 escape of his wife's relatives from Czechoslovakia, hoodwinking not only the Communists but also a number of would-be helpers, including officers of the American CIC. Of mild interest in illustrating the border-crossing activity of that time. Some of its solemn dissertations on peripheral matters—the evolution and functions of the several Soviet and U.S. intelligence services, for example—are amusing in their ingenuousness.

MISCELLANY

DIPLOMAT. By *Charles W. Thayer.* (New York: Harper and Brothers. 1959. Pp. 229. $4.50.)

This casual compendium on the workings of diplomacy includes a quick look at intelligence as certain others see it. Chapters XII, XIV, and XV combine elements of a short history of intelligence—the Black Chamber, OSS, CIA, taken from standard sources—with the anecdotes and comments of a diplomat extraordinary. The author has reservations about intelligence in the hands of socio-anthropologists, with their new scientific methods. He sees the research and analysis experts in their isolated tower in State Department "chiefly engaged in gathering materials for high-level public speeches and re-analyzing foreign newspapers long since scrutinized in foreign capitals by our embassy staffs." He asks how the new "scientific" expert can "take into consideration and evaluate a subtle smile he never saw or a handshake he never felt." On the new concept of national estimates he quotes Churchill's contempt of "collective wisdom" and concludes that "any attempt to synthesize the products of several minds must end by reflecting the product of none."

But he concedes that specialists in intelligence are useful in support of the Diplomat, the only true intelligence officer. As the general practitioner in intelligence, the Diplomat has a requirement for specialists to bring the mass of information under encyclopaedic control by substituting numbers for mental capacity. Above all, he needs specialists in intelligence to safeguard his communications.

STUDIES in INTELLIGENCE

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All opinions expressed in the Studies are those of the authors. They do not necessarily represent the official views of the Central Intelligence Agency, the Office of Training, or any other organizational component of the intelligence community.

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THE INTELLIGENCE LITERATURE AWARD

An annual award of $500 is offered for the most significant contribution to the literature of intelligence submitted for publication in the *Studies*. The prize may be divided if the two or more best articles submitted are judged to be of equal merit, or it may be withheld if no article is deemed sufficiently outstanding.

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Awards will normally be announced in the first issue (Winter) of each volume for articles submitted during the preceding calendar year. The editorial board will welcome readers' nominations for awards, but reserves to itself exclusive competence in the decision.

A former G–2 officer gives some personal views on how to multiply the value of a military intelligence asset.

UNRECOGNIZED POTENTIAL IN THE MILITARY ATTACHÉS

Lyman B. Kirkpatrick

The system of U.S. military attachés, a worldwide liaison service which today is accredited to 75 countries, including five behind the Iron Curtain, is one of the least well understood of the Government's intelligence arms. Probably because of this lack of understanding its great potentialities remain relatively untapped.

The military attachés have produced and are producing large amounts of intelligence information, and certain attaché reports have been of significant strategic value. The Army attaché in Tel Aviv correctly interpreted the Israeli mobilization of October 1956 as a war measure and determined the direction of the attack against Egypt. His prompt report, a key item in the intelligence which enabled the Watch Committee to alert the President to the impending Suez War, could be counted by itself a sufficient justification for the attaché system's entire budget for the year. Service reporting from behind the Iron Curtain has also been of incalculable value, and that from many other areas has provided information of importance.

As the attaché systems become recurrently the target of economy drives in the Department of Defense, however, the lack of knowledge in the proper places as to what the attachés produce for the intelligence community grows apparent. Attaché reports are not often singled out for distribution to high departmental policy levels. Most of them are inconspicuous elements of the routine reporting which keeps each military service up to date on the corresponding services of other countries. They contribute to the "finished intelligence" of the encyclopaedic National Intelligence Surveys; but officers at the policy level are unlikely ever to look at an NIS

until, when a crisis hits, they have an immediate need for data on the Lebanese army or the Indonesian navy, and even then they do not necessarily remain conscious of the fact that it was the attachés who supplied these data. Nor is it always obvious at the policy level that there is a significant contribution from the military attaché system in nearly every National Intelligence Estimate.

It seems clear that the social rather than intelligence aspect of the military attachés' work is weighed too heavily at certain levels in the Pentagon. Hence the attachés are criticized as "cookie-pushers" assigned to duty on the cocktail circuit. It is true that the nature of the job in many capitals requires considerable social activity. In Washington itself, the papers abound with accounts of parties for or attended by the service attachés of the various foreign embassies. It may also be true that the attaché staffs occasionally include some too socially conscious or ambitious officers who devote themselves too assiduously to the kind of intelligence collection that is done over a glass. But that sort of thing can happen in any organization; it is something that can be remedied quite quickly and easily by command action.

It is important that a new dignity be given to the attaché system and a deserved respect accorded it. It is important that the still untapped reservoirs of information needed by the Government which are available to military attachés be recognized and exploited. There are new areas that need to be covered, and old ones that should be covered better. There are new horizons of opportunity, and new approaches that can be used to obtain intelligence of utmost value.

Coverage and Cross Accreditation

Today there are 761 U.S. staff personnel serving in the attaché systems of the Army, Navy, and Air Force overseas. The Army has 429 (143 officers, 212 enlisted men, and 74 civilians), the Navy 161 (157 officers), the Air Force 171 (145 officers, 22 enlisted men, and 4 civilians). There are army attachés accredited to 73 countries, air attachés to 69, and naval attachés to 58. Army attachés are actually stationed in 69 countries, air attachés in 53, and naval attachés in 45.

It has been the policy to accredit one attaché to more than one country in order to economize in manpower, because the activities of some countries in some military fields are limited. For example, there are army attachés in Costa Rica, El Salvador, Honduras and Nicaragua; but Air Force interests in these four countries are handled by the air attaché in Guatemala, and naval matters in all five republics plus British Honduras are the responsibility of the naval attaché in Mexico City. There are other variations in service practices around the Caribbean. A naval attaché is stationed in the Dominican Republic, but the air attaché accredited to Ciudad Trujillo is stationed in Venezuela, and the army attaché comes over from Cuba. Haiti, on the other hand, has an army attaché in Port au Prince but is covered by the air attaché from Caracas and the naval attaché from Havana.

While there is certainly not enough work under present conditions in many of these places to keep separate attachés fully occupied, the system of cross accreditation does create some peculiarities. Thus in Havana, where the Air Force representative covers only Cuba, the Navy's covers Haiti in addition, and the Army's the Dominican Republic. Our military expertise on the Dominican Republic is partitioned among Ciudad Trujillio, Havana, and Caracas; a regional conference would have to be called to get the consensus of our on-the-spot representatives about the over-all strength of the Trujillo regime.

Sometimes the changing currents of international relations create some curious situations in this representation from outside, and changes have to be made in accreditation. At one point the United States had no service attachés in the Sudan, the representatives of all three services in Egypt being accredited also to Khartoum. With the Sudanese more than a little suspicious of Nasr's designs on their struggling young nation, this doubling raised obvious problems. Today there is an army attaché in Khartoum—a most important assignment with a military junta running the Sudan—and air affairs there are covered by the air attaché in Ethiopia.

Cross accreditation is of course economical, and it can be satisfactory in certain instances. But we should be aware that in this era of rising nationalism the armed services of

those countries not accorded resident attachés may consider themselves slighted and so feel more kindly—and cooperative—toward the major powers that do keep attachés in residence. It would be wasteful, to be sure, to assign naval attachés to the Sudan or Switzerland, but the most powerful and influential nation on earth should be able to afford at least one appropriate service attaché in every country that has a military force, however embryonic. That there will be more than enough to keep such officers actively and profitably employed I hope the following paragraphs will demonstrate.

New Horizons

One need only look at the number of countries where the military are today in full control, hold a dominant position, or at least exercise considerable political influence, in order to see the ascending potential of the role of the service attaché. Taking the world region by region and noting only the more important examples of this situation, we find in Europe General de Gaulle master of France, General Franco running Spain, and Marshal Tito ruling Yugoslavia, all of them dependent in one degree or another on support from the army; in the Middle East Egypt's Nasr and Iraq's Kasem, army officers brought to power by military coups; in Africa Haile Selassie of Ethiopia relying on the loyalty of his imperial bodyguard and the Sudan run by a military junta; in Asia the governments of Laos, Pakistan, and Burma subject to the will of the military and Indonesia pivoting on the key position of the army; in Latin America the army *not* the dominant factor in domestic politics only by exception from the rule.

In such countries, and in countries where the military may in future emerge as a powerful political force, the officers of the military services become a prime intelligence source and target. The U.S. service attaché has as his first obligation, of course, the development of contact with officers on the chief-of-staff level of the service to which he is accredited. But the circumstances of the coup in Iraq point up the need for getting to know also the ambitious and rising young officers who through ability or good fortune may achieve prominence at some future time. The attachés could by this means insure, not an advance warning of all future coups, but that there would be fewer surprises.

It is acknowledged that in many countries a too obvious or aggressive cultivating of friendships with military personnel by U.S. attachés would be viewed with disfavor—and probably recognized for the surreptitious probing that it was. Some ingenuity and long-range planning would be required here. Initially the attaché might be able only to spot upcoming young officers who should be approached later, perhaps by others, particularly since in many countries those that carry a political thrust are kept in provincial garrisons away from the capital. Sometimes the embassy, using the country-team system, could have people outside the attaché's immediate office make the initial contact, develop the necessary rapport, or maintain a relationship which had been established.

But a main avenue of long-term approach to future wielders of power starts in the United States. Every year hundreds of foreign military officers attend U.S. service schools. Perhaps not all of these will reach chief-of-staff level, but the expectation that they will achieve senior rank is implicit in their selection for the expensive visit to the United States. Consider, for example, that Admiral Larrazabal, who headed the junta that governed Venezuela between the overthrow of the Pérez Jiménez regime and the election of Betancourt, had attended the U.S. Naval War College at Newport.

We have thus an ideal opportunity to establish personal relationships that could in the future keep us informed on affairs of critical intelligence interest. I am not talking about recruitment of these officers as agents; it is a matter of developing the conviction in a foreign officer that his, your, his country's, and the United States' interests are all identical, or so very close that it would be to his country's advantage, or at least not to its detriment, for him to confide in you.

First, there should be a thorough, methodical system at the school for developing biographical data on each individual officer—not just the usual personal history statement or biographical sketch, but knowledge of the likes and dislikes of the man and what makes him tick. Did his father fight with the Khalifa against Kitchener at Omdurman? Does he drink heavily, have occasional sprees or amatory adventures? Is he ashamed he can't afford a better home, feel he can't enter-

tain Americans? What are his cultural interests—music, Goethe, chess? Has he been discriminated against because of his race? Where does he want to end his career—as chief of staff? as constitutionally elected president? as dictator? or as a professional officer who has served his country well? And how does he see the future development of his own country? Which great powers does he think can best help it?

Much of this information can be assembled by the faculty of the school in question. But intimate insight into a man's character, and especially the establishment of a rapport that would yield continuing intelligence dividends, would require that as often as feasible and practical the U.S. officer destined to be assigned to a country become a classmate of its potentially influential students at a U.S. service school. The identity of interest among classmates creates a strong bond.

If a foreign officer attends a U.S. school it can be assumed that his English is passable. But this should not lead to any relaxing of the attaché's effort to acquire fluency in the language of the country to which he is assigned. The psychological advantage of knowing the language is tremendous. An intelligence officer's objectives are much easier to reach if his foreign contact senses in him not a superficial, self-seeking interest but a true and deep understanding based upon knowledge of the country's language, history, and customs and an appreciation of its people. Such specialization, it is true, implies a relatively long assignment at the post in question.

The full implications of this long-range approach for the personal career of a military attaché may appear rather formidable in terms of present-day concepts. A year or two spent learning language, area, and customs, a year or more at a service school to cultivate the friendship of a foreign officer, and at least a double tour of duty in one country—these may add up to a third or a half of the U.S. officer's entire active military career. But if we are serious about our intelligence effort, this is a way to give new significance and worth to the attaché system, and the long-term benefits should certainly be high.

A radical proposal for controlling the substance of routine information reports from overseas and getting them promptly to consumers.

DESIGN FOR JET-AGE REPORTING

William Earling

Transmitting information from its variegated and far-flung collectors to users in the complex intelligence community is necessarily a tremendously complicated business. In our present situation the natural complexity is compounded by our having been content to handle nonpriority materials by means evolved with little change from communication systems of the archaic past in separate departments and agencies. In 1900 the few copies of dispatches from abroad required in Washington could be supplied by carbon copies typed in an embassy and forwarded by ship pouch. The only improvements we have introduced for routine reports since then are to use mats or stencils instead of carbon paper and to forward them by air instead of by sea.

Given the vastly increased volume of reporting, this speed-up in means of transportation has not been able to prevent a net slow-down in the flow of information. Dispatches are still directed back to parent departments in Washington through many separate channels. There are departmental reviews, revisions, retypings, reproduction. Mail rooms and secretariats distribute them to other interested departments and agencies, which in turn route them by messenger to subordinate components. At every stage they queue up in front of logs and registers. The average transmission time for routine reports has come to be measured in months, and some gray documents take more than a year to make their way through the maze.

It is true that the community is not suffering critically from delay in receipt of priority information transmitted by radio and cable. Although much of our rapid communications system is also archaic, radical improvements have been

made in some segments. Others are needed and possible, but this article will limit its concern to routine dispatches and information reports. For them we need a new, much faster system, though not necessarily so fast or so expensive as for cables.

The model intelligence reporting system would connect all components of the community through one integrated communications network. This network would have the capacity to move all intelligence from reporter to consumer within, say, 24 hours. It would have standard, streamlined, automatic procedures for handling information at both ends of the line, with no room for backlogs, personal procrastination, or processing delay.

This model is something we can aim at, but we must begin at some modest and practical beginning. Let us then examine the design of a not too expensive system to speed the sluggish flow of information reports from overseas perhaps not fifty-fold but ten. Most analysts would find it not bad to be sure of getting all routine information, down to the lowest priority, within a week of its dispatch.

Triplicate Problem

The time required for the many processing steps that intervene between reporter and consumer, a time exponentially increased with volume as each report waits its turn at each processing station, is central to our problem, but it is not the whole problem. If we concentrate on the mechanics of getting pieces of paper from point to point as fast as possible without considering their substantive purport we are ignoring one side of the coin. That the current volume of reporting is outgrowing our ability to handle and use it effectively is manifest not only in unacceptable delays but in consumer complaints that they receive too many reports they do not need while failing to receive information they do need. Collecting components retort that consumers fail to let them know through standard evaluation procedures which of their reports are useless and to keep them informed through the standard placing of requirements precisely what *is* needed. A lack of communication between the two elements is evident.

It is clear that better guidance would improve the quality and reduce the volume of reporting; and this smaller volume of better material could in turn be handled more speedily. Formal collection requirements alone cannot do the job: the hungry analyst writes his requirements loosely in order to be sure of getting everything that bears on his subject, and the avid reporter in the field will find *some* bearing on *some* requirement in almost everything. Nor is the present consumer evaluation procedure sufficient to the purpose: in all of FY 1958 CIA, for example, received only 25 spontaneous evaluations of its CS reports, and of those rendered on particular request most were too slow coming—from an average six months up to almost two years in instances—to be useful as a basis for corrective action. What is needed is some new system for rapid and frequent user criticism of individual reports in order to point up good material and weed out at the source any information below the level of significance for the intelligence community.[1]

A third facet of our problem, bearing both on the delay of information and on the analyst's dissatisfaction with what does show up in his in-box, is the practice of successive dissemination through organizational channels, through office or division and branch or section to the individual user. A central mechanized dissemination direct to individuals would save time, but Air Intelligence experiments with such an automatic system [2] indicate that a great deal of excess paper is pumped into the mill by a straight-faced, undiscriminating machine presented with imprecisely defined user requirements. If we can find some way to pinpoint in machine language exactly what each individual analyst requires, we can give him more nearly what he wants and give it to him faster.

[1] For earlier treatments of this problem see William P. Bundy, "The Guiding of Intelligence Collection," *Studies* III 1, p. 37, and Lowell M. Dunleigh, "Spy at Your Service, Sir," *Studies* III 2, p. 81.

[2] Described by Paul A. Borel, "On Processing Intelligence Information," *Studies* III 1, p. 32. For other aspects of mechanized Air Intelligence information handling see two articles in the series on "Developments in Air Targeting," Outten J. Clinard's "Data Handling Techniques," *Studies* III 2, p. 95, and Kenneth T. Johnson's "Progress and Future Prospects," *Studies* III 3, p. 53.

The problem is then a three-fold one—to speed transmission and processing of reports, to improve by guidance the quality of reporting, and to make dissemination faster and more responsive to precise individual wants. These needs are interrelated in something of a vicious circle: delayed and indiscriminate distribution of reports to users breeds delay in getting evaluations of them back to the originators; user disinterest in outdated information extends to disinterest in commenting on it; lack of evaluative comment means more indiscriminate reporting and dissemination; a greater volume of reports produces still more delay. If we can significantly cut the transmission and processing time and better tailor our dissemination, users will better recognize their own interest in feeding back substantive appreciations to the collector; and the collector will be enabled by prompt user comment to stop wasting his precious manpower on marginal and submarginal operations and spurred to concentrate it on productive enterprises.

Design for Speed

The design here exhibited of a new system to cope with this triple problem was developed for experimentation on the CS reports of CIA. One of its central features is a roll of perforated paper tape. In its most familiar form it is the tape produced by the perforator unit of a standard M–19 teletype machine, with its rows of up to five holes in different position combinations, each representing a letter or function punched on the keyboard of the machine. When this tape is fed into the M–19 transmitter-distributor each perforation produces an electrical impulse in a channel corresponding to its position, and these impulses are used to key a page printer, or if desired produce an identical tape, at the other end of a telephone line or radio circuit.

A postwar development, the flexowriter, has adapted the tape communicator principle to the electric typewriter with its richer keyboard and smaller print. An increase in the number of impulse channels and corresponding perforation positions on the tape permits enough additional combinations to carry both capital and lower-case letters and some characters and functions, such as semicolons and tabulation, that the teletype machine cannot perform. Experimentally we

can use either the M–19 or a modified flexowriter in our design, but the M–19 is a bit crude for finished reports and the advantages of the flexowriter are largely vitiated by our need to stick to five channels in order to keep the tape compatible with other communications equipment. Both machines are too noisy. New tape-producing typewriters are being developed which will suit us better than either of these.

It is not that we are proposing electric transmission of all routine information reports, not yet at any rate. But we are borrowing many features from cable procedure, and our system will if necessary be immediately convertible, in whole or in part, to one using electric means.

The prepared tape can be automatically scrambled into a quite meaningless pattern of perforations. Thus encrypted, it is secure for radio transmission or, in our design, for airmailing by whatever means is fastest. In practice, this means will probably be the unaccompanied State Department pouch if arrangements are made to get it on the first available plane without waiting for other material to accumulate: the State pouch cannot be bumped by the air lines and is not held up in customs. The tape should take sometimes as little as one day to reach its consignee, rarely more than three.

In the experimental procedure, then, a routine CS report is typed in the field, beginning with its operational cover sheet, on a tape-producing typewriter. The report will be in the form, a compromise between cable and dispatch format, in which the analyst will in a few days, we hope, find it on his desk; the first manual typing will be the only one in all but exceptional instances. Form headings and other repetitive material need not be so typed even here: a standard tape carrying them can simply be run through. Carbons or a mat in the printer will take care of local dissemination and record copies.

Encrypted and pouched, the tape bypasses in effect all registries in the field and in Washington—a carbon by the usual accompanied pouch will satisfy their needs—and is delivered with only a pause for automatic decryption to the CIA Cable Secretariat. The Secretariat operates day and night with its own courier service and whatever staff is necessary

to get cables to their users within an hour or two of receipt. It has developed exceedingly effective procedures, and this bit of borrowing on our part from cable usage will be important both materially and psychologically. In the Secretariat the unscrambled tape is run through a printer, typing original and carbons of the operational cover sheet, mat and carbons of the report.

Responsibility for releasing the report, however, still rests with the controlling area desk, and that for indicating its dissemination belongs jointly to the desk and to CIA Central Reference. A Central Reference expert will be on duty in the Secretariat, and as soon as the mat is typed he will read it against user requirements and note on its face the proper recipients, as far as possible individual analysts. In the meantime carbons of the report, along with the original and carbons of its cover sheet, have gone to the area desk. If it can be released without further ado, it goes back immediately, assigned a number and showing the addressees prescribed by the desk, to be added to Central Reference's designations. If it requires consultation, comment, or correction, it is held up, possibly a day or so, for these. There will be check-up and inquiry about overdue releases.

Back in the Secretariat, the report number, dissemination instructions, desk comments, and minor corrections can easily be added either on the mat or to the tape, and the tape can either type a new mat or be fed by teletype to the consumer. At some future date the whole community may be sufficiently linked in a secure teletype network that most of the distribution can be accomplished by feeding the corrected tape into it. Considering the usual need for a courier at the receiving end of the teletype line, however, courier service from the Secretariat direct to individuals like that in present use for cables might be at least as fast for many addressees. When there are a large number of recipients at one location, as at the Pentagon, the tape and teletype might be used to print a mat at a central cable center there, say the Army Staff Communications Office, which could then make distribution to Army, ASA, Air Force, Joint Chiefs, and Secretary of Defense offices.

Field preparation of the tape may have taken a day, transportation as much as three, Secretariat processing possibly another, desk release and distribution perhaps a couple more. When the user analyst gets his information it will probably be no more than a week old. He could get it faster only with a large-scale and costly introduction of new radio and cable circuits with advanced terminal equipment. Field offices and their controlling headquarters desks will find not only their reporting but also their considerably greater volume of operational correspondence all moving at this speed.

Design for Guidance and Coordination

This speed alone will help feed back to the source an opinion on the usefulness of his information, but as we have shown, a new medium is needed for communication from user analysts to the originators of reports. We propose a new evaluation procedure, centered on a form bearing a deadline for return. It will call for a quick appraisal by the analyst of the value, credibility, and adequacy of each report in meeting his requirements, with ideas on how it could have been made more useful. We should like eventually also to get here the analyst's comments on its subject-coding, information which should in time build up to yield greater precision in stating requirements, making dissemination, and retrieving documents from storage.

Comments on subject-coding would not be possible under present procedures: information reports as now disseminated have not yet been coded. But in our system the Central Reference expert on duty in the Cable Secretariat who reads a report to determine its proper recipients could also assign its ISC and area codes. If the interposition of this step before dissemination seems an added complication when we are trying to get a report to its users as fast as possible, it would not really take extra time, and the pay-off in getting analysts to think in terms of the codes and in making Central Reference aware of analysts' criteria for coding should be enormous.

The evaluation form will accompany reports sent to those analysts whose feedback is worth exploiting, the specialists concerned with the subject matter reported, those responsible for writing collection requirements on it, those whose work

will suffer if information is not adequately retrievable because of imprecise coding. It stands to reason that their cooperation will be quickly rewarded by receipt of fewer reports which are of no interest to them, by retrieval of filed materials they need in research, and by the more direct and effective contact with collectors made possible by their responses.

The form will be designed for simple answers and multiple-choice checks both for the convenience of the analyst and to facilitate later processing. In past experience, more than half of the elaborate old evaluation forms are returned with check marks only, no substantive comments whatever. For the most part, therefore, punched-card processing of the new forms will eliminate carbon or reproduced copies and obviate manual sortings and distribution. One operator can punch six to eight hundred forms onto cards in a day. All derived products, except those including lengthy analyst comment, will be tailor-made machine tabulations.

Feedback for Coders

Every theoretical discussion of retrieval problems brings out the inevitable human limitations in the coding process.[3] Central Reference document analysts are not omniscient universal geniuses; in assigning the apparently pertinent codes they are bound to overlook or not to be aware of angles under which retrieval might in the future become necessary. This is the primary criticism leveled at the present library system by personnel using it. The Intelligence Subject Code, especially with the refinement of its current revision, will be a splendid instrument, useful exactly to the point to which coders properly foresee the headings under which material may need to be recovered, but no further.

The better and more widely known the ISC, the more it is directly used and contributed to by experts in their various fields, the better the retrieval system. If when its revision is complete we could provide a space on the evaluation form for analysts to suggest coding in other categories than those assigned by Central Reference, analysts would become more fa-

[3] See for example George W. Wright, "Toward a Federal Intelligence Memory," *Studies* II 3, p. 7, and Paul A. Borel, "On Processing Intelligence Information," *Studies* III 1, p. 25.

miliar with the coding systems, and any analyst who received a report could take care of his own interests by thus nominating the appropriate codes.

Mechanically, the additional entries could be referred to Central Reference coders in weekly tabulations. These could show report numbers, the additional codes proposed for each, and the names of the contributing analysts. They could be arranged by document or ISC number or in whatever order would be most conducive to integrating them into the system after any necessary discussion with the proponents.

Once this feedback process had been under way for some time and analysts had become used to it, it is hoped they would develop such confidence in the ability of the library—particularly as mechanization provides increasingly reliable and rapid service—to retrieve what they need that they would be willing to dispense with the bulk of their own holdings of indexed documents. Without participation in the coding process we believe this confidence could not be established.

Feedback for Disseminators

If we are to achieve the speed and efficiency of mechanical dissemination from a central point direct to individual analysts, their individual requirements, as we have noted, will have to be stated with precision and kept up to date by a feedback system suitable for mechanization. Under such a system, dissemination can take place by ISC subject codes, and the assignment of codes to a report would automatically indicate its dissemination. But coded requirements as well as coded reports are a prerequisite for such a mechanized process.

The analyst will be properly skeptical that his subtle needs can ever be fully stated in machine language, and certainly some unusual spot requirements will have to be handled outside any mechanical system. But most requirements can be sufficiently codified to take care of the great routine bulk of dissemination. A codified statement of an analyst's requirements may be derived in the first instance by tabulating his response over a period of some months to key questions on the evaluation form for all the reports he received, along with their assigned subject codes. Document analysts could trans-

late this tabulation into a tentative Statement of Requirements, to be refined in discussion with the analyst concerned. The resultant agreed Statement of Requirements would be used as the basis for current dissemination to him, and it could be kept up to date by the continuing feedback of his evaluations.

This feedback system, properly used, will tend to give the analyst and his supervisor direct control over the volume of information delivered to his in-basket. The supervisor is an interested party because of his responsibility for an equitable distribution of workload to his subordinates, in practice a most difficult task. Most supervisors carry their own workloads and do not inspect their subordinates' in-baskets at regular intervals. Tabulations of the evaluation form by name could provide them every week or at any convenient interval with a list of the reports their subordinates took in and their reactions to them. This tool might be a considerable aid to proper workload distribution.

Feedback for Collectors

Most of the questions on the form will be designed to guide the collector. Headquarters can use the answers, incorporated into punched card systems covering operational data, sources, project numbers, and lists of requirements, to furnish the field, in tabulations by station or base and source cryptonym, the evaluations placed on all of their reports, matched up against requirements levied on the station. Headquarters desks and staffs will be able, in their planning and control functions, to use not only these but other tabulations, for example listings by project and source of reports and their evaluations, lists by requirement numbers of evaluated reports responsive to requirements, and a variety of statistical compilations. If evaluations run consistently high on a low-cost source, there will be little question about the renewal of his operation. Adverse reactions will provide an indication to the desk and staff that a situation needs to be looked into. User rejections will not be drowned in the stack of paper surfaced once a year in the project renewal process, but will lead to an examination of all pertinent facts and the prompt closing of marginal operations. Desk and staff personnel will be

freed from the routine bookkeeping chores now required to keep track of field reporting.

From Prototype to Production Model

This design for speed and guidance has undergone limited tests on the reporting of a major field station, and it has been found to produce at least the short-term benefits anticipated. It is still in the prototype stage, however, subject to modification in more extensive testing planned as equipment becomes available. It may be that new technological developments, for example photographic or magnetic tape encryption processes now being investigated, will make major changes desirable. In any case it will require adaptation to varying local needs in the field before it can be generally applied to the reporting of even this Agency.

There will be many obstacles to the integration of the reporting of the whole community in a single system. They will have to be tackled slowly, and piecemeal. The easiest beginning will probably be on the receiving end, with the extension of rapid dissemination and the application of some better evaluation system in those agencies, notably Air Intelligence, that employ the Intelligence Subject Code. Efforts are now under way to standardize the format of all community reporting. For all its tentative and limited nature, our design does provide a basic concept and may embody some specific features that can lead to an ultimate integrated reporting system.

Significant advance and recalcitrant bugs in the procedure for urgent intelligence flashes.

NOTES ON THE CRITIC SYSTEM

William A. Tidwell

"A true critick ought to . . . communicate to the world such things as are worth their observation."

Joseph Addison's job description in 1712 could also be the motto for a special CRITIC set up by the intelligence community in mid-1958, the reporting system responsive to a directive that critical intelligence be communicated from the field to the "highest authorities" in "speeds approaching ten minutes." CRITIC does communicate rapidly to this high executive world things that are worthy of their urgent attention, specifically indications of international crisis or impending military hostilities. If, in its present state of development and with the communications hardware now in use, there are relatively few occasions on which a CRITIC message actually moves from reporter to intelligence user in ten minutes' time, the establishment of the system has nevertheless made radical changes in the flow of critical intelligence to Washington, and messages handled under it take only a fraction of the average time required for similar messages before its inauguration.

Establishment and Performance

The intelligence community has always been concerned with the rapid reporting of urgent items, but a systematic community-wide assault on the problem did not get under way until the autumn of 1957. At that time a study of the reporting related to the Turkish-Syrian crisis and certain selected indicators of Soviet military activity demonstrated that many critically important items were being handled in a routine manner and that they frequently required more than 24 hours to reach the White House. In terms of averages, a message containing information such as is now handled in the CRITIC system would take nine hours and a half

to move from the field reporter to the intelligence user in Washington.

The results of this study were given to the President's Board of Consultants on Foreign Intelligence Activities, which, with the concurrence of the IAC, recommended to the President that the problem be attacked with the utmost vigor by the intelligence community. This recommendation was approved by the President, and the community initiated action on two fronts, that of facilities and that of procedures. The first resulted in the promulgation of NSCID No. 7, designating the Department of Defense as executive agent for creating and managing a world-wide communications system for the transmission of critical intelligence. The second led to the establishment of the CRITIC system of procedures for rapid reporting over this world-wide communications net.

From the beginning it was obvious that the initial decision as to whether an item of information is of critical nature would have to be made by the field reporters. At the same time it was clear that field reporting personnel, not always apprised of all the related information available in Washington, might err in their judgments. It was necessary, therefore, while giving as much guidance as possible to the field, to reserve to intelligence headquarters in Washington the opportunity for final evaluation of CRITIC items before passing them to the White House.

Critical intelligence was therefore defined as "information indicating a situation or pertaining to a situation which affects the security or interests of the United States to such an extent that it *may* require the immediate attention of the President," and in DCID No. 1/8 specific categories of information considered to fall under this definition were listed. Field reporting personnel of all intelligence agencies were directed to prefix the indicator CRITIC to all messages containing information under these headings and to forward them under high precedence by the most rapid communications means available. It was arranged that in Washington messages carrying this indicator would receive simultaneous electrical dissemination to all the main USIB agencies and to the Strategic and the Tactical Air Commands. The system was put into effect on 21 July 1958.

Like most new undertakings, the CRITIC system operated with a certain amount of creaking and groaning during the first few months, but its effect on the speed of reporting was immediately apparent. CRITIC messages already moved from field reporters to intelligence users in Washington in an average of about an hour and a half, as against the 9½-hour average during the Turkish-Syrian crisis. The Critical Communications Committee, monitoring the system on behalf of the USIB, spent a great deal of time refining the interpretation of various categories in the CRITIC list and unsnarling procedural problems as they were identified. By the end of the first year of operations the average transmission times had dropped to an hour or less, an accomplishment made possible by improvements in the hardware and operating procedures of the supporting communications services along with better handling of the traffic in the intelligence agencies.

Persistent Problems

The progress achieved by the CRITIC system has thus been excellent, but a number of problems remain to be overcome before it can reach full efficiency. For one thing, it can function perfectly only if the messages are kept short, but field reporting personnel have not all learned yet to be as concise as possible. It is still not unusual for a message to contain hundreds of groups, and one even reached the 3,000 mark. It is obvious that these messages cannot be put through in ten-minute service by present communications equipment, operating at 60 or 100 words per minute. Long messages to describe a complex situation could often be obviated by a series of short messages sent as the situation develops.

Some headquarters personnel have been misled by the definition of critical intelligence as matter for "the immediate attention of the President" into thinking that each CRITIC message should in itself be something of an earth-shaker. But there are a number of categories of CRITIC items, indicators of Soviet hostile intent, which become critical only as they form a critical pattern. The pattern, however, can be discerned only in Washington, by the combination of its several elements; and field reporters without access to the rest of the pattern must therefore give CRITIC handling to in-

dividual elements, items which may prove in Washington to be isolated events of relatively little significance.

Some reporting personnel have not understood that the handling of CRITIC messages in Washington is organized on a community-wide basis, that the CRITIC designator is less a communications precedence indicator than an addressee group which automatically ensures immediate distribution by electrical means to all appropriate addressees in the Washington area. Their consequent designation of multiple addressees has increased handling and processing time and delayed delivery to intended recipients. One reporter even addressed a CRITIC message to the Chairman of the Joint Chiefs of Staff, causing General Twining to be awakened in the middle of the night and blocking delivery of the message to its proper recipients until he could authorize its release.

Such shortcomings as these, however, are probably inevitable when a large number of widely dispersed people are called upon to learn a new system of operation; experience and further training of both intelligence and communications personnel should greatly improve performance in these respects. More recalcitrant is a problem arising from a communications fact of life: in a number of highly important countries of the world, including those behind the Iron Curtain, the U.S. Government cannot maintain its own communications facilities and is dependent upon commercial facilities or the monopolies of the governments concerned, which of course do not recognize the comparative precedence assigned a message within the U.S. Government systems. Some of these governments might be willing on a reciprocal basis to grant us the right to operate our own communications, but the granting of such rights in the United States is contrary to U.S. policy. Communications from these forbidden areas are generally the responsibility of CIA and the Department of State. Both organizations are hard at work on the problem, and there is some hope that improvements can be effected.

In the communications systems operated by the U.S. Government, considerable additional improvements are planned or under way. We have good reason to believe that CRITIC messages handled by these facilities can achieve average

speeds of 10 minutes or less within the very near future. Numerous test messages transmitted in substantially less than ten minutes prove that the goal of "speeds approaching ten minutes" is attainable under the right conditions. The CRITIC system will become a "true critick," however, only by virtue of alert and efficient support from a great number of intelligence and communications personnel in many agencies of the Government. Great strides have been made, but there is still work to do.

A critical review of prewar Japanese military intelligence operations in Manchuria.

ANTI-SOVIET OPERATIONS OF KWANTUNG ARMY INTELLIGENCE, 1931–39 [1]

Richard G. Brown

Japanese military intelligence operations against the Soviet Union in the Far East became of prime importance after Japan took over Manchuria in 1932. Before that she had no great need for intelligence on the Soviet forces in the Far East, inasmuch as she had no common international boundary with the U.S.S.R. on the continent, the Chinese being in control of most of Manchuria. At the time of the Manchurian incident the Japanese nevertheless had potentially strong operational intelligence assets in numerous inhabitants of the Korean and Chinese border areas who were able to cross into Soviet territory with relative ease so long as Soviet security remained generally lax. In addition, there were numerous anti-Communist White Russians in northern Manchuria willing and able to engage in intelligence activities for the Japanese.

The intelligence operations of the principal Japanese agency in Manchuria, the Kwantung Army, included propaganda, sabotage, counterintelligence, and what was to become a major collection effort on the Soviet army and the geography of the area. The means it employed included the dispatch of secret agents into Soviet territory, the interception of radio communications, the interrogation of Soviet deserters and defectors, and the establishment of border observation units.

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[1] This article is based on historical data compiled, with the assistance of personnel of the Japanese Kwantung Army, by the Military History Section of Headquarters, Army Forces Far East, and distributed by the Office of Military History, Department of the Army. The principal source is Volume X of the Series *Japanese Special Studies on Manchuria*, issued in June 1955 under the title "Japanese Intelligence Planning Against the USSR."

From the first the Kwantung Army and the Army General Staff in Tokyo were alert for indications of Soviet reaction to the Manchurian incident, and after Kwantung Army elements moved into the Soviet sphere of influence the surveillance of Soviet actions in the Far East, particularly any military movements, was intensified. Yet Japanese military headquarters felt that the Soviet Union had no intention of intervening in the situation, and so devoted its attention not to immediate countermeasures but to consolidating the Japanese position in Manchuria and developing an extensive intelligence network as Kwantung Army units advanced toward the Soviet border. This intelligence effort was intensified as Soviet border defenses improved: aerial photography during the summer of 1933 revealed extensive fortifications designed to check Japanese military operations against Soviet territory.

Agent Infiltration

The principal field intelligence units under the Intelligence Section of the Kwantung Army staff were eight Army Special Services Agencies. Of these it was the unit in Harbin which played the major role in the Manchurian operations. The Harbin ASSA used White Russians for espionage missions, and these were the best of the agents available. The border area ASSA's occasionally used White Russians, but relied mainly on local Chinese and Koreans. These agents were infiltrated into Soviet territory to carry out espionage. Occasional deserters from the Soviet army were also exploited for information.

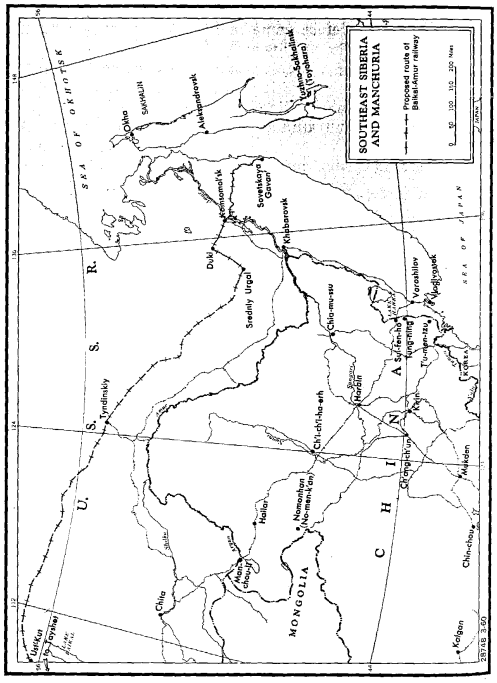
The Soviets commenced to bolster border security during 1935. They increased the number of border garrison units, ordered the evacuation of border area inhabitants, and instituted constant patrolling. A Soviet counterespionage network in Manchurian territory, especially in the border area, regularly observed and reported on the movements of Japanese agents. The White Russians, while more reliable and competent than other agents, being most of them ardent anti-Communists, were more easily detected. Many were shot in attempting to cross the border, and the majority did not return, thanks to effective Soviet security. A deadlock in trans-border operations resulted.

The standstill in intelligence operations was quite embarrassing to the Kwantung Army's headquarters Intelligence Section, which therefore came increasingly to take over the active direction of the intelligence services in Manchuria, particularly of the ASSA units. Efforts were made to improve techniques of agent infiltration, to take more pains in forging credentials, to pay more attention to dress, baggage, and language, to give better training for missions and reporting. Attention was also given to other means of intelligence collection—communications, publications, and telescopic observation.

Communications Intercepts

Soviet communications in the Far East relied mainly on wireless; the wire network had failed to keep pace with the mushrooming military and industrial expansion. A very considerable number of Soviet message circuits were thus vulnerable to interception. In order to learn the techniques for breaking codes, the General Staff in Tokyo had sent several technical officers to Poland in 1933 and 1934: the Polish Army General Staff's cryptanalytic work was considered by the Japanese to be among the best in the world. When the first contingent of these officers returned from Poland in 1935, a small unit for studies on radio interception and the breaking of Soviet codes was formed and assigned to the Kwantung Army. Eventually this unit was expanded and became known as the Communication Intelligence Group, operating directly under the supervision of the Kwantung Army intelligence service.

The interception and analysis of Soviet plain-text messages was not undertaken until 1936, when the Soviet Union began to construct the Baikal-Amur Magistral to supplement the Trans-Siberian Railroad. The BAM line was a matter of grave concern to the Japanese General Staff, but the Kwantung Army Intelligence Section had no means of observing the progress of construction on it. The Operations Section therefore took the initiative and asked the Japanese-controlled South Manchurian Railway Company to establish a branch of its Communications Research Department in Harbin. This branch was charged with intercepting plain-text wireless messages concerning construction on the BAM line and with



analysis of the intercepted data with respect to selected subjects. Although this installation supplied data to the intelligence network through the very active Harbin ASSA, the fact that it was conceived and supervised by the Operations Section became an irritant in this Section's relations with the Intelligence Section. The success of the Railway Company's unit led the intelligence service to supplement its code interceptions with clear text intercepts, which were thereafter forwarded on ticker tape to the Harbin ASSA for analysis by its Document Intelligence Division.

Document Analysis

The importance of available Soviet publications, primarily newspapers published in the Far East, had somewhat belatedly become apparent to the Japanese, and the few publication analysts originally assigned to the Harbin ASSA had been augmented and formed into the Document Intelligence Division. Its staff included a large number of White Russian intellectuals, as well as Japanese competent to interpret and analyze Soviet documents, publications and messages. Periodicals, handbills, newspapers, magazines, books, booklets, pamphlets, and even personal notebooks collected by the various intelligence agencies were sent to the Harbin ASSA for scrutiny. Later, when it became difficult to obtain documents, greater importance was attached to Soviet radio broadcasts, along with the intercepted clear-text wireless messages. But there were still documents obtained by agents, papers carried by the occasional defectors from Soviet territory, and in one instance a windfall of postal communications from a Soviet mail plane which made a forced landing in Manchuria in 1938.

Border Observation

In the early thirties the military units of the Kwantung Army manned posts for visual observation of Soviet territory; each front-line unit had a few lookout posts equipped with 24-power battery telescopes. After the difficulties in intelligence collection became acute in 1934, the intelligence service undertook to improve and expand this system as an intelligence activity. The observation posts were organized as "Soviet Territory Observation Teams" who were to keep the Soviet side of the border under surveillance day and night,

recording in detail the movement of even a single soldier, horse, or vehicle. The posts were each manned by approximately one squad. They used telescopes of various types, ranging up to one of 150 power obtained from the Navy for night use. The front-line Army commands were ordered to make use of any suitable points in their respective sectors for this purpose, and to train and supervise the personnel to make the observations. Nevertheless, up until 1938 these teams were often composed of inferior personnel and occasionally even lacked telescopes. Some of their more important reports were on the arrival and departure of ships in Vladivostok harbor, as observed from posts at Wangchaoshan and Tumentzu, and on the arrival and departure of aircraft at Voroshilov, as seen by posts at Suifenho and Tungning.

Achievements and Failures

By mid-1939 the Kwantung Army's intelligence agencies had scored considerable progress in improving their operations. In 1935 the communications intelligence Research Unit had succeeded in breaking the simple codes used by the Soviet border forces, and constant study brought later successes against Soviet army codes of three and four letters. Although these codes were not commonly used for important messages, the Research Unit was nevertheless able to learn the organization and disposition of some border garrisons and the location and movements of some air units. It also did traffic analysis, compiling statistics on the origin and volume of Soviet radio messages.

The interception and study of plain-text messages by the South Manchurian Railway's Communications Research Department yielded considerable information about the progress of construction on the BAM line. The Kwantung Army's Research Unit was also able to obtain from plain-text intercepts some valuable indications about particular military situations in Asiatic Russia. Analyzing this data, the Document Intelligence Branch of Kwantung Army intelligence was able to reach conclusions about the disposition of units, changes in units, their commanders, their numerical designations, the arrival of new personnel, and their places of origin, as indicated by messages of safe arrival sent home. Messages in the

year also supplied many fragmentary details about industrial and economic conditions in Asiatic Russia, and these often contributed to important findings.

The piecemeal data compiled by the Harbin Document Intelligence Division was on many occasions helpful to higher echelons in making estimates of the enemy's strength and disposition. A compilation of file cards on approximately 2000 Soviet officers in the Far East, for example, contributed significantly to ascertaining the order of battle for Soviet army forces in eastern Asia. An unusual operation undertaken by the Division was the examination of postal matter in the Soviet mail plane which made a forced landing in Manchuria in 1938. The mail had to be secretly opened, sorted, copied, and resealed while diplomatic negotiations for the return of the airplane and its crew were being carried on. The analysis of the material was completed within a month.

The observation teams engaged in telescopic surveillance of Soviet territory produced some information but on the whole were not notably successful. They provided details on Soviet fortification improvements in parts of the border zone and on new military roads, barracks, and warehouses behind the fortifications, and they compiled statistical data on vehicle operations supporting the fortified zone. Efforts of the ASSA's to penetrate Soviet territory with spies were nearly all failures, but their interrogation of fugitives from Soviet territory often uncovered important information.

A test of the Kwantung Army's intelligence services was afforded in 1939 by the development of the Nomonhan incident, which began in May as a series of clashes between Soviet and Japanese forces guarding the border between Outer Mongolia and Manchuria. By June it had become a major engagement of divisional magnitude and in August a failure for the Japanese. This operation disclosed several serious defects of organization and technique in Kwantung Army intelligence, despite of its significant improvement since 1931. In general it showed itself still not sufficiently modernized and systematized to be effective. It also showed marked differences in system and procedure among its several components.

Deficiencies at Nomonhan

The chief defects of the Kwantung Army's headquarters Intelligence Section arose from its having assumed over a period of years complete control of all the ASSA's. Its own functioning had consequently become extremely complex and its real aims were often lost from sight. Properly a policy planning staff, the Section had been transformed into an operating agency, and the detail arising from its domination of the ASSA's constantly obstructed it. As the discharge of its normal responsibilities became careless under these stresses, the headquarters Operations Section lost confidence in it and tended to make its own estimates, arbitrary and independent, drawn from scanty information and often from untested sources. The Intelligence Section was unable to halt this trend, and it became more pronounced with the passage of time.

This headquarters involvement with the ASSA's was aggravated by an organizational weakness in the coordination of these units which prevented them from being utilized systematically. The ASSA's had failed to systematize liaison and cooperation among themselves. The Harbin ASSA, which had the greatest experience and capacity in Soviet intelligence and a staff more comprehensive and diversified than any of the others, was kept on an equal footing with the other seven, so that the benefit of its knowledge and expert guidance was not imparted to them. With all eight operating independently under the direct control of the Intelligence Section, the administrative burden became too great during the Nomonhan incident.

A serious procedural defect in the handling of information was illustrated by an incident which produced a minor crisis in relations between the Intelligence and Operations Sections. The Harbin ASSA had obtained through a contact in the office of the Soviet consul general there a file purporting to be extracts from message traffic between Moscow and Khabarovsk. Initially this correspondence seemed authentic and important, but developments after the outbreak of the Nomonhan incident convinced the Intelligence Section that it was false and deceptive. The Operations Section, however, which had obtained a copy of it from the Harbin ASSA,

assumed that it had been acquired by interception and decipherment, and reproduced it under highest security classification. The Intelligence Section failed to report the deceptive nature of this correspondence to the Operations Section, which therefore tended to be misled by it in some phases of the Nomonhan operations.

It was not until the last stages of this engagement, as the Kwantung Army was concentrating its strength for an attack, that the communications intelligence Research Unit achieved some moderate success in learning the disposition of Soviet and Mongolian troops in the Far East; and even this limited accomplishment was made from the vantage point of Changchun—almost 500 miles from the scene of battle. The Kwantung Army's inadequacies in the communications intelligence field were strikingly apparent in its failure to have a signal detail in the front-line areas for the collection of battlefield information transmitted by wireless in either code or plain text, for the Soviet army often transmitted in clear text in situations demanding speed, and the increase in the number of coded communications for combat purposes would have facilitated the solution of the Soviet code. Communications facilities in the vastness of Outer Mongolia, the locale of this conflict, were so patently poor that a significant increase in radio traffic was to have been expected at the outbreak of hostilities. Japanese interception equipment was not developed sufficiently, however, nor were operators adequately trained to tap this source of intelligence. Another communications deficiency was the lack of a network for the exclusive use of the intelligence services; the secret missions that did get into Soviet territory were often therefore isolated.

A committee of officers from Kwantung Army headquarters and the General Staff in Tokyo later reviewed the Kwantung Army's performance during the Nomonhan incident and found a number of weaknesses. Chief among these was the fact that the operations staff officer had insufficient confidence in the estimates of the enemy situation made by the intelligence staff officer, and as result was inclined to form his own estimates on an inadequate intelligence foundation, sometimes even basing his decisions exclusively on the peace-

time situation. Another was the preoccupation of intelligence officers with peacetime intelligence problems to such an extent that they failed to develop a war mobilization plan and thus were unable to exploit enemy activity during the Nomonhan hostilities. A third was the fact that improvements in techniques were insufficiently taken advantage of, and that there was a great need for systematizing operations and procedures. The committee recommended that major improvements be made in the peacetime operation of the intelligence services and in preparing them for wartime activity, so that intelligence estimates, as well as other intelligence products, would enjoy the full confidence of operations officers and be accorded full weight.

How FCC's routine policing of the ether became in World War II a multi-purpose defense service and a far-flung counter-espionage operation.

THE U.S. HUNT FOR AXIS AGENT RADIOS

George E. Sterling

I hope that this country, particularly its intelligence agencies, has become better organized to handle a national emergency than it was in 1941. When the war, after slowly creeping for two years from Europe toward U.S. shores, suddenly exploded upon us at Pearl Harbor, thousands of new kinds of things had to be undertaken in desperate haste and with at times disorderly improvisation. Many agencies were given emergency duties for no better reason than that they were using equipment approximating what was needed for the wartime work. That they by and large discharged these extraordinary responsibilities well, at the same time helping cooperatively toward the gradual readjustment of temporarily assigned functions, is something in which all those who participated can take pride.

The Federal Communications Commission, because it had a network of radio monitoring and direction-finding stations to police the domestic airwaves, was given its full share of duties not called for in its job description. It ran a rescue service for planes lost in the black-out or bad weather, locating them by their radio signals and furnishing them their bearings; more than 600 planes, many of which would otherwise have been really lost, were given FCC emergency fixes before Army Air Force personnel were trained, with our help, to take over the job. It monitored enemy commercial radio circuits and furnished the Board of Economic Warfare with hundreds of leads useful in the preclusive buying program. To meet requirements of the Eastern, Gulf, and Western defense commands, the Commission's legal responsibility for apprehending unlicensed radio stations was extended to surveillance of the coast by radio patrols for signs of surrepti-

tious communication with enemy submarines. The network intercepted foreign weather traffic for our air forces. It monitored foreign radio broadcasts, setting up the organization which now has become the Foreign Broadcast Information Service, and published texts and analyses of broadcast news and propaganda for a variety of government consumers. It trained OSS personnel in radio methods and procedures and built equipment for their use.

For a year and a quarter the FCC's Radio Intelligence Division, as the monitoring network was known, carried the full load of military radio intelligence in Alaska, where the Army was not able to station a radio intelligence company until late in 1942 and got a monitoring station in operation only in the spring of 1943. It radio-patrolled the Alaskan coast by sea. It also participated at Army request in military intelligence elsewhere, most notably in Hawaii and on the west coast. In San Francisco it set up an Intelligence Center where officers of the military services were on duty around the clock. It identified and tracked the radio-equipped balloons which the Japanese launched against our west coast. It discovered and established the location of a Nazi weather station on Greenland, which the Coast Guard was then able to destroy. It trained the military personnel who eventually took over most of these duties, prepared instructional booklets and monitoring aids for them, and supervised their work until they became competent enough to operate without help.

The RID even participated from afar in the guerrilla movements in the Philippines. This activity began when one of our monitors picked up a signal using the call, PK1JC, of an amateur in the Dutch East Indies, where no amateurs could operate. We fixed its origin in northern Luzon. PK1JC sent a message coded, we determined, with a prewar Signal Corps cipher disk, giving the name and serial number of an unsurrendered American soldier trying to establish contact with MacArthur's headquarters. He requested acknowledgement by a signal from General Electric's powerful KGEI transmitter near San Francisco. The Signal Corps arranged for this acknowledgement and asked us to continue copying all his messages. Later, when the landing of transmitters by submarine created quite heavy traffic from the Philippine guerrillas, a primary monitoring station at San Leandro, California, was exclusively devoted, at Signal Corps request, to copying it and expediting it by private teletype circuit to Washington.

Policing the Domestic Ether

Although these spirited improvisations requested and supported by the military services lay far outside the Commission's proper charter, the Communications Act of 1934, they were undertaken eagerly when required and relinquished later gracefully but with reluctance by our radio men and women anxious to contribute to the war effort in any way they could. Our people had enough of their own proper work to do, for after Pearl Harbor the regular job of the Radio Intelligence Division took on a new and grimmer aspect. It was now not just a question of tracking down maladjusted transmitters, unshielded diathermy apparatus, or even the illegal communications of pranksters, smugglers, and racetrack tipsters, but of sealing the country's leaky ether against loss of war secrets over the radio circuits of enemy agents. Hitherto, with commercial communications to foreign countries free of surveillance, spies in this country had had no need to risk secret transmitters; now these commercial facilities were closed or censored and the whole spectrum had to be patrolled for furtive whisperings in Morse cipher. The RID was under challenge to live up to its initials.

The Division's equipment, personnel, and physical deployment were adequate to the task. During the state of national emergency that preceded Pearl Harbor the FCC had been authorized to begin an expansion of its radio detection facilities, which were ultimately stabilized in twelve primary monitoring stations, about sixty subordinate monitoring posts, and about ninety mobile units distributed through the United States, Puerto Rico, Hawaii, and Alaska. The fixed stations and many of the mobile units were linked by instantaneous communications. They were organized into three major networks based on radio intelligence centers respectively in Washington, near San Francisco, and in Honolulu; but in fixing the location of a source of radio signals the three networks were fused into one and directed from Washington.

Each primary station, in addition to its complex of rhombic and other antennae and its receiving and recording equipment, had at least one Adcock direction finder, a large rotating antenna sensitive to the direction of shortwave signals bounced off the ionosphere; this device had been invented in England, but was refined and improved by RID engineers. At short range, say within a few miles, a simple loop antenna can pick up the ground-wave component of a signal and determine its direction; our disguised mobile units included these in their equipment. And finally, for locating transmitters at really close quarters, we developed what we called a "snifter," a signal-strength meter that a man could carry in the palm of his hand while inspecting a building to determine which room a signal came from.

In the routine day-and-night operation of a monitoring station, the patrolman of the ether would cruise his beat, passing up and down the frequencies of the usable radio spectrum, noting the landmarks of the regular fixed transmissions, recognizing the peculiar modulation of a known transmitter or the characteristic fist of a familiar operator, observing an irregularity in operating procedure and pausing long enough to verify the call letters, or finding a strange signal and recording the traffic for close examination, and then sometimes alerting the nation-wide net to obtain a fix on the location of its source. More than 800 such fixes would be made in an average month, requiring the taking of some 6,000 individual bearings. For although mathematically the intersection of two bearings provides a fix, the 1% error that must in practice be allowed in the angle of a bearing, even when it is corrected for variations in propagation and site conditions, becomes considerable at distances that may run to thousands of miles; and at least four bearings are needed for a reasonably reliable long-range fix.

Radio Spies in the United States

With respect to Axis agents in the United States and its territories this close vigilance was almost purely prophylactic, and effective in its prophylaxis: out of respect for it enemy agents, as far as we ourselves were able to discover, made only two attempts during the entire war to establish radio communications across our ethereal frontiers, and in both cases failed to get a single message through.[1] The stories of these two, although they have been told from other viewpoints elsewhere,[2] are worth summarizing here.

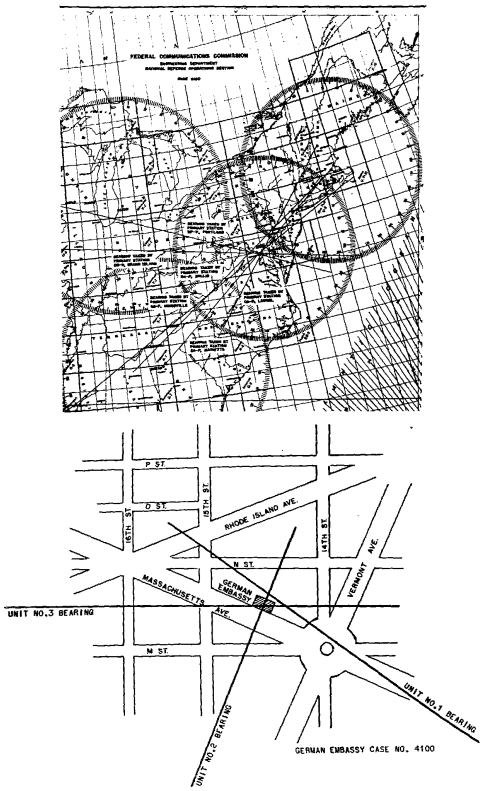
The first took place in the spring of 1940, long before Pearl Harbor had roused us to hunt for radio spies here in earnest. Our routine monitoring turned up an unidentified transmitter carrying on coded traffic with a distant station which used the call AOR. We asked the Army and the Navy if it might be one of theirs. They had no knowledge of it; the Navy thought it might be a St. John, New Brunswick, station. But our direction finders showed it to be on Long Island, and its correspondent AOR near Hamburg, Germany. We reported to the FBI.

The Bureau told us in confidence that it was indeed a German agent radio, but under their control. A German-American, William Sebold, had revealed that he was recruited by the Nazis and instructed to set it up. The FBI built and now were manning the station for him, feeding Hamburg false or innocuous information and identifying its agent sources. The deception continued for more than a year under our joint surveillance, until at the end of June, 1941, 33 German agents to whom the traffic had furnished leads were arrested. At their trial that fall, when the defense tried to maintain that AOR was not a German station but an FBI entrapment device in the United States, RID engineer Albert McIntosh produced charts showing the fix on Hamburg. His public testimony must have been one factor in the German decision not to risk agent transmitters in the United States.

They did try it once more, though, right after Pearl Harbor, apparently on local initiative, impromptu. In the general alert which followed that shocking Sunday morning we had put several mobile monitoring units out cruising the Washington streets. These were equipped not only with loop direction finders but with a device we called the watch-dog, an

[1] Wilhelm Hoettl, one of the German foreign intelligence area chiefs, affirmed during his interrogation by 3rd Army in June 1945 that the Sicherheitsdienst had not been able to establish a single wireless connection either in the United States or in England.

[2] Notably in Don Whitehead's *The FBI Story.*



FIGURES 1 AND 2

aperiodic receiver we had developed which would sound an alarm when it received a strong signal on any of a wide range of frequencies. (It was patented by two RID engineers and later used by OSS and the Navy.) In the wee hours of Tuesday, December 9, one of these watch-dogs was triggered by signals on a transatlantic frequency. At the same moment three thousand miles away our monitors in Portland, Oregon, heard them too—station UA briefly and vainly calling a distant control center. Five other direction-finding stations were set to watch the frequency; and when a few hours later UA tried it again, they reported the bearings projected on the chart in Figure 1. This fix confirmed the uncertain supposition of the watch-dog that the transmitter was in Washington.

Now three mobile units were given the scent, and they quickly narrowed down the location to the German Embassy, as shown in Figure 2. It was a problem to pin-point the transmitter without entering the Embassy because the antenna was stretched between two buildings, with equal signal strength at each end and apparently lead-in wires to both buildings. This problem was solved in a pre-dawn conference with the FBI, who arranged, in cooperation with the Potomac Electric Power Co., that we could go down into a manhole in the street and cut the power to each building separately in turn when UA began to call. In the end, however, because the State Department was afraid for our own diplomatic mission still in Germany, we did not seize UA but simply set up two jammers to drown him out if he should try once more. He never did.

This beginning was the end for Axis radio agents within our borders; any German agents picked up by the FBI thereafter were found to have been using secret ink or some other communications than radio to get information out of the country. And we learned that some Japanese agents who requested their headquarters' permission to set up a transmitter here were turned down on the grounds that the FCC would nab them as soon as they got on the air. Outside our own states and territories it was a different story, one in which also the RID became intimately concerned.

The Portuguese Net

One day in September 1941, monitors at the secondary RID post in Miami heard a station using irregular procedures and signing the call UU2, one not in conformity with those used on commercial and other authorized circuits. It was therefore made a case for investigation. Bearings fixed its location near Lisbon, Portugal; and as it continued to call almost nightly without receiving a reply, RID units were instructed to be on the lookout for the answering station. After more than a month monitors at the secondary posts in Pittsburg and Albuquerque simultaneously picked up the answer from a station signing CNA; bearings were taken which located this transmitter in South Africa.

A few days later another station using the UU2 procedure was intercepted, this time with the call BX7. It was also in Lisbon, and the characteristics of its signal showed that without question BX7 was the same station which had previously signed UU2, apparently the control station of a network. After a week an answer with the call letters NPD was picked up by our Rhode Island monitoring post. This station proved to be in Portuguese West Africa.

The messages exchanged between the Lisbon control UU2/BX7 and the two out-stations in Africa were of course enciphered. RID did not maintain a cryptanalysis laboratory, decipherment being the responsibility of the FBI, of the Army's Signal Intelligence Service, and, on behalf of the Navy, of the Coast Guard; but in order to facilitate the identification of intercepted traffic we had interested a couple of our staff in cryptanalytic work. These men attained a considerable skill and in some cases were able to furnish leads for the FBI decipherment. The Lisbon cipher was one of these cases. It was an up-and-down transposition whose key length varied from day to day.

The texts of the messages showed this network to be one channel by which German agents in the neutral countries and colonies of Africa reported on the movements of ships, troops, and materiel and on political events. On March 26, 1942, for example, the South Africa station reported ship sailings and the concentration of Allied troops which later took Madagascar. As translated from the Portuguese:

TWENTYSIXTH. AMERICANS "NISHNAHA" AND "SOLONTUSHAW" SAILED WITH ORE FOR NEW ORLEANS, ALSO ENGLISH "CITY OF N. CASTLE"; "ANGOLA" AND ENGLISH "ISIPIEGO" FROM DURBAN ARRIVED WITH PASSENGERS. TROOPS STILL CONCENTRATED; TRYING TO LEARN DETAILS.

From Portuguese West Africa an agent with the code-name Armando sent similar information intermingled freely with operational reports. On December 4, 1941:

ARMANDO REPORTS ENGLISH CONSUL RECEIVED LONG ENCIPHERED TELEGRAM RELATIVE ENFORCING STRICT VIGILANCE AGAINST ESPIONAGE. OFFICIALS CLAIMED ENGLISH STILL COMMAND CAPE VERDE SUBMARINE CABLE. MANY MEN GO TO FREETOWN OWING APPROACH TEN CONVOY SHIPS, LARGE TROOPS, AMMUNITION AND TANKS. HOWEVER INFORMER DOES NOT KNOW IF THEY REMAIN LAGOS OR FREETOWN AND BATHURST.

On January 7, 1942:

WEST INDIA ARRIVED BATHURST FOURTEEN WITH PILOTS AIRCRAFT MECHANICS DISASSEMBLED TANKS ANTIAIRCRAFT MACHINE GUNS MUNITIONS LARGE QUANTITY GASOLINE CAMPAIGN TENTS. NEXT MONTH WE WILL HAVE REGULAR CONNECTION DAKAR THROUGH INTELLIGENT NATIVE GOLDSMITH AUTHORIZED TO ENTER COLONIAL SERVICE UNDER GOVERNOR TO HELP MY WORK. ARMANDO

On February 5:

CHIEF OF POLICE LIEUTENANT UNDERCOVER IMPRUDENTLY WORKS FOR ENGLISH. CONVENIENT TO OBTAIN HIS RETURN LISBON. HE CAN DAMAGE US. ARMANDO

But the Germans were growing dissatisfied with Armando's work. The Lisbon station radioed him on February 11:

SAID THERE IS TO BE DISEMBARKMENT ENGLISH AMERICAN TROOPS DAKAR NEXT FIFTEEN DAYS. WHY NO REPORTS MOST URGENT.

On February 12:

DISEMBARKATION TROOPS FREETOWN NOT DAKAR. I ORDER YOU INVESTIGATE. NOT SATISFIED REPORTS WHICH I CALL FOR. HAVE RECEIVED BETTER REPORTS FROM OTHER PERSONS.

And most indiscreetly, on 27 March:

SECURE EXPEDITIOUSLY RECENT REPORTS DAKAR FREETOWN RELIEVE CAROLINA OF HIS DUTIES. USE NEW INK. BEARER SHOULD DELIVER LETTERS PERSONALLY TO PORTER HOTEL DUAS HACOES VICTORIA STREET FOR MR. MERCKEL. WE ARE EXPERIMENTING CONTINUATION ORGANIZATION TWO MORE MONTHS. USE YOUR BEST REPORTS FOR MY VINDICATION.

The organization did not in fact last much longer than two more months, but it was not the Germans who terminated it. Revelations like this one enabled Allied intelligence officers to clean out the Portuguese group in the summer of 1942.

Nazi Agent Training and Procedures

Having thus demonstrated its capability in the European theater, the RID was approached early in 1942 by its British counterpart, the Radio Security Service, with a request for the establishment of regular liaison and exchange of information. From then on to the end of the war we maintained a most harmonious and fruitful relationship which served to build up a pretty complete picture of the German diplomatic and espionage networks and their activities. The characteristics of individual transmitters and individual operators were recorded and catalogued so that they could be recognized when they were used on a different circuit. Nearly all the codes and ciphers were broken, and the great bulk of the clandestine traffic could be promptly read. During the most critical period of the war in Europe the RID was monitoring 222 frequencies used in clandestine intra-European circuits.

After the Lisbon net was closed down the Germans had five major networks, with control centers in Berlin, Hamburg, Bordeaux, Madrid, and Paris. The out-stations were located in practically every European country, in Africa and the Atlantic, and in the western hemisphere. The operators of these out-stations were in general not skilled radiomen, we learned from captured spies, but agents who had been trained in radio and codes and ciphers along with other tradecraft—for example photography and microfilm, secret writing, explosives and demolition—at a school near Hamburg. Their radio

training embraced the use of International Morse and the construction and operation of transmitters and receivers.

Student operators were required to achieve the modest transmitting speed of twelve words a minute (as compared, for example, with our Merchant Marine requirement of 20–25 words a minute). Then they would make a five-minute sample transmission on a device which recorded graphically their speed, touch, and characteristic fist. On the basis of this graph they were assigned a permanent transmitting speed and given another week's training at this speed. Then a second graph was made as each operator graduated, this one to be filed as a specimen signature against which his later messages would be verified as genuine and not the deception of enemy counterespionage. This procedure was apparently adopted after the Germans learned that the FBI had fooled them with the Sebold station on Long Island.

The agents were furnished portable transmitters and receivers, usually of the type built into a suitcase, complete with antenna wire, tools, and all the accessories necessary for going into immediate operation. They were given precise instructions for constructing a directional antenna which would afford a maximum signal to their control center and a minimum to eavesdroppers. Then they were dispatched to their posts by neutral ship, by submarine, by parachute, or over clandestine land routes.

The first sign of their safe arrival would be their call letters on the air; and this would signify their presence to us, for it is difficult to disguise an agent radio's call. At one time, when the control of one of the German nets passed from the Abwehr to the Gestapo, its transmitters adopted the call letters and frequencies of commercial stations in South America; but other characteristic procedures of clandestine traffic still betrayed them, and this device was later abandoned.

Not being able to disguise their calls, the agent networks made a practice of changing call letters, usually every day, in an effort to spoil continuity for their pursuers. But very often had a rota which remained nonrepetitive for a year, say, and we were able to work out in advance the call letters which many espionage transmitters would be using on any

particular future day; sometimes we even caught the out-stations making mistakes in their own system. Some worked with a list of 31 different calls which repeated itself every month. Some had two such lists, one for odd and one for even months. One system was worked out with such little forethought that a spy once had to call with the international distress signal, SOS. This was one of the systems that determined call letters in connection with the cipher key for the day, a connection that sometimes led our part-time crypt-analysts into the decipherment of messages.

One group, we learned from one of its indiscreet first messages sent blind, based its calls and transposition cipher on the Albatross edition of Axel Munthe's *The Story of San Michele*, a book excluded by copyright arrangements from the British Empire and the United States, using a different page each day. The page to be used was determined by adding to a constant number assigned each agent the number of the month and that of the day in question. The last line on this page contained the calls to be used—the first three letters, reversed, for the control center and the last three, reversed, for the out-station. An example of this procedure may be of interest.

Shortly before midnight, eastern standard time, on March 12, 1942, one of our monitors at Laredo, Texas, copies the following slow hand-keyed message on 11,220 kilocycles.

VVVV EVI EVI EVI
IWEOF WONUG IUVBJ DLVCP NABRS CARTM IELHX YEERX
DEXUE VCCXP EXEEM OEUNM CMIRL XRTFO CXQYX EXISV
NXMAH GRSML ZPEMS NQXXX ETNIX AAEXV UXURA FOEAH
XUEUT AFXEH EHTEN NMFXA XNZOR ECSEI OAINE MRCFX
SENSD PELXA HPRE

We know from our analysis of previous messages that the call EVI is due to be used by an operator of the San Michele group whose assigned constant number is 56. Checking, we add the month and day—this would be March 13 by Greenwich Mean Time—and turn to page 72 of the novel. The last word on the page is "give," so EVI is right. The first word on the last line is "like"; the control center will sign KIL.

The message sent in the early hours of March 13 was probably enciphered on March 12, so we go back to page 71, shown here opposite, for the key. Here the first line reads, "I would

I would have known how to master his fear, and would have been the stronger of the two as I have been in later years more than once, when I have stayed a hand clutching a revolver in fear of life.

When will the anti-vivisectionists realize that when they are asking for total prohibition of experiments on living animals they are asking for what it is impossible to grant them? Pasteur's vaccination against rabies has reduced the mortality in this terrible disease to a minimum and Behring's anti-diphtheric serum saves the lives of over a hundred thousand children every year. Are not these two facts alone sufficient to make these well-meaning lovers of animals understand that discoverers of new worlds like Pasteur, of new remedies against hitherto incurable diseases like Koch, Ehrlich and Behring must be left to pursue their researches unhampered by restrictions and undisturbed by interference from outsiders. Those to be left a free hand are besides so few that they can be counted on one's fingers. For the rest no doubt most severe restrictions should be insisted upon, perhaps even total prohibition. But I go further. One of the most weighty arguments against several of these experiments on living animals is that their practical value is much reduced, owing to the fundamental difference from a pathological and physiological point of view between the bodies of men and the bodies of animals. But why should these experiments be limited to the bodies of animals, why should they not be carried out on the living body of man as well? Why should not the born criminals, the chronic evil-doers, condemned to waste their remaining life in prison, useless and often dangerous to others and to themselves, why should not these inveterate offenders against our laws be offered a reduction of their penal servitude if they were willing to submit under anæsthetics to certain experiments on their living bodies for the benefit of mankind? If the judge, before putting on the black cap, had in his power to offer the murderer the alternative between the gallows and penal servitude for so and so many years, I have little doubt there would be no lack of candidates. Why should not Doctor Woronoff, the practical value of his invention be

have known how to master his fear" etc. We take the first
me letters and number them in sequence:

I W O U L D H A V
1 2 3 4 5 6 7 8 9

Substituting these figures in the first four groups, with nulls for any missing letters, we get

I	W	E	O	F		W	O	N	U	G		I	U	V	B	J		D	L	V	C	P
1	2	x	3	x		2	3	x	4	x		1	4	9	x	x		6	5	9	x	x

or "12 March, 2304 hours, 149 letters in 659th message following." There are actually 154 letters following, but the first group of five is simply a special indicator identifying the agent.

This is as far as the RID needed to go for its own purposes before turning the message over to the FBI. But the text could be worked out from the same page of the novel. Lay out a blank message in lines of twenty letters each, keeping the columns straight. 149 letters in rows of 20 make nine columns of eight letters each followed by eleven columns of seven each. Write across the top the first twenty initial letters of the lines on page 71, skipping indented lines. Number these in alphabetical sequence, and then go down the columns in the indicated order with the encrypted text. This arrangement gives the clear German text:

i	b	m	r	a	a	t	m	a	t	s	u	n	e	u	f	f	n	p	t
8	4	9	14	1	2	16	10	3	17	15	19	11	5	20	6	7	12	13	18
S	P	R	U	C	H	x	S	E	C	H	S	N	U	L	L	x	V	O	N
V	E	S	T	A	x	A	N	x	S	T	E	I	N	x	x	Q	U	E	E
N	x	M	A	R	Y	x	Q	U	E	E	N	x	M	A	R	Y	x	A	M
x	E	L	F	T	E	N	x	E	I	N	S	A	C	H	T	x	U	H	R
M	E	Z	x	M	E	Z	x	V	O	N	D	A	M	P	F	E	R	x	C
A	M	P	E	I	R	O	x	C	A	M	P	E	I	R	O	x	A	U	F
H	O	E	H	E	x	R	E	C	I	F	E	x	R	E	C	I	F	E	x
G	E	M	E	L	D	E	T	x											

In English:

TEXT SIXTY FROM VESTA TO STEIN. QUEEN MARY REPORTED OFF RECIFE BY STEAMSHIP CAMPEIRO ON ELEVENTH AT EIGHTEEN O'CLOCK MIDDLE EUROPEAN TIME.

The Latin American Infestation

The Queen Mary message, from an agent in Rio de Janeiro, came at a moment of climax in RID's most active and critical theater of counterespionage operations, Latin America. There were in March of 1942 six agent transmitters in Rio

and three of them reported the Queen Mary's arrival the twelfth. The espionage messages were full of news her until after she sailed on March 20, but these were last messages most of the agents sent. By the time she again in mid-Atlantic on a safely altered course, the Bra- authorities had arrested some 200 of the German spies. tory behind this roundup is first of all an RID story.

ns of the Nazi effort to create an espionage base in America began to be apparent as early as the fall of On October 27 our primary station at Allegan, Michi- picked up a strange maritime signal using the unregis- call BCNL. Other monitoring posts were alerted, and a number of similar calls were traced to ships in the of Mexico and Caribbean Sea. The FCC's Tampa office eeded in identifying these vessels as small ones operated firm called Gough Bros. and controlled by a coastal sta- near Belize in British Honduras. The U.S. Caribbean nse Command, after developing evidence that this fleet being used to refuel German submarines and pass infor- ion, arrested a Canal Zone employee who was a member e ring and was able to arrange a trap for nineteen others, ding the ringleader, prominent British shipping execu- George Gough, in Belize.

anwhile in Mexico a German spy was sending out intelli- reports in private code over Chapultepec Radio, the transmitter used for clandestine communication with during the first world war.[3] After Pearl Harbor, when se of code on commercial facilities was prohibited in co, this man, a properly registered amateur, resorted to n clandestine radio, but made the mistake of communi- first with the FBI's deception station on Long Island. concerted German drive to establish radio agent nets hemisphere, however, and our struggle against them, in the spring of 1941. One of our monitors at Millis, chusetts, detected the faint signals of a station that ying to hide its transmission in a transatlantic radio- ne circuit operating on the same frequency. It was ng the call letters REW, but the signal sounded quite at of AOR, the FBI-operated Sebold transmitter's re-

O. Yardley's *The American Black Chamber.*

spondent. Other monitoring stations, asked to help identify the suspicious and noise-shrouded signal, discovered that when REW paused to listen a station on a different frequency would start sending the call letters PYL. The two transmitters put on the same performance at the same hour the next day, and for several days; they were apparently trying without success to communicate with each other. One of our monitors became so engrossed that he wanted to go on the air and help them out. Our fixes showed that REW was indeed in Hamburg, and PYL in Valparaíso, Chile, an espionage station discovered before it could make contact with its base.

For the present, however, there was nothing that could be done about agent radios outside U.S. jurisdiction except to listen in, and more and more of them began to appear, setting up in a half dozen of the Latin American republics. Chile and Brazil held the principal concentrations at this time. There were three main agent networks in Brazil, centered on transmitters that we designated LIR, CEL, and CIT, from the call signs they were using when first heard; the EVI of our decipherment example was LIR. Evidence of the damage they could do began to mount.

The German control stations, for example, sent exhaustive lists of requirements for naval information, asked PYL in Chile if it could "place a suitable man for us among students going to the United States for air training," complimented agents as "exceptionally correct" in their reports on technical details of English and American cruisers' equipment, and assigned agents to investigate "USA parade and air bases Colombia and Venezuela" and "air units Trinidad and Lesser Antilles and flights via those places to West Africa; airplane types, movement, dates." The agent radios sent back reports like these:

> 5 JULY. NINE BOEINGS FLEW WITH MIXED CREW ENGLISH AND AMERICANS. IN NEXT FEW WEEKS 20 MORE TO BE FLOWN ACROSS. DETAILS FOLLOW.
>
> 19 JULY. LM REPORTS 15 LOCKHEED HUDSONS FLEW ACROSS. ENGLISH REGISTRY AND CANADIAN-AUSTRALIAN CREW. BOEING CLIPPER LEFT NATAL ON SEVENTH ALLEGEDLY FOR BOLANO WITH 19 LOCKHEED MECHANICS AND 11 CREW.

> 7 AUGUST. USA STEAMER URUGUAY ON LAST VOYAGE TO UNITED STATES LEFT RIO 25 JUNE. WAS CONVOYED BY BRITISH AUXILIARY CRUISER CARNARVON CASTLE TO TRINIDAD. TRIP TAKES 7 DAYS. CRUISER TRAVELED SOMETIMES AHEAD SOMETIMES ASTERN OF SS URUGUAY.
>
> 8 OCTOBER. BMM REPORTS SEVERAL HUNDRED US AIRCRAFT OF VARIOUS TYPES AND 8000 SPECIAL TROOPS ALLEGEDLY LANDING CORPS BEING ASSEMBLED PORT OF SPAIN.

In November PYL identified a network courier as "daughter of Clarke, secretary in USA embassy Quito since 1 November." And ten days after Pearl Harbor an agent offered details on the torpedo safety nets with which ships were being equipped and also "absolutely safe men . . . who will send to bottom two or three large armed English ships . . . without any suspicion falling on us. If we are interested payment only after sinking, nothing in advance." The control station in Germany of course approved: "Proposal for destruction of ships very interesting." Reports on plane production also now began in earnest:

> 1 JANUARY. CURTISS COLUMBUS FACTORY WILL BEGIN MASS PRODUCTION SERIES SB2C SINGLE SEATER STUKA FOR NAVY. ARMAMENT ONE CANNON FIVE MACHINE GUNS, MOTOR 1700 HP WRIGHT. BUILT FOR 2000 HP WRIGHT IN EXPERIMENTAL STAGE. PRODUCTION SO3C BEGUN IN COLUMBUS FACTORY AT BEGINNING DECEMBER. EMPLOYEES ALL CURTISS AIRCRAFT FACTORIES DECEMBER TOTAL 27000. PROPELLER PRODUCTION NOVEMBER 1042.

Our Government finally took action. On January 15, 1942, the Rio conference of foreign ministers of the American republics recommended immediate measures to eliminate the clandestine stations. An Emergency Advisory Committee for Political Defense was established with headquarters in Uruguay, and under its auspices we dispatched some of the best RID monitoring officers to the six countries where we knew agent radios to be operating (Brazil, Chile, Mexico, Cuba, Martinique, Paraguay). They had a two-fold mission—to locate the hide-outs of known agent transmitters with mobile direction-finding equipment they took along, and to help the governments of these countries establish monitoring networks which could keep them free of radio spies in the future.

For this second purpose we sent men also to six other countries (Haiti, Venezuela, Colombia, Ecuador, Peru, Uruguay). Forty men from eighteen Latin American republics were at the same time brought here for training at our school in Laurel, Maryland.

The man we sent to Brazil was Robert D. Linx. He helped lay the groundwork for that arrest of 200-odd spies after the Queen Mary left her dock in March. This roundup apparently cleaned out the LIR and CIT organizations, the latter led by a man named Christiansen; they were never heard again. Some members of the CEL net escaped to the interior, but two series of arrests after they ventured twice at intervals to reactivate their transmitter put an end to them too. By mid-year Brazil was permanently cured of its agent radio infestation. Linx stayed on to direct the establishment of the monitoring service, and became known as "the father of Brazilian monitoring."

Although our men in Latin America worked quietly by themselves as much as possible, the German agents were not always unaware of what was going on. We heard one of them telling his control that he knew at least six Yankee direction finders were beamed on him and he was going to cool off in the woods for a while. (He cooled off in a Central American jail.) In Chile, the PYL organization took the precaution of establishing a stand-by transmitter to assure continuity of communication if one should be seized. On March 9 PYL sent a message informing Hamburg that "Pedro," whom they had employed to operate the new transmitter, would be ready to get on the air the following day. On March 10, although RID had not yet received the decrypted text of this message, our monitors picked up Pedro's test transmission with the call GES and fixed his location in Antofagasta.

The arrival of our man, John de Bardeleben, in Valparaíso on March 19 was the signal for the main PYL transmitter to go mobile. De Bardeleben spent weeks tracking its changing locations in the area within a ten-mile radius of Valparaíso. It developed that every second week, however, a transmission would be made from the house at Avenida Alemana 5508, Cerro Alegre. This house belonged to one Guillermo Zeller, a radio technician and licensed amateur who was often

seen in the company of Hans Blume, manager of the Valparaíso branch of the German company Transradio. In April 1941, shortly before PYL was first heard trying to contact REW, Blume had bought from the radio supply store Casa Widow a complete set of transmitter parts and two Hallicrafter receivers. A tap was now placed on the Zeller telephone.

The Chilean authorities were persuaded to raid the Zeller house on June 25. Their perfunctory search discovered no transmitter, but Zeller was indiscreet enough to telephone afterwards to one of his agent colleagues and report his narrow escape: "Lucky they didn't search very good, especially in the basement." With some trouble and delay another search warrant was obtained, again to no avail; the officers didn't bother to open a box they noticed in the basement purporting to contain a sewing machine. PYL went off the air after this, and nothing could be done until after many weeks De Bardeleben found the transmitter in its sewing-machine box stored in a grocery on Cerro Alegre. Finally, on October 23, most of the agents of the PYL organization were arrested; but the man who actually operated the main transmitter and operator Pedro at Antofagasta had disappeared.

Neutralist Argentina, which did not participate in the Emergency Advisory Committee, posed a delicate diplomatic problem with respect to the elimination of clandestine enemy transmitters, and one of critical importance as the clean-up in Brazil and Chile made the Argentine the main base for espionage activity in this hemisphere. Not only agent radios but the powerful Argentine commercial transmitters were carrying quantities of compromising information to Italy, Japan, and Germany, and we could only copy their transmissions, hundreds of messages daily. Many of these were at speeds too high for manual copy; we recorded them on tape and trained selected typists to put them into page form. A strong memorandum from the U.S. Government on January 4, 1943, enabled us to send two men to Argentina to try to do what we had done in Brazil and Chile, but our earlier successes were not repeated here. The agent operations had become much more sophisticated. While our men were taking bearings on a signal the transmission would be cut off at

that location and picked up by another transmitter several miles away. And the cooperation of Argentine officials under the Castillo and Ramirez-Peron regimes was less than eager. They finally became so resentful of U.S. Government pressures that we had to withdraw our men.

One spy who escaped in Chile, however, did not get as far as Argentina. Almost a year after the incomplete catch of the PYL ring in Chile, monitors at three different RID posts heard a new station with the call PQZ, and all three were sure they recognized the fist of operator Pedro of the GES station at Antofagasta. Bearings placed the transmitter at Santiago, Chile.

De Bardeleben's successor in Chile, William Fellows, was notified, and he picked up the signal the next time it came on the air. Working alone, he had to move around and take bearings from different locations in order to get a fix; but after two more PQZ transmissions he had the house located. To my considerable personal satisfaction the operator Pedro, a graduate of the Hamburg spy school, who had the effrontery to use my own initials as his clandestine call, was arrested and his equipment seized. With this postlude there ended, except for the Argentine hold-out, the story of radio spies in the Americas.

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...icles and book reviews on the following pages are un-...sified and may for convenience be detached from the clas-...body of the *Studies* if their origin therein is protected. ...uthors of articles are identified in the table of contents ...ding page 1.

...editors gratefully acknowledge the assistance of Mr. ... Pforzheimer, Curator of the CIA Historical Intelli-... Collection, in scanning current public literature for in-...gence materials, and of the many intelligence officers who ...ed book reviews for this issue of the *Studies*. Most ...orthy in this respect are the following:

...s *The Panther's Feast*
...*etitive Intelligence*
...*SHAI*
...on Grivas and the EOKA — Roger G. Seely
...on the Hungarian AVH
...*Weapon on the Wall*
...ather's *Executive Overseas*

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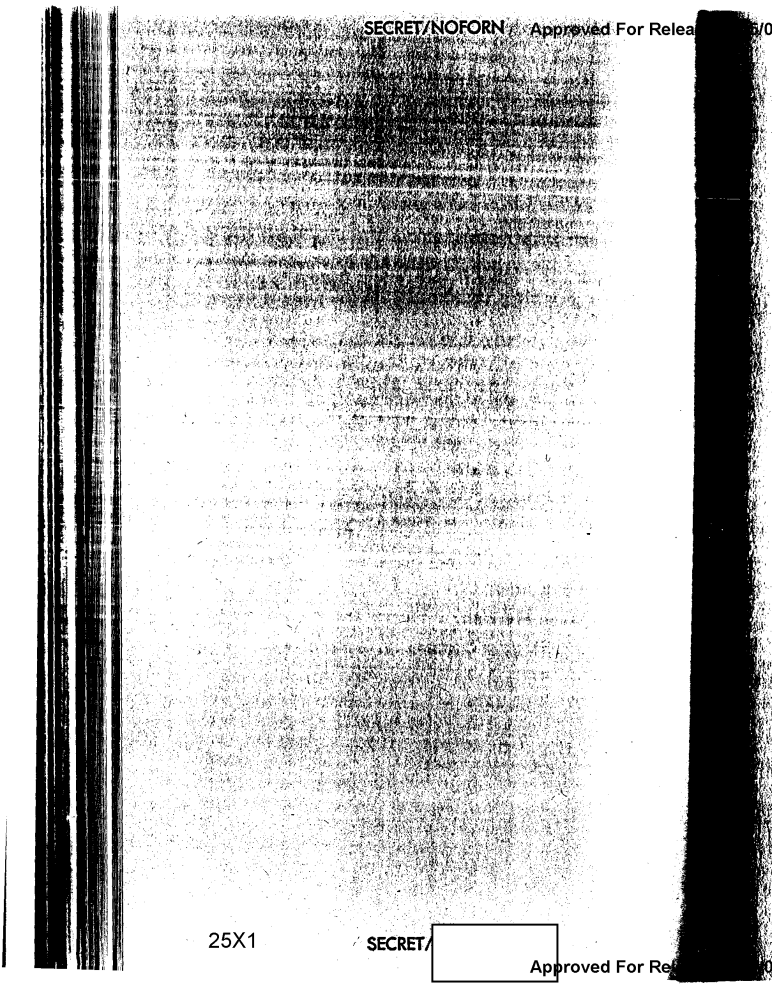
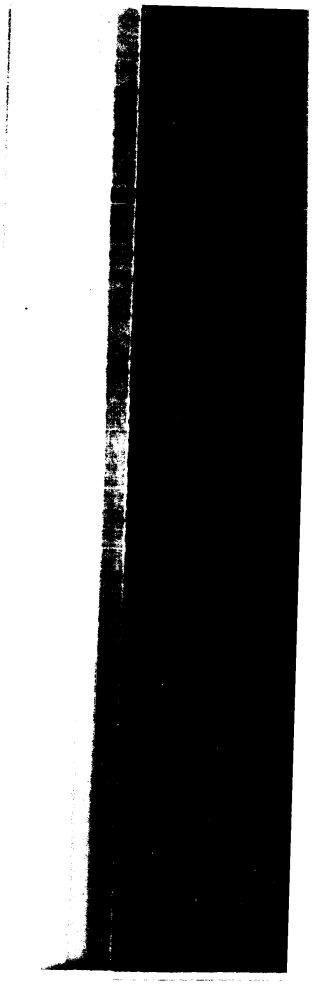




Intelligence, deception, and unorthodox stay-behind operations in a combined and all but real-war combat exercise.

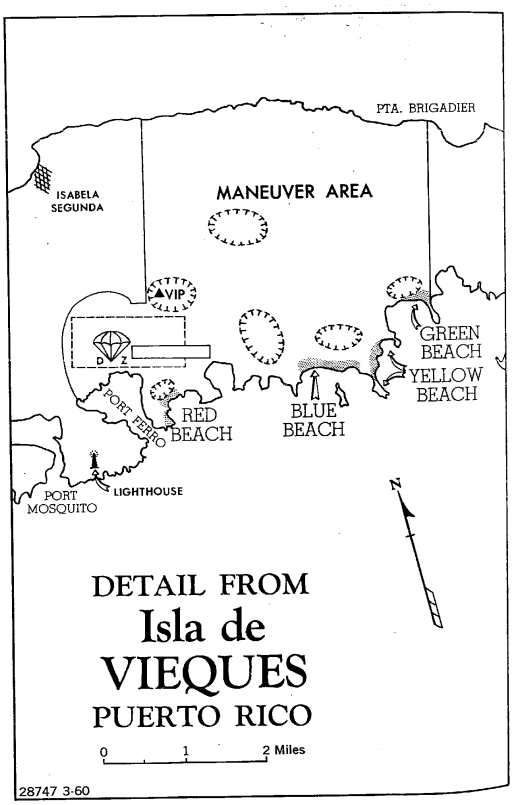
OPERATION PORTREX

Edwin L. Sibert

There used to be some truth in the gibe that a war's first battles are fought with the weapons and techniques (including intelligence techniques) of the final engagements of the last previous war. Now, however, the practice of conducting large-scale and realistic maneuvers in time of peace, incorporating new developments not only in weapons and tactics but also in intelligence, psychological, and paramilitary devices, provides assurance that the first battles of the next war will at least be fought with the methods of the last maneuvers. One such war game in which I participated during the military doldrums between World War II and the Korean War was a particularly stimulating illustration of how realistic an exercise can be made, of some practical limitations on realism, and of the extent to which deception and unconventional operations can be worked in.

Operation Portrex wasn't so very big, as modern maneuvers go, but all elements of the armed forces—Army, Navy, Air Force, Marines—took part, and there were paratroopers, frogmen, undercover agents, and guerrillas. It was staged in the first quarter of 1950 on the island of Vieques, a twenty-mile stretch of land some ten miles east of Puerto Rico. It embraced a period of more than two months devoted to preparations for a three-day assault action.

The problem of the exercise was the recapture of a hypothetical major Caribbean island which the enemy had occupied. U.S. forces were to make a combined airborne and amphibious assault on its southern beaches, represented by those of Vieques, and clean out the ten-square-mile maneuver area of this island in the initial action. The cards were stacked against the enemy defenders, who had available in the beach area only a regimental combat team reinforced by a provi-



ional armored reconnaissance unit, an engineer company, and mixed battalion of anti-aircraft artillery, with light aviation and the support of a weak fighter wing. The invading task force consisted of the 3d Infantry Division reinforced by battalion of the 82nd Airborne Division and a Marine Corps reconnaissance company. It had the support of a strong fighter wing based on Puerto Rico, air lift for the parachute battalion, adequate sea lift for the ground forces, and naval units for shore bombardment.

commanded the land forces of the enemy defense, Puerto Rican regulars. In mid-December 1949 I was permitted to take them to Vieques. First we had to construct a tent camp for ourselves and the numerous visitors expected, both VIP's and run-of-the-mine; but by New Year's we were able to turn our attention to defensive works—obstacles, strongpoints, camouflage, protection against shell fire and air bombardment, deception, counterespionage, and unorthodox measures.

Defenses and Deception

The beaches called Red and Blue on the accompanying map were the major ones, the only ones big enough to accommodate a regimental combat team. But since an envelopment of our east flank was indicated by the geography of the maneuver area, we had to construct obstacles and defenses not only on these but also, less thoroughly, on the small and shallow Yellow and Green beaches. Materials and supplies might have been a problem. Vieques Island has a population of only about two thousand, mostly small farmers and poultry and cattle raisers, concentrated in a restricted central area. Its east and west ends are uninhabited training grounds. Its only town is Isabela Segunda, with one street, unpaved. Therefore all our ordinary supplies and all materials for defensive works had to come from the San Juan area in Puerto Rico by tug and barge.

Fortunately we had a sizable salvage yard at Fort Buchanan, Puerto Rico, with a wide assortment of war surplus items such as steel landing mats, I-beams and other odds and ends of structural steel, old cable, etc. These, interlaced with felled cocoanut palm trunks and thoroughly laced with barbed wire, made formidable abatis-type obstacles. We bulldozed out anti-tank ditches at strategic locations;

and we supplemented our limited allotment of barbed wire and screw-type steel posts for apron fences by stuffing in among them a lot of the heavy, thorny, tough brush that was prevalent in the area. I'm sure our post-maneuver popularity with the invading troops was of a low order.

Back from the beaches we burrowed as no one had since World War I, and we found that in that tropical, rain-drenched country you had to drain a ditch or dugout before it could be used. In one of the necessary departures from complete realism, we were ordered to clear all the stumps, stakes, stones, etc., from a large flat area around the airstrip behind Red beach, an obvious tip-off that this would be the drop zone for the parachute troops. I saw to it that this work was done most conscientiously: my son commanded a company in the airborne infantry battalion attached to the 3rd Division.

As we were building the defenses during January and February, the invaders were regularly taking air photographs on which to base their assault plans. In order to throw them off, we used not only camouflage but an elaborate system of dummy defenses ostensibly disposed against an expected main thrust of the invading forces north from Blue beach. These were strongpoints of ground scraped up by the bulldozers, protected by piled thorny brush, and equipped with inflated tanks and dummy guns, trucks, and communications equipment. The so-called Aggressor Cadre from Fort Riley furnished this dummy equipment and helped greatly in the deception work.

Trying to find some way to misguide the leading assault waves of landing craft, we conceived the plan of camouflaging the principal small-scale landmark in the area, an old two-story Spanish lighthouse west of the beaches, and erecting a false facsimile about a mile away. I knew our engineer, Jim Goodwin, could do it, because he could make anything; but I was forethoughtful enough about my eventual retirement pension to ask the Naval District Commandant's advice in the matter. Seldom have I seen a man so shocked; his voice shook with emotion as he dwelt on the sacredness of aids to navigation. So we had to call that off. I finally got permission to use a smoke-screen, under the proviso that it be

lifted ten minutes before the landing craft were to touch down.

A particular tricky detail in our defenses was our use of the small island that the map shows about 600 yards off Blue beach, a low and rocky one accessible by rowboat but not by landing craft. We were careful that air photographs should show us ignoring its potential as a defensive strongpoint, but we dug at its north end and heavily camouflaged a deep shelter for .50-caliber machine guns sited to fire on the beach. They were to wait until the landing craft had touched down and then open fire on the invaders from the rear; in the noise and confusion of the landing it would be some time before their fire would be identified and located, not to say suppressed.

PP, and PM Preparations

Our attention was by no means all on hardware. We took advantage of the Puerto Rican troops' capability in Spanish to have them use it exclusively whenever there was a possibility that the American enemy would intercept their communications. We elaborated their natural difference in appearance from the U.S. forces by giving them a distinctive helmet and fatigue clothes dyed green, items provided by the Aggressor Cadre. We issued them identity folders, printed by the Aggressor Cadre, which served us as a counterespionage device and which the invaders later used as a basis for their interrogations.

For the benefit of the enemy we put up a lot of posters with warnings about non-existent dangerous snakes and insects, as well as some existing poisonous tropical plants like the manzanillo. Our psywar effort may have been a bit on the light side though; the "1984" motif was strung through all our propaganda, and some wag even put a huge "Big Brother Is Watching You" sign up in the latrine we erected for female VIP visitors, correspondents and the WAC and WAF brass.

But the most important thing I did with respect to unconventional measures was to persuade Waller Booth, a former Army officer living in San Juan, to come on active duty for the exercises. It was he who organized and directed an underground net of counterespionage agents among the native resi-

dents of Vieques and who prepared a group of stay-behind guerrillas to operate within the invaders' beachhead.

About half a mile inland between Red and Blue beaches lay a heavily wooded swamp perhaps a mile in diameter, where the ground stood generally under two or three feet of water. Booth picked this place as his homey hideout for a motley crew of about sixty stay-behinds carefully selected for a variety of virtues, some of them dubious. He built a wooden walkway about six inches under water into the center of the swamp, marking its location with cryptic blazings on the trees. Here he erected above water a shelter with crude sleeping and eating facilities, storage space for supplies, and a communications center connected by hidden telephone lines to our main switchboard. The hideout was invulnerable to air photography and not a likely target for naval gunfire. Booth stocked it with rations, water, weapons, ammunition, and demolition material sufficient for the entire period of the maneuver. His men wore enemy uniforms.

Booth's other enterprise, the counterespionage net, showed its effectiveness as D day approached. Our security vigilantes picked up two enemy agents in Isabela Segunda, CIC men in civilian clothes posing as commercial travelers from San Juan, before they had been able to get into the defense area or send out any message. No agent ever penetrated the maneuver area.

On the two nights before D day at least a hundred enemy frogmen swarmed in to reconnoiter the beaches, but they failed to detect the machine gun nest we had hidden on the island off Blue beach. Our defenses looked from the air so formidable, however, that on D minus 1 we were ordered to detonate 100-lb. static charges of TNT among the obstacles to simulate the effects of naval bombardment. Jim Goodwin had a long and eloquent discussion with the umpires about the number and position of these detonations, and in the end they did surprisingly little damage.

The Action

On D day, the attack made a fine show coming in. But it was stopped cold by our smoke-screen, borne on a steady trade wind blowing ideally from just north of east, until we were

forced to lift it at the stipulated time. Then it was hard, slow work for the invaders to carve a foothold on the main beaches, and our machine gunners on the island off Blue beach wreaked great theoretical slaughter before their ammunition was exhausted.

Shortly after the amphibious touch-down the airborne troops were dropped in the expected area. I'll never forget the awesome beauty of those thousand parachutes opening white against the clear blue tropical sky, accented by the brilliant colors of the cargo chutes. But the airborne assault, which was supposed to link up rapidly with the other forces and proceed to wipe out the shattered defenders, was a failure. The twenty-mile-an-hour trade wind was rough on the jumpers; although there were no fatalities, some ninety men were hospitalized. The seaborne forces were so delayed by our obstacles that they couldn't come to the aid of the paratroopers, and we captured most of them. I was relieved to see my son walking around in the PW enclosure, and proud that he refused to accept a can of beer from me unless all the prisoners in the enclosure were similarly favored.

We also took prisoner the Marine Corps reconnaissance company, which had been assigned the job of protecting the invaders' east flank where our defenses were weak. We offered the Marines no opposition until they got so far inland that they were out of touch with the main forces and had exhausted their fuel and ammunition. Their capture left the enemy flank wide open to anti-tank fire and counterattack from our anti-aircraft and reserve infantry battalion operating outside the envelopment.

Along about noon of D day, at the expense of many hundreds of theoretical casualties, the main invading forces had fought their way inland past the swamp hideout of Booth's guerrillas, who now began to trickle out and mingle in their American uniforms with the enemy on the beachhead, where of course was confusion. For the next three days, operating mostly at night, they performed all the functions of a real fifth column, with which the Army, Navy, Air Force, and Marine invaders were completely unprepared to cope. Their most valuable contribution was a steady flow of intelligence

to our headquarters, but some of their paramilitary exploits were more spectacular.

They put time-fused incendiary bombs in all manner of dumps along the beaches and on board beached LST's. They placed shaped charges against a cruiser lying off shore. They captured and used an enemy tank. They theoretically killed the enemy Corps and Division Commanders by simply knocking on their tent poles, handing each a musette bag "from Colonel so-and-so," saluting, and disappearing: the bags held simulated bombs timed for something like thirty seconds. They captured officers carrying communications instructions for directing field artillery and naval gun fire, data which by the end of the maneuver had almost got us, the defenders, accepted into the invaders' naval gun radio net, and had actually enabled us to make the enemy field artillery fire in places of our own choosing.[1]

In spite of his set-backs and losses, the invader succeeded, using a clever night operation which had been rehearsed at Fort Benning, in gaining a lodgment on VIP hill by about midnight after D day.[2] Having intelligence of his strength

[1] That these small off-beat operations can sometimes yield disproportionate results was brought home to me again later, in Korea during the last Red push in the summer of 1953. In the Seoul-Inchon area a couple of light enemy aircraft were making a series of inconsequential night-time intrusions, flying low so they were almost impossible to intercept. Since they did little or no damage, however, they were shrugged off and left to the quadruple mounted .50-caliber machine guns posted throughout the area. At Inchon one of these gun posts, sandbagged on a knoll, guarded a great dump of oil in 55-gallon drums, fuel which would be needed by our forces in opposing the current large-scale enemy offensive. One night, as one of the light intruder planes, flying low in the usual pattern, came over toward this dump, enemy agents by sniping drove the gun crew momentarily from their post. The plane dumped a sackful of incendiary grenades into the acres of piled-up oil drums, and the fat was in the fire. Only the depot commander's precaution of having stacked the drums in well-separated small piles and his prompt action in containing the fire saved us from a critical fuel shortage at a critical time. A silly little operation, one that could probably never be repeated, had come close to having very embarrassing results.

[2] The battalion commander in this action was Lt. Col. Joe Stillwell, Jr., now a general officer.

nd fearing that morning would find us in a precarious posiion, I ordered at 0200 hours that an over-all withdrawal to ur second position be completed before daylight. This was large order, but it worked: dawn on D plus 1 found the enmy coming out of his corner punching wildly in the air, that deluging our now empty old positions with a heavy artillery arrage. That day and the next we made two successful surrise counterattacks, and when the problem was called off 0900 on D plus 3 we were still an organized force with a mall reserve at hand.

Wally Booth stayed on in the service after the maneuvers, nd in 1952 he was wounded while engaged in guerrilla acivities on an island off the eastern coast of North Korea. I m told that one result from our efforts at Vieques was the stablishment of an Army school to teach the kind of operaions Wally demonstrated there. If that is true, one of the uildings at the school should be called Booth Hall.

Personal recollections of the capture and show trial of an intelligence chief.

THE LAST DAYS OF ERNST KALTENBRUNNER

The list of the 22 once exalted Nazis on trial at Nuremberg was led by the notorious names Goering, Hess, Ribbentrop, and Keitel, in that order. The man who came fifth, after Robert Ley's suicide, was not well known to the public, either in Germany or abroad. The prosecution was distressed that documents bearing his signature were few and far between. His name had rarely appeared in public print. The official Reich photographer, Heinrich Hoffman, had been unable to find in his extensive collection a likeness of the man. The press kept running some other Nazi official's photo to represent him and getting mixed up about what his position and duties had been. This obscurity was fitting and proper from the professional point of view, for Ernst Kaltenbrunner had headed the at last unified Reich intelligence and security services.

Succeeding after Reinhard Heydrich's assassination in June 1942[1] to the chieftainship of the Reichssicherheitshauptamt, Kaltenbrunner inherited the RSHA's ascendancy over Admiral Canaris' Abwehr which Heydrich had achieved, and eventually, with the assistance of circumstance, he contrived to have the Abwehr completely abolished and its main remnants made the RSHA's Militaerisches Amt, to be directed along with its foreign intelligence Amt VI by Walter Schellenberg. Amt III, under Ohlendorf, was the internal Sicherheitsdienst, and Mueller's Amt IV the Gestapo. But Kaltenbrunner's main interest lay in foreign affairs: according to Schellenberg he aspired to get hold of the foreign ministry in place of Ribbentrop, whom he hated.[2]

He was a powerful man. Even Himmler, to whom he theoretically reported, feared him: asked in April 1945 to receive some Swedish delegates from the Jewish World Congress,

[1] For the story behind Heydrich's death see *Studies* IV 1, p. 1.
[2] Folke Bernadotte, *The Curtain Falls*, p. 142.

Himmler said to Schellenberg, "How am I going to do that with Kaltenbrunner around? I should then be completely at his mercy." [3] (Schellenberg considered Kaltenbrunner, his immediate boss, to be one of his own "most active and dangerous enemies" and therefore worked closely with Himmler.) Kaltenbrunner, not Himmler, was entrusted with the investigation of the July 1944 attempt on Hitler. He often by-passed Himmler to report directly to Hitler, with whom he had had personal ties since childhood, and toward the end spent several hours with him daily.[4]

On the Scent of the Chief Werewolf

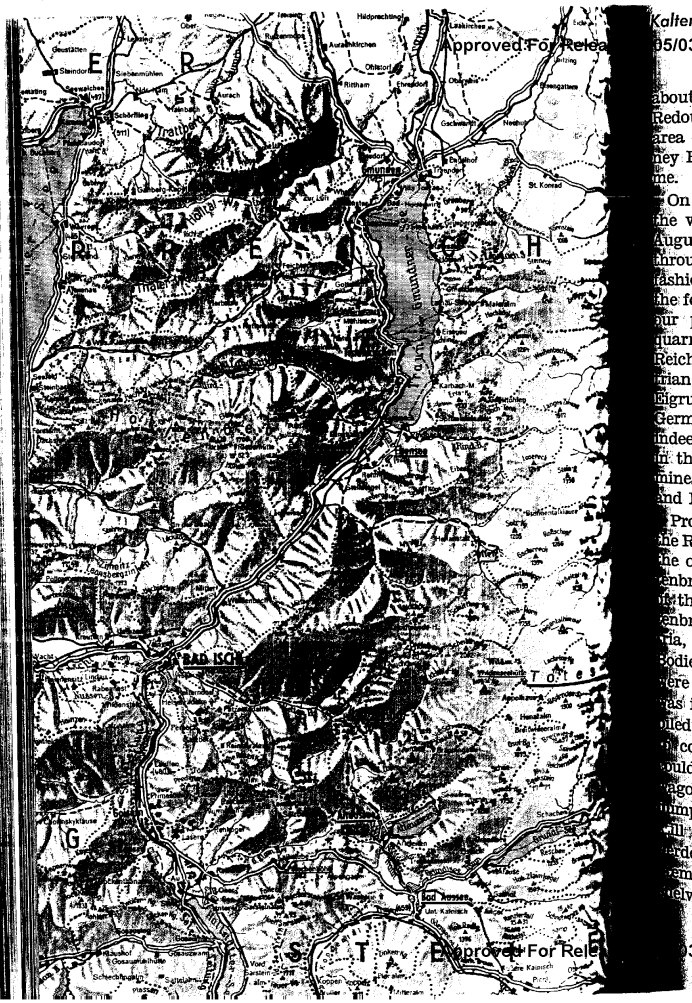
After the Siegfried Line was breached and Nazi Germany began to fall apart, it was said that the hard core of Party leaders and their Waffen SS would hole up in a National Redoubt which they had made ready in the Austrian Alps and from there descend to prey like werewolves on the Allied occupation forces. This bad dream, of course, never came true, and later there was a good deal of scoffing at the "myth." But at the beginning of May in 1945 there was nothing mythical about either the Werewolves or the National Redoubt. As General Walter Bedell Smith said, "We had every reason to believe the Nazis intended to make their last stand among the crags." [5] All of our intelligence pointed to the Alpine area east and south of Salzburg as the final fortress for the Goetterdaemmerung of the remaining Nazi fanatics. Reconnaissance photographs showed that they were installing bunkers and ammunition and supply depots in this mountain region. Interrogations of military and political prisoners indicated that government officers, ranking Party leaders, and the SS troops were moving to the Redoubt, leaving it to the Wehrmacht to stem the allied advance.

Under these circumstances the 80th Infantry Division, Third U.S. Army, was ordered back on May 3 from its meeting with the Russian troops at Steyr on the Enns river to a position

[3] Deposition of Walter Schellenberg, Document No. 2990-PS, November 18, 1945, Office of Chief U.S. Counsel, Nuremberg.

[4] Bernadotte, *op. cit.*, pp. 133, 139; Walter Schellenberg, *The Labyrinth, passim.*

[5] "Eisenhower's Six Great Decisions," *Saturday Evening Post,* July 13, 1946, p. 26.



about sixty kilometers north of the center of the National Redoubt area. I was in charge of the CIC team covering the area of the 80th Division's 319th Regiment. Interpreter Sydney Bruskin of New Haven, Connecticut, worked closely with me.

On May 5 we arrested and interrogated the Party leader of the village of Vorchdorf. He revealed that two days earlier August Eigruber, Gauleiter of Upper Austria, had passed through Vorchdorf on his way to Gmunden on Traunsee, a fashionable resort about sixty kilometers east of Salzburg in the foothills of the mountain Redoubt. Gmunden was beyond our prescribed area, but a Gauleiter was too tempting a quarry; there were only four in Austria, 42 in all the Greater Reich. So we took up the pursuit. But in Gmunden the Austrian police told us that during the previous week not only Eigruber but also Kaltenbrunner and Reichsleiter Ley of the German Labor Front had passed through. Here was big game indeed. They had been headed for the heart of the Redoubt in the Salzkammergut, a mountain fastness dotted with salt mines and extending from Attersee through St. Wolfgang and Bad Ischl to Bad Aussee in the Steiermark.

Proceeding the same day up the long Traunsee shore into the Redoubt area with a tank battalion, Sid and I were afforded the opportunity to examine a concrete manifestation of Kaltenbrunner's work, the concentration camp at Ebensee. Part of the Mauthaeusen extermination system built up by Kaltenbrunner when he had been the "Little Himmler" of Austria, it seemed more horrible even than Dachau or Ohrdruf. Bodies that one would never have believed could exist alive were walking around, covered with sores and lice. The filth was indescribable. Adjacent to the crematorium were rooms piled high with shrunken nude bodies, lye thrown over them to combat the stench and vermin. The excess bodies that couldn't be handled at the crematorium were hauled by the wagonload to another part of the enclosure, where they were dumped into open pits filled with a chemical solution. Worse still was the hospital, where the dying and sick had been reserved for experimentation before being carted off to the crematorium. There were no beds in it; the inmates lay on themselves covered with dirty rags, groups of two or three hud-

dled together like mice to keep warm. As we entered they put out their hands and begged for food. When we told them we had none, but that the American medics and military government personnel would be along immediately, they broke down and sobbed, "We have waited for you four, five, six years. Now you come empty-handed."

On the next day, May 6, we seemed about to close in on Kaltenbrunner, the man who shared with Himmler and SS General Poehl responsibility for the whole system of Nazi concentration camps. We had pushed sixteen kilometers into the Redoubt without encountering any sign of resistance and reached Bad Ischl, home of Franz Lehar and formerly the summer residence of Emperor Franz Josef I. Here we were told "on reliable authority" that at that moment Kaltenbrunner and his wife were in Strobl, a town ten kilometers to the west. Our informant, who wore the uniform of a Wehrmacht lieutenant, was a local leader in the Austrian Freedom Movement which had sprung up in opposition to the Nazis. This Movement did in fact give invaluable aid to the CIC in tracking down the Nazi leaders: about 80% of our arrests of SS, Gestapo, Sicherheitsdienst, and Party leaders in Austria were due directly to leads received from it.

The lieutenant offered to drive me to Strobl with his interpreter, a German soldier, and to have a second car with other members of the Freedom Movement follow us. Suppressing my suspicions of this quick proposal I left Sid in Bad Ischl to organize an informant net and set out with the volunteer escort. I was thankful for their Wehrmacht uniforms when we found the road clogged with remnants of General Sepp Dietrich's Sixth SS Panzer Army retreating before the Russians. We were not bothered. The war was effectively at an end, anyway, and the main bulk of the SS, like the Wehrmacht, was glad to call a halt to the fighting; it was mostly fanatics and the underground that worried us now.

In Strobl, the burgermeister admitted in a trembling voice that the Kaltenbrunner party had been staying at an estate on the outskirts of town. We drove to this estate, parked the two cars at the entrance to the grounds, and walked from there to the house. Several men in civilian clothes followed but did not stop us. At the house we were greeted by a large

blond woman of about 38 years, who immediately acknowledged that she was Mrs. Ernst Kaltenbrunner. With her were her three young children but no husband. I informed her that she was under arrest for purposes of interrogation and, to impress the civilian bodyguard, mentioned the imminent arrival of American soldiers. We then escorted her down to the car, still followed by her silent bodyguard. At the car their leader finally spoke, in perfect English: he and his men had personally been instructed by General Kaltenbrunner to safeguard Mrs. Kaltenbrunner and the children; only yesterday, however, he had heard on the radio that General Eisenhower had ordered all civilians to turn their weapons in to local burgermeisters, and he had told his men to comply; they therefore had no means to carry out their assigned mission. It was apparent that the will to resist was gone.

Back in Bad Ischl, our informants helped us pin-point the center of the National Redoubt as being in the vicinity of the mountain town of Alt Aussee, thirty kilometers to the south and well up in the Totes Gebirge range. We took this information, and Mrs. Kaltenbrunner, back to the 80th Division command post at Voecklabruck. Interrogated, Mrs. Kaltenbrunner acknowledged that her husband had been with her at their Strobl estate as recently as May 3. He had presided over a meeting attended by the following important Nazi officials: Neubacher, ambassador to Belgrade; General Glaise-Horstenau, minister to Croatia; Gauleiter Rainer of Salzburg; RSHA foreign intelligence area chiefs Wilhelm Waneck and Wilhelm Hoettl; SS Oberfuehrer Muehlmann; Otto Skorzeny, leader of the RSHA sabotage units. Kaltenbrunner, she said, knew the Alt Aussee area well from summer visits he had made when he was the "Little Himmler" of Austria. She described him as 43 years old, six feet four inches tall, weighing 220 pounds, having a powerful build and dark features, with deep scars on both sides of his face.

A task force of tanks and infantry under Major Ralph Parson was ordered to the Alt Aussee area, and I was instructed to join them there. It was now V–E day. Sid Bruskin and I left Voecklabruck at four in the morning on May 9. As we drove up over the Poetschen pass, it was difficult to keep our minds on the mission, so beautiful was the scenery. The

road led up beside a rushing mountain stream that cascaded merrily down the rocks in steep descent, its spray sparkling in the early morning sun. Above and around us were snow-capped peaks, and the green alms on either side were brightly splashed with mountain flowers. We rested in Bad Aussee and then climbed the last four kilometers into Alt Aussee, a town of 4,000 at the end of a winding mountain road, the last village in the ascent up the Totes Gebirge. Nestled on the west shore of Alt Ausseersee, it looks across the deep, cold lake to the Trisslwand Peak on the east and over the Loser Alm on the north shore to the snowcapped summit of the Totes Gebirge range.

Alt Aussee was for the Viennese what Lake Tahoe is for Californians. Three Gauleiters—Henlein, Jury, and Eigruber—had their summer homes there. Prince Chlodwig Hohenlohe-Schillingsfurst, the largest landowner in the Salzkammergut, was born and now lived there. Prince Hohenlohe, who had lived for a decade in New York with an American wife, made transparent attempts to ingratiate himself with us. He got us living quarters in the Hotel Eibl and offices in one of his villas down the street. He invited us to tea and apologized for his poor hospitality, saying that the Nazis made him live in his barn. (Later he was arrested for interrogation, after Kaltenbrunner told 12th Army Group interrogators that he had been Ribbentrop's observer in Spain and Portugal and had produced a mine of information regarding the United States and Latin America.[6])

We established an informant net from our "white list" of anti-Nazis and the most knowledgeable and trustworthy members of the Freedom Movement. This latter group was headed by Johann Brandauer, the assistant burgermeister. Rumors were rife that Kaltenbrunner, Ley, Eigruber, Kreisleiter Stichnot of Gmunden, and strong groups of SS troops and high SS officers were hiding out in the recesses of the Totes Gebirge. From May 9 to May 11 we worked sixteen or eighteen hours a day trying to get some clue to Kaltenbrunner's whereabouts.

[6] HQ 12th Army Group Intermediate Interrogation Report, June 28, 1945.

Our first important contact was with Albrecht Gaiswinkler, British agent who had been parachuted into the area on April 20. A native of Bad Aussee, he had been drafted into the Wehrmacht, had deserted in France, turning a Nazi supply train over to the French Maquis, and when the Third Army liberated Alsace had given himself up to the Americans. The Americans had turned him over to the British, to whom the Aussee area was allocated for future occupation. Gaiswinkler had learned that Wilhelm Waneck, Chief of the RSHA Intelligence Section for Southeastern Europe—and one of Kaltenbrunner's May 3 conferees at Strobl—was now operating a wireless transmitting station in the Kerry Villa located on a hill at the outskirts of Alt Aussee. Working with Waneck were his deputy, Wilhelm Hoettl, (another of the conferees), Werner Goettsch, who had earlier held Waneck's job and now was a sort of chief ideologist for the RSHA, and a number of other Nazi officials.

Thanks to Gaiswinkler's effective groundwork, Sid and I were able to arrest this group, seal its headquarters at the Kerry Villa, and stop the operation of its transmitter. We did not know then that this was the central communications center for the National Redoubt and Kaltenbrunner's only connection with the outside world; its importance and the feverish activities of the Goettsch-Waneck group during the preceding month were revealed only later after detailed interrogation of the principals. For the moment our attention was all on locating Kaltenbrunner, and these people gave no leads on his whereabouts except the information that he had been at Alt Aussee on May 3.

We located and arrested many lesser Nazis who had fled to Alt Aussee, seeking for the most part time to collect their thoughts and prepare their anti-Nazi alibis—Gunther Altenburg, Minister Plenipotentiary to Greece; General Erich Alt of the Luftwaffe; Joseph Heider, who had been detailed by Eigruber to blow up the Alt Aussee salt mines wherein was stored a fabulous collection of looted art treasures for the projected Great Hitler Museum in Linz; Dr. Hjalmar Mae, head of the puppet state in Esthonia; Walter Riedel, construction chief for the V–2 weapons at Peenemuende; Ernst Szarvas, Foreign Office secretary in Rome; Spiros Hadji Kyriakos,

Under Governor of the National Bank of occupied Greece; William Knothe, General Counsel of the Foreign Office; Dr. Carlos Wetzell, head of the pharmaceutical industry; and Dr. Bailent Homan, minister in the Hungarian puppet government.

As we cast about during those three days for traces of Kaltenbrunner's movements, we sorted out the diverse social groups in Alt Aussee, each busy trying to establish its anti-Nazi premise. There was the artist's group, with movie actors Ernst von Klipstein and Lotte Koch, the Viennese theater star Unterkirchner, the aged composer Wolf-Ferrari, the sensational pianist-composer-conductor Peter Kreuder, self-styled "Cole Porter of Germany," the composer and conductor Nico Dostal, the Austrian tenor and movie star Johannes Heesters, and many members of the Vienna symphony orchestra. More intriguing from the CIC viewpoint was the old German nobility group of Countess Platen and Herbert von Hindenburg, nephew of the Field Marshal, because they had living with them one Jean Schils, a Dutch intelligence man who claimed to have been a member of the anti-Nazi underground, and a certain Norman Bailey-Stewart. Schils gave us several false leads on "V-3 weapons" supposed to be located nearby in a Russian-occupied area, and seemed in general bent on provoking incidents between the Russians and the Americans.

One day Schils came into the office to volunteer information on the whereabouts of Gauleiter Eigruber and brought Bailey-Stewart along as his interpreter. It soon became apparent that Bailey-Stewart was deliberately misinterpreting everything Schils said, and he was acting very abnormally. About 35 and unusually good-looking, he showed his impatience with the dullness of the business at hand. I questioned him alone, and he turned out to be England's famous "Officer in the Tower" of the thirties, eager to tell the world the sequel to those early espionage activities—his work for the Nazis in the war just ending.

In 1932, according to his account, returning as a second lieutenant from duty in India, he was disillusioned with England's imperial policy. He volunteered for the German secret service and was sent back to London to collect order-of-battle information. Discovered through the alertness of the Eng-

lish censors, he was tried amid much publicity and sentenced to five years in the Tower of London. When his family's influence obtained his release in 1936 he went to Vienna, watched now not only by the English secret service but also by the Gestapo and Schuschnigg's and Skubl's Austrian police. He applied for Austrian citizenship. The English picked him up in 1938 and accused him of smuggling arms into Austria to help the then illegal Nazi Party. The charges were not proved, however, and with the Anschluss he became a German citizen. In the same year he was questioned by RSHA agents about his criticism of Nazi propaganda beamed to England, and his criticism was so good that he was flown to Berlin and given a job in the Rundfunk, where in 1939 he began what were to become later, under William Joyce, the Lord Haw Haw programs. But about this time he was reported to have made remarks detrimental to the Nazi State, and he became involved in personal antagonisms. Through a friend in the Foreign Ministry he was given a job in its wireless department. In March 1944 he was sent to Vienna. In December, having been called to service in the Volksturm, he gave a false address and departed for Alt Aussee.

All this was very interesting, but it did not advance the Kaltenbrunner chase. We arrested Bailey-Stewart on behalf of the British and went back to our job. The most promising set of people in Alt Aussee for our purposes was the one comprising Countess Gisela von Westarp, Iris Scheidler, and Dr. Rudolf Praxmarar.

Gisela von Westarp was Kaltenbrunner's mistress. A pretty blonde of twenty-two with blue eyes, vivacious and extremely intelligent, she had been working at Himmler's Berlin headquarters when Kaltenbrunner came from Vienna in early 1943 to take over the RSHA. On March 12, 1945, she bore him twins, Ursula and Wolfgang, in a cowshed in Alt Aussee. I still have a letter she wrote to her mother describing the event, declaring that she "almost deserved the Mother Cross," and pointing out that Mrs. Kaltenbrunner had taken twelve years to produce only three children. One of the twins' godfathers, Gisela told me proudly, was Hitler's personal physician, Dr. Karl Brandt.

Iris Scheidler was the wife of Arthur Scheidler, formerly adjutant to Heydrich and now to Kaltenbrunner. She was thirty years old, an attractive society brunette, seemingly intent on having a good time. She and Gisela were good friends with many of those in the Hitler inner circle, especially Heinrich Hoffman, the Reich photographer who had introduced Eva Braun to Hitler, Eva Braun herself, Baldur von Schirach, Hitler Youth leader and later Gauleiter of Vienna, and Herman Fegelein, the SS General who acted as liaison officer between Hitler and Himmler.

Dr. Rudolph Praxmarar had once been Iris' husband, and they still had great affection for each other. He had been a classmate and friend of Kaltenbrunner's at the University of Graz and then became a prominent physician in Vienna. Now he was the SS Chief of Hospitals and military commander of Alt Aussee. He was about 50 years old, with a genial personality and the reputation of being a great sportsman. But we received from Freedom Movement informants in the SS hospitals an accusation against him signed by members of his own staff. It read in part:

> Until two days prior to the entry of the American Task Force into Alt Aussee, Praxmarar kept active association with the bloodhound Kaltenbrunner. He has not been afraid to shelter him in the hospital and provide him with medicines and food and weapons. Arms were loaded into a car at night to help Kaltenbrunner escape to the mountains. Praxmarar, prior to the arrival of the Americans, tried to force several of the patients into the Kampgruppe Kaltenbrunner for the purpose of staging a last stand in the mountains. He also tried to get one hundred men from Georg [Gaiswinkler] for the same purpose. Under the pretext of angina pectoris he took into the safety of his hospital the Kaltenbrunner Gestapo chief in Vienna, SS Brigadier General Huber.

We found Huber still in the hospital and arrested him. Praxmarar we didn't arrest until several days later, when we had received further proof of his complicity with Kaltenbrunner.

The Quarry Taken

Finally, on the morning of May 11, we received our first solid piece of information on the location of Kaltenbrunner's hideout. Johann Brandauer reported that the Alt Aussee forest ranger—a member of the Freedom Movement—had seen

General Kaltenbrunner, Scheidler, and two SS guards five days before in a cabin called Wildensee Huette atop the Totes Gebirge. Though the tip was five days old, it had the merit of coming from a reliable source: Brandauer was one of our closest and most trustworthy collaborators. I therefore asked him to bring me immediately two reliable Austrians who knew the mountain trails to serve as guides.

Brandauer brought not two but four Austrian guides, all former Wehrmacht soldiers. They said it would take us five hours to reach the cabin. There would still be from twenty to thirty feet of snow on the ground, and no cover for us except drifts on the last four kilometers of the way up to the cabin. We would have to leave before midnight to arrive under cover of darkness and while the crust on the snow was still hard. I would dress in Austrian costume—lederhosen, Alpine jacket and hat, and spiked shoes. I would approach the cabin alone; the Austrians were not willing to come closer than five hundred yards. I would go up unarmed so as not to draw fire or arouse suspicion. I would pose as a passer-by crossing the mountains on the way to Steyrling, in the next valley: there were many Wehrmacht deserters and fleeing Nazis whose safest and most expedient mode of travel was by foot over the mountains. If Kaltenbrunner was not there I would come out immediately.

This was a sensible plan. That it was executed stumblingly was due to the fact that Major Pearson, the task force commander, insisted on sending a squad of his boys along. I was afraid their presence might bring on a pitched battle, leaving either a dead or an escaped Kaltenbrunner, and my arguments achieved at least the compromise agreement that I would have authority to use the infantry squad in any manner I saw fit. I ordered it to stay well to the rear and on the approach to the cabin keep under cover out of sight.

After this matter had been arranged, on the afternoon of the eleventh, I sent for Gisela. She was extremely anxious to find out what information we had regarding Kaltenbrunner. I told her we had some leads and asked her to write a note to him urging him to accompany the bearer into safe custody with the Americans rather than let himself be taken, and probably killed, by the Russians. After a moment's

thought she complied. Later that afternoon we were visited by several delegations from the Gisela-Iris group—first Hans Unterkirchner, the Viennese actor, then Lotte Koch and Ernst von Klipstein, then Praxmarar and Iris—all fishing for information.

Iris was apparently most concerned about the safety of her husband Arthur Scheidler. Although she was going to have a baby in six weeks, she insisted that she be allowed to accompany any patrol that might go off into the mountains after him, arguing that if she were in evidence there would be no shooting on the part of the Kaltenbrunner group. Thinking that she might indeed be useful in this way, I told her she could come; but then she backed down. Never quite sure what the maneuverings of these friends of Kaltenbrunner might mean, I sent Sid to the Gisela-Iris house to keep an eye on them for the next twelve hours.

That night at 11:30 p.m. the patrol assembled in the CIC office for final briefing. The infantry boys, although they had volunteered for this mission, were a little dubious about the plan as outlined, and especially about being guided by former German soldiers. They wanted it made clear that if they made a single false step the guides would be dead ducks; after coming through the war alive they didn't want to get killed with peace and home in sight.

As we started off at midnight the squad of soldiers loaded with their rifles, hand grenades, and ammunition seemed to make as much noise as a company of tanks rolling through the streets; it would be evident to the village people that a patrol was leaving. We walked past the See Hotel, where one of Praxmarar's SS hospitals was quartered, past Fischerndorf, along the Alt Ausseersee shore, and then began to climb. There were unexpected obstacles: trees swept down by heavy snowslides lay across the path, and the foot bridge over the Stammern stream had been carried away in the spring floods. Up through the timber, up past the timber line we wound our way, snake-like over the hairpin trail. The infantry, weapon-laden and without spiked shoes, slowed us down, and it was soon clear that we could not keep to our schedule. Three of the soldiers, injured by falls, were dropped along the way.

At 5 a.m., as day began to touch the sky, we finally reached a snow-covered pass from which through glasses we could see the Wildensee Huette. It lay across a great expanse of exposed down-slope and then up a long bare ridge, just below the crest. We nevertheless decided to proceed directly, in full view, rather than take a circuitous route to gain cover from overhanging crags. It was getting late; everybody was thoroughly tired from breaking through the crust calf-deep at every step; and the cabin appeared to be utterly deserted.

Behind a ridge of snow some 300 yards from the cabin I left the four Austrian guides and what remained of the infantry squad and worked my way around to the blind west side of the cabin, taking advantage of any cover there was. As I was laughing at myself for being so cautious in approaching an evidently deserted cabin, I heard a bird-call signal off to the right. No, it *was* a bird, apparently as lonesome as I felt. The cabin, I could see, was a typical Alpine hut—two rooms, a wood shelter, a porch that faced down the slope in the direction we had come. The shutters were tight closed; no smoke was coming from the chimney; no fresh foottracks were visible in the snow.

I walked onto the porch and knocked at the door. There was no response. I tried the door and found it locked. But then a sleepy groan came from the left-hand room. I knocked loudly on the window shutter. Someone got out of bed and walked across the room. The shutter opened, revealing a rough-looking man of about 35, not Kaltenbrunner. "Was suchen?" he asked. I said in very American-sounding German that I was cold and wanted to come in. But he clearly wasn't going to ask me in, so I came straight to the point and handed him Gisela's note to Kaltenbrunner.

He read it carefully, but then said he didn't know these people, he was just a passer-by on his way down to Bad Ischl. At that moment he looked over my shoulder down the slope, and saw the four guides coming up with rifles slung over their shoulders; observing that nothing had happened to me, they had decided that there was no danger. He quickly crossed the room and took a revolver from his trousers hanging beside the bed. I retreated to the protection of the cabin's west side, and he slammed the shutter shut. The guides, alarmed,

brought the eight infantry boys up in a half-circle around the front of the cabin. While this maneuver was being executed, the man in the cabin opened the door and came out on the porch, perhaps to negotiate, but when he saw the reinforcements he quickly reentered, slamming and bolting the door behind him.

With the men in position, we called out to the occupants to come out with their hands over their heads. For ten minutes we kept repeating this call, with no results. Not wishing to start shooting, we went onto the porch and began to knock down the door. But immediately it opened and four men walked out with their hands over their heads. They had decided to come peacefully after all.

Inside the cabin we found four Wehrmacht rifles, four revolvers, a large quantity of ammunition, two machine pistols, and a machine gun, the latter hidden in the recess of the chimney. Also a case of empty champagne bottles, some French bonbons, some American tax-free cigarettes, and a large quantity of counterfeit American and British money. In the ash pit at the base of the chimney was a picture of Kaltenbrunner with his wife and children, a copy of his last radio message to Fegelein for Himmler and Hitler, his identification card as Chief of the SIPO and SD, and his metal identification discs as number two man (Himmler was number one) of the Gestapo and the Kriminalpolizei.

I interrogated each of the four men. Two of them admitted they were SS guards, but claimed they had no connection with Kaltenbrunner. And Kaltenbrunner and Scheidler, although there was no mistaking at least the former, refused to admit their identities. They had false papers, Kaltenbrunner those of a doctor discharged from the Wehrmacht, and he carried a medical kit and all the usual accessories. (Later he took pains to explain that these papers were not forged, but the authentic identification of deceased persons. This rather fine distinction was characteristic of his efforts to appear an Austrian gentleman and a good Catholic.) He stood rigidly at attention during the interrogation, trying to create a good initial impression by being earnest and cooperative. Scheidler was the antithesis. He made no attempt to hide his wrath.

His eyes flashed furiously at me as we swung heavy packs onto the four men for our trip down to the village.

At 11:30 in the morning we arrived back in Alt Aussee, where word had apparently circulated that a mountain patrol was returning: a crowd was gathered in the village street. As we passed Prince Hohenlohe, he remarked, "I see you have your man Kaltenbrunner," and at the same time Iris and Gisela broke from the throng and ran up and embraced their respective men. Kaltenbrunner and Scheidler now had to drop their masks.

The Last Days

In time, through the interrogation and testimony of Kaltenbrunner and others,[7] it was possible to piece together the story of his recent efforts to salvage something from the German defeat. On April 18 Himmler had named him Commander in Chief of all forces in southern Europe. He had reorganized his intelligence services as a stay-behind underground net, dividing the command up between Otto Skorzeny, head of the sabotage units, and Wilhelm Waneck, whose radio station in the Kerry Villa kept in contact not only with Kaltenbrunner and other centers in the Redoubt and in Germany, but also with stay-behind agents in the southern European capitals.

Waneck, however, with Werner Goettsch, Wilhelm Hoettl, and others, concluding as early as 1943 that the Nazis would lose the war, had been intriguing for a negotiated peace with the western allies and a common front against Russia. The plan was to set up an independent Austrian state in rebellion against the Nazi Reich and supported by the Anglo-Americans. Goettsch had valuable contacts among the Vienna Socialists, and one idea had been to send Karl Doppler to the United States to broach the plan because he had the same masonic degrees as President Roosevelt. Kaltenbrunner was informed of this conspiracy and gave tacit assent, though he could not actively participate. Later other Socialists were brought in, including Karl Winkler, who had contacts with

[7] Notably Wilhelm Hoettl (Third Army Preliminary Interrogation Report No. 17, June 1945), Wilhelm Waneck (12th Army Group Intermediate Interrogation Report, June 21, 1945), and Werner Goettsch (USFET Final Interrogation Report No. 8, July 24, 1945).

America and England through Draja Mihailovich, and Raffael Spann and Professor Heinrich, who had an excellent contact in England, their friend Major Christie at the Travellers Club, London. Attempts in 1944 to contact Major Christie by letter failed, however; and an opportunity provided by Mihailovich to get in touch with the American Legation in Belgrade was lost when Belgrade was occupied.

Finally, in March 1945, according to the interrogation reports, Hoettl went to Switzerland with the Polish Count Potocki, with whose help and that of Prince Alois Auersperg, a former Abwehr officer implicated in the July 1944 attempt on Hitler's life, he was able to get into touch with Mr. Schultze-Gaevernitz, a member of the American Embassy, and through him with Allen Dulles.[8] Through Auersperg and a Dr. Kurt Grimm, Austrian Freedom Movement representative, Hoettl also had contact with a Mr. Leslie of an Allied Commission in Berne. The Americans, he was told, did not want a strong Russian influence in Austria, and they were particularly interested in Kaltenbrunner's attitude toward an independent Austrian state.

With this information Hoettl, Waneck, and Goettsch were able to urge Kaltenbrunner to set up a rival Austrian government to the Russian-sponsored one in Vienna, which the western allies refused in April to recognize. Kaltenbrunner held two meetings with members of this Free Austria group—Neubacher, Glaise-Horstenau, Muehlmann, Hayler, Pschikril, Hoettl, Goettsch, and Waneck—at which a provisional cabinet was discussed and it was decided that Kaltenbrunner, in accordance with American wishes, should be an advisor. Having now full powers in southern Europe, Kaltenbrunner was in an excellent position to use his reorganized intelligence services as a bargaining counter with the Allies.

On April 26, at Strobl, Hoettl reported to Kaltenbrunner, Glaise-Horstenau, Neubacher, Muehlmann, Waneck, and Goettsch on the results of a second visit to Switzerland. It was agreed at this time to try to arrange a meeting between Allen Dulles and Kaltenbrunner at Feldkirch, in Austria near

[8] This approach, if it was made, was carried out by the intermediaries: Hoettl did not in fact meet with Allen Dulles, and probably not with Gaevernitz.

the Swiss border. During the next few days Kaltenbrunner met with Field Marshall Kesselring and Lieutenant General Winter at Koenigsee regarding the project. But the sands were running out; the war was coming to an unexpectedly rapid end. Kaltenbrunner could pursue the political way out no longer. Facing capture as the Russian and American troops closed in, he retired to Alt Aussee to bid Gisela farewell and from there with his two SS guards and his adjutant Scheidler made the ascent to the mountain hideout among the snowy crags of the Totes Gebirge.

Interrogated now briefly by the 80th CIC at Alt Aussee before being sent on to Third Army and 12th Army Group, Kaltenbrunner said that he had intended to come down from his retreat after things had quieted down and, on the basis of the underground forces at his command, his Free Austria project, and his knowledge of Bolshevism, come to terms with the western allies: "If there is one man in Europe who knows Bolshevism, it is I." We allowed Gisela and Iris a last tearful farewell before sending the two men on to higher headquarters. There was a plan afoot which never materialized to have Kaltenbrunner talk with General Eisenhower and then issue a statement calling on the underground to end all resistance.

During subsequent interrogations Kaltenbrunner remained very cooperative, intent on establishing his alibi. At Third Army he said that with Hitler's consent he "began in 1945 to use the foreign intelligence service to counteract Ribbentrop's pernicious influence and to find a political way out." He wrote a letter to his wife, Lisl, clearly designed for American eyes:

> My own destiny lies in the hands of God. I am glad that I never separated from Him. . . . I cannot believe that I shall be held responsible for the mistakes of our leaders, for in the short time of my activity I have striven hard for a reasonable attitude, both internal and external. . . . They ought to have paid more attention to my words. . . . We have no property worth mentioning. Perhaps the only resource for you will be my small stamp collection. . . . Was it not my duty to open the door to socialism and freedom as we imagined and desired them? . . . I have not given up hope that the truth will be found out and for a just legal decision.

But he never disclaimed his positive relationship with Hitler, one apparently bordering on adoration. His subordinate Wilhelm Hoettl said of him that he "was fascinated by Hitler, believed in him without reservation . . . . He believed he had a mission to serve Hitler with his entire RSHA . . . . He came to believe that Hitler was the man sent by God. This developed into a mania."

In July Kaltenbrunner was sent to British Interrogation Center 020 outside of London. Here, at a time when the horrors of the concentration camps were being brought to light, he was seized on as the first prisoner that had played a significant and responsible part in the extermination program. He was given third-degree treatment, I learned later from an American intelligence officer working on the case. The result was that henceforth he not only did not cooperate but refused even to admit he had any responsibility at all in the Nazi system. He refused to admit that he knew men who had been his closest associates. He denied that he had ever been near a concentration camp. He refused to admit that he signed orders incarcerating persons in concentration camps. In short, he denied from this time on any connection with Nazi crimes or persons responsible for such crimes. He was flown to Nuremberg for the trial in handcuffs—the only one of the 21 major defendants treated in this manner.

In November, two weeks before the scheduled opening of the trial, I was sent to Nuremberg to set up a security plan: the American military commanders were becoming anxious about "lone-wolf assassins," and Robert Ley had succeeded in committing suicide despite supposedly elaborate precautions. To test the Palace of Justice security system, another CIC man and I tried penetrating without proper credentials to the inner cell block which housed the 21 defendants. We succeeded, as anybody might have done, in passing through the four interior guard posts without the required Red Pass. A fifth post guarded the individual cells. I asked to see Kaltenbrunner and was readily admitted upon signing the registration book.

Kaltenbrunner looked gaunt and pale. He clearly showed the effects of what he had been through since I saw him on May 12. He gave no indication of wanting to remember

me; it seemed as if he had mesmerized himself into a state of complete forgetfulness. Only when I mentioned the name Gisela he nodded and asked several questions about her and the twins. But that was all.

On the opening day of the trial, to everyone's great disappointment, Kaltenbrunner was not in the prisoners' dock; he had been stricken with a cerebral hemorrhage the night before. It was three weeks before he was well enough to make his plea, "I do not believe I have made myself guilty in the sense of the indictment." On December 10 I was present at the scene described in the press release of the International Military Tribunal's public relations office:

> Ernst Kaltenbrunner received a cool welcome from his co-defendants when he made his initial appearance at the trial Monday afternoon. Entering the prisoners' dock just before the afternoon session began, no welcoming hands were proffered to greet him. When he offered to shake hands with some of the defendants there was a noticeable reluctance on their part. Taking his seat in the dock between Wilhelm Keitel and Alfred Rosenberg, he tried to engage his neighbors in a conversation without much luck. . . . When he was approached by his own defense council, Kaltenbrunner held out his hand. His lawyer had, however, with studied casualness locked his hands behind his back.

I walked down beside Kaltenbrunner during the intermission that afternoon. He recognized me and motioned that he wanted to speak with me. That was not permitted. I had received that day through the mail a note from Gisela for him, a girlish love-note telling him that his heart must never grow cold, that she was thinking of him and would always love him. I handed it to Kaufman, Kaltenbrunner's defense counsel. AP correspondent Daniel DeLuce, however, who was talking with Kaufman at the time, appropriated it and wrote a story on it. Kaltenbrunner presumably never found out that Gisela was keeping the home fires burning.

Later that week Kaltenbrunner was stricken with a recurrence of the cerebral hemorrhage, and could not return to the dock until January. But he survived through the entire trial, to be hanged on October 15, 1946, with eleven of his co-defendants.

Achievements, extravagances, and exposure of a clandestine German interbellum operation in military research and development.

THE LOHMANN AFFAIR

The Weimar Republic's attempts in the twenties to circumvent the Versailles restrictions on its armed forces produced clandestine operations which in their financing, cover devices, and hazards of exposure present a close parallel with intelligence operations. One such series of undercover research and development projects, carried out by a Captain Walther Lohmann of the German Naval Transportation Division, got out of hand and became a source of acute embarrassment to the Weimar Ministry of Defense. The affair was hushed up, and in more recent times has been virtually overlooked by historians. Sufficient material is now available, however, for a scrutiny of Lohmann's work, its oddities and blunders, and for an account of the way the German Cabinet successfully veiled its true nature after some of the clandestine activities had been exposed in the press.[1]

Walter Lohmann, the son of a one-time director of the North German Lloyd shipping line, served inconspicuously as a non-combat logistics specialist during the European war of 1914–1918. He won recognition in navy circles afterward, how-

[1] The following materials were used in the preparation of this article: captured documents of the German naval staff, in custody of the Division of Naval History, U.S. Navy; the record of proceedings of the German Cabinet and documents of the German Foreign Ministry, in custody of the U.S. Department of State at the National Archives; records of the Berlin Embassy of the Department of State, now available to the public at the National Archives; documents of the German Reichstag and the files of several German newspapers, including the *Berliner Tageblatt*, available at the Library of Congress. In addition the writer has consulted the published memoirs of former German Defense Minister Otto Gessler, *Reichswehrpolitik in der Weimarer Zeit* (Stuttgart, 1958). Precise documentary citations are made in another version of this study being submitted to the *Journal of Modern History*.

ever, for his work on a subcommission which negotiated the disposition of the German merchant fleet and for his direction of shipments of emergency food supplies to Germany. He also managed the return from overseas of German war prisoners. In 1920, while on the first of two trips to Leningrad to negotiate with the Russians regarding the release of captured German merchant ships, he met the comely German-born Frau Else Ektimov, destined later to play a role in his downfall. He subsequently arranged for the return of the lady to Germany and for her support.

In October 1920 he assumed command of the Naval Transport Division of Navy headquarters in Berlin, a post concerned primarily with logistical matters. For this reason, and also because he enjoyed the complete trust of Admiral Paul Behnke, then commander in chief of the Navy, he was given full charge in early 1923 of the disbursement of the Navy's "black" funds reserved for clandestine purposes.

Achievements

Initially, these funds included large sums—amounting in dollars to at least 25 million—obtained from the sale of warships and submarines scrapped in 1919 and 1920 at the order of the Allied Powers. Later, some two and a half million were added as the Navy's share of the so-called "Ruhr funds," monies voted by the Reichstag and used to strengthen the armed services above Treaty limit at the time of the French occupation of the Ruhr. Subsequently, smaller sums totaling about two and a quarter million were obtained or diverted from other sources. Most of this money was transmitted to recipients through a Lohmann-supported bank, the Berliner Bankverein, which acted as a middleman between the Naval Transport Division and the various projects funded.

Only one inspector, a man of Lohmann's own choice, was assigned to audit the funds, and he had no authority to question the wisdom or validity of the captain's disbursements. His presence afforded a partial check against improper bookkeeping and ordinary waste, but none to hinder Lohmann from supporting whatever projects he chose. Admiral Behnke and Minister of Defense Otto Gessler, trusting Lohmann to use the money for worthwhile undertakings, seem to have

given him *carte blanche,* an opportunity which appealed to his Hanseatic spirit.

Between 1923 and 1927 Lohmann financed nearly all of the clandestine and semi-clandestine projects of the Navy. Most of these were established with the initial concurrence of his superiors, and many required the closest cooperation with several divisions of the naval staff; but some were founded and supported solely on the captain's initiative without the knowledge of even the commander in chief of the Navy. This independent activity was protected by the necessity for strict secrecy in clandestine operations and by Lohmann's extremely broad powers.

The projects which dealt with aircraft and submarine design and development were for the most part soundly conceived, well executed, and extremely important for the future development of the Navy and the Luftwaffe. With subsidies from Lohmann, three German shipyards operated a highly successful submarine design bureau in The Netherlands which maintained contact with Navy headquarters through a dummy firm known as Mentor Bilanz. The "Dutch" bureau, Ingenieurskantoor voor Scheepsbouw, designed a submarine which Lohmann and Captain Wilhelm Canaris (later to become the Abwehr chief of ambivalent loyalties) in 1926 arranged to have built at Cadiz in Spain. The purpose was to train German technicians and to develop a prototype medium-size submarine, which among other features had torpedo tubes designed to eliminate the large bubble of air that normally betrayed a submarine's position when a torpedo was fired.

Lohmann's work in aircraft development was equally significant. The firms of Heinkel, Dornier, and Rohrbach enjoyed his subsidies, and in 1926 he purchased outright the Albatross Aircraft Company to obtain facilities for the type-testing of "commercial" aircraft which closely resembled the fighter, bomber, and reconnaissance planes being built abroad by such firms as Boeing, Vickers, and Douglass. By 1927 Germany had several successful prototypes, and the Swiss subsidiary of Dornier was about to embark on the design and development of the "DO X" flying boat, a twelve-engine giant larger even than the famous Boeing Clippers of Pan-Ameri-

can, to meet the requirement for a patrol seaplane capable of landing and refueling at sea. Only an unacceptably low service ceiling made it necessary to abandon this design.

The training of airmen was at the same time not overlooked. Battle-experienced pilots of the Lohmann-financed Severa flying service based at Noordnay and Holtenau conducted tactical exercises with the fleet and trained a dozen young naval officers each year in the art of flying.

Extravagances

As Lohmann's list of projects grew—including also such things as the secret construction of motor torpedo boats and subsidies to various small-boat shipyards and yachtsmen's associations—his ambition increased proportionately. By about 1926 he seems to have become convinced that he could perfect a massive structure of clandestine projects financed by profitable commercial ventures bolstering the rapidly dwindling "black" funds. He then stepped into another world, the world of commerce and business, where his successes were lamentably few. He had become the victim of *Masslosigkeit*—gross intemperance.

Two projects which attempted to combine money-making with what might today be termed "defense-related research" bordered on the fantastic. One company was founded to exploit an experimental method of raising sunken ships by surrounding them with ice, and another sought to extract motor fuel from potatoes. These accomplished nothing, and both aroused much public ridicule when they were later exposed. Another device, a coal-pulverizing machine, came to grief in the course of experiments and the Lohmann-financed company which sponsored it went bankrupt.

But it was the Berliner Bacon Company which came to be described by German Socialists as the most oderiferous of Lohmann's schemes. This project was initiated primarily as a money-maker in the spring of 1926. Lohmann proposed to wrest from the Danes the lucrative British bacon market by offering a German product cured by a new process especially for the Englishman's palate. He had incidentally in mind that the fast refrigerator ships he hoped to acquire for the bacon trade would be useful in wartime as troop transports.

His ambitions, however, exceeded his ability to analyze the British market potential, and by mid-1927 his company was bankrupt.

Lohmann's downfall stemmed from his relations with the Phoebus Film Company, in 1927 the third largest producer of motion pictures in Germany. Beginning in 1924 Lohmann granted subsidies to this firm on condition that it produce films of a "national" character designed to stimulate the "fatherland consciousness" of the German people. He also hoped to use its overseas offices to establish an intelligence network in former enemy countries where Germany was not allowed a naval attaché.

The captain probably had personal reasons for supporting Phoebus as well. Prior to his association with the company he had become a close personal friend of one of the directors, and afterward a member of a hunting club organized by him. Through this man Lohmann secured for his friend Frau Ektimov a position with Phoebus at a salary of 1,000 marks a month, enough to enable her to support her aged mother and young son in comfort. Frau Ektimov, employed for "representation," did no work, and she had apartments in a house purchased by Lohmann. Lohmann's personal relations with her are nevertheless officially said to have been above reproach, motivated solely by a desire to help her; and *honi soit qui mal y pense.* He also seems not to have appropriated any of the "black" funds for his own use.

Between 1924 and 1927 Lohmann provided Phoebus, a company capitalized at approximately $1,000,000, with a total of over $2,500,000. He informed his superiors of only one of five separate grants, a government-guaranteed loan from the Giro-Central Bank in Berlin in March 1926. In order to obtain their signatures on this guarantee, Lohmann resorted to a stratagem, informing them that the Lignose Company, a producer of raw film, had also guaranteed the loan and that in the event of default it would stand the loss instead of the government. He neglected to add that he had in effect bribed one of Lignose's officials with a $2,500 "negotiating fee," and that he had given this man a written assurance that Lignose would not have to pay. In the early half of 1927 he arranged two more government-guaranteed loans which he kept secret from

his superiors by affixing his own signature in the name of the Reich.

Despite this massive aid, Phoebus continued to lose money. In 1927 it was in such serious financial difficulties that it failed to convene its regular annual stockholders' meeting or issue a financial report. By August disaster was impending for both Lohmann and Phoebus. The company was falling behind in payments on its loans, and penalties were mounting rapidly. None of Lohmann's various money-making projects had paid off, and the "black" funds were near exhaustion.

Exposure

Kurd Wenkel, one of the financial writers of the *Berliner Tageblatt*, a liberal daily of high quality, had been following the declining fortunes of the German film industry with close attention. He was well aware of the financial condition of Phoebus, and by mid-July had begun to suspect that Phoebus enjoyed official support. At about this time he became acquainted with a former director of the company, Isenburg, who had resigned in disgust in 1926 and knew of Lohmann's dealings with Phoebus, of the several government-guaranteed loans, and of Lohmann's relations with Frau Ektimov. Evidently for reasons of spite he told all this to Wenkel, who took care to check the story independently and then in articles on 8 and 9 August created a sensation by exposing the shameful scandal.

Wenkel, however, was apparently not aware of Lohmann's real clandestine mission. For him the Phoebus relationship constituted an attempt by the Navy to strengthen right-wing elements in Germany. His articles briefly mentioned some of Lohmann's other activities, including subsidies to a boatbuilding yard, but only as attempts to help industries that had some war potential. One of his disclosures, however, had it been pursued, could have exposed most of Lohmann's work—his connections with the Berliner Bankverein.

Lohmann had bought a controlling interest in the Bankverein in March 1925 in order to use it as a covert financing agency for his projects. But the private bankers who remained shareholders were greatly displeased at the depreciation of its stock caused by failures such as that of the Berliner Bacon Company, and their discontent made them seri-

ous security risks. If any of them emulated the vindictive Isenburg and talked to the press, there was grave danger that the Lohmann affair might become not only a scandal but a revelation of serious German violations of the Versailles Treaty.

Antidotes

The German Cabinet and Chancellor Marx were therefore anxious to smooth the affair over as rapidly as possible. Lohmann was suspended from office, an official Cabinet inquiry was begun, and a retired official of the Prussian State judiciary was placed in charge of Lohmann's office for the purposes of investigation and audit. Publicity was curtailed and Wenkel silenced by pressure on the *Berliner Tageblatt*. Two radical journals continued to carry articles through late August, September, and October, but neither had good enough contacts in navy or industrial circles to make further damaging disclosures. Chancellor Marx consulted directly with various important party leaders to insure silence in political quarters. In November the Cabinet began a series of meetings on the affair. As prophylactic action against future extravagant indiscretions by one individual or one component of the government, it decided to establish a "Supervisory Commission for the Secret Tasks of the Armed Forces" composed of the heads of the Army and Navy, the Reich Finance Minister, and the President of the General Accounting Office (Rechnungshof) to supervise and approve all clandestine projects of the services. Within the Navy a special "B" budget for funds diverted from publicly budgeted items was placed in the charge of a regular budget officer who had no authority to initiate or control projects. Although illegal operations were ultimately on a considerably larger scale than during the Lohmann era, rising from $1,700,000 in 1928 to $5,250,000 in 1933, there was no further abuse of the powers conferred by secrecy.

Lohmann, much in disfavor, was nevertheless punished only by forced retirement on a reduced pension. There seem to have been two reasons for this clemency—first, that extensive investigations showed he had not appropriated official funds for himself; and second, that an elaborate court-martial would have brought on the very thing the government wanted most to avoid, publicity which might disclose violations of the Ver-

sailles Treaty. Lohmann was a broken man, however, and he died only three years later of a heart attack. His widow had so little money that she was unable to pay the necessary inheritance taxes. Of Frau Ektimov's fate there is no word.

Before the Reichstag and the world public the Cabinet was able to obscure the fact that violations of the Versailles Treaty had occurred. The matter had to be brought to the Reichstag for approval of a special appropriation to pay off the government-guaranteed loans to Phoebus; but the Cabinet announced in advance the resignation of both Defense Minister Gessler and Navy commander Zenker, who, as Lohmann's superiors, had to accept responsibility for the scandal. In the Reichstag discussions the question of why Lohmann had engaged in such unusual activities was never fairly asked. Violation of the Treaty was charged only once, by the young and fanatical Communist deputy, Ernst Schneller, who declared correctly that Lohmann had been involved in submarine production in Spain. He ruined the effectiveness of an otherwise good case, however, by continuing with wild allegations that Germany's former enemies were assisting her in this work preparatory to a combined capitalist assault on that bastion of socialism, the U.S.S.R. This was such hackneyed tripe that the responsible German press did not bother to print his charges. The French news agency Havas carried them, but only in routine fashion and without comment.

Abroad, the fact that Lohmann's work violated the Versailles Treaty was completely missed by the press. Furthermore, the reports of the American Embassy in Berlin were brief and incurious regarding Lohmann's motives. British and French diplomatic reporting is not available, but an examination of the German Foreign Office records fails to disclose even a memorandum of conversation on the subject between these embassies and the Wilhelmstrasse. The conclusion seems inescapable that either the vaunted British and French intelligence services were caught napping, or, as seems more likely, the policy-makers in Paris and London chose to ignore the affair. To them the apparent collapse of the German Navy's efforts to circumvent the Treaty was perhaps a matter for quiet amusement rather than for alarm or indignation.

COMMUNICATION TO THE EDITORS

Dear Sirs:

I have come across copies of correspondence which may be of interest in documenting Mr. Nabbie's article on "The Alamo Scouts" that appeared in the *Studies* Vol. III No. 4. Spanning a two-month interval from a fortnight before the Luzon landings to a fortnight after the retaking of Manila, they illustrate the evolution of official policy toward the Filipino guerrillas. The first statement of policy from MacArthur's headquarters was made in response to a Sixth Army request:

Headquarters Sixth Army
Office of the Commanding General
APO 442

20 December 1944

Subject: Official Recognition of Guerrillas
To : Commander-In-Chief, South West Pacific Area, APO 500

1. Request that a directive be published clarifying the policy to be followed in extending official recognition to guerrilla units.

2. It is understood that to date no guerrilla forces on Luzon have been officially recognized by this theater.

3. Guerrilla groups on Mindanao, Leyte and Panay have been extended such recognition with consequent emolument in rank and pay. It is believed that unless some similar recognition is extended to a group or groups on Luzon, it may cause resentment and handicap the unification of the guerrilla forces there.

For the Commanding General:

G. H. DECKER
Brigadier General, G. S. C.
Chief of Staff

1st Ind.

General Headquarters, South West Pacific Area, APO 500,
27 December 1944

To: Commanding General, Sixth U.S. Army, APO 442

1. The formal recognition of guerrilla units operating in Luzon present a very different problem than that prevailing on major islands to the South. Such action in the South resulted from an entirely different military situation than has existed under enemy occupation in Luzon. The vast areas, never under the physical occupation and control of the enemy in Mindanao, Panay and Negros, for example, permitted the organization and arming of

regularized military forces and their commitment to guerrilla warfare, military intelligence and other interior activity under the direction of this Headquarters.

2. This was not possible in Luzon due to the widespread garrisoning of the area by vastly greater enemy occupying forces. As a consequence the resistance movement in Luzon has been confined to the classic type of underground operations in which an entire population, with little exception, has participated with patriotic fervor. These operations have extended into every center of enemy activity and have resulted in providing information in most precise and detailed form on enemy dispositions throughout the island.

3. It is anticipated that this great patriotic movement among the people of Luzon will reach its maximum strength and utility after the battle for Luzon has been joined and it is the desire of the Commander-in-Chief that it be utilized to maximum advantage.

4. The service, past and future, of unsurrendered, escaped or released members of USAFFE [United States Army Forces, Far East], will certainly ultimately be recognized on the merits of each case, as will the service of civilian patriotic secret societies, groups and individuals, but it is desired that for the purpose of the campaign the movement insofar as practicable be treated and directed as a spontaneous patriotic effort on the part of the whole people.

By Command of General MacArthur:

B. F. FITCH
Brigadier General, U.S. Army
Adjutant General

This position, although it was presumably the best that could be taken at the time, was not a very practical one. "A spontaneous patriotic effort on the part of the whole people" did not differentiate between Filipinos who trafficked with the Japanese and the guerrillas who had taken up arms, made sacrifices, and were living in the hills away from their families. It also gave no basis for defining the status of individual guerrilla leaders, where claims to authority were rife and assumed rank was the order of the day. (I personally met and was badgered by 20-year-old full colonels.) The unsurrendered Americans in the area (Volckmann,[1] O'Day, Barnett, Blackburn,[2] Calvert, and Murphy in north Luzon; Lapham, Anderson McKenzie and Ramsey in the central part; Barros in the south-

[1] See Russell W. Volckmann, *We Remained* (New York, 1954).

[2] See Philip Harkins, *Blackburn's Headhunters* (New York, 1955).

ern Bicol section) did do much to consolidate individual guerrilla units and define in some sort their areas of jurisdiction.

The subsequent regularizing of the guerrilla units as components of the Philippine Army which Mr. Nabbie describes from the Alamo Scout viewpoint was based on the following cable of 17 February 1945 from the Commanding General, Advance detachment, USAFFE, to the Commanding General, Sixth Army:

> It is desired as rapidly as practicable to induct into the Philippine Army those guerrilla elements who have been or are being employed or whom you believe it is desirable to employ in support of our combat operations on Luzon. They may be inducted into service as groups or individually as you deem expedient. The mechanical process of such incorporation into service will be accomplished by you or your subordinate commander as you may direct, furnishing rosters and necessary data to the USAFFE Headquarters to perfect the official records. Officers and men not already in the Philippine Army by virtue of previous enlistment, induction or appointment will acquire the status of members of the Philippine Army as of the date of entry upon duty with pay according to Philippine Army scale commencing as of that date and without prejudice to prior service or claims. You are authorized to equip and supply these units as best you may.

The screening of guerrilla claims through personal inspection of the units by Alamo Scout officers behind the Japanese lines was probably effective in eliminating most of the Johnnie-come-lately's and others whose recognition was not warranted.

Henry G. Fishburn

The editors welcome the contribution of book reviews on subjects within the contributor's field of competence. Reviews, like manuscripts, should be typed in double space, and they should be headed with the bibliographical data in standard **Studies** *format.*

INTELLIGENCE IN RECENT PUBLIC LITERATURE

ESPIONAGE AND COUNTERESPIONAGE

THE PANTHER'S FEAST. By Robert Asprey. (New York: Putnam. 1959. Pp. 317. $5.00. Also London: Jonathan Cape. 1959.)

Robert Asprey's fictionalized life of Colonel Alfred Redl, Austrian counterintelligence genius and Russian agent within the Imperial General Staff before the first world war, makes little contribution to a professional understanding of this famous espionage case long cited, without detailed or adequate study, as a classic instance of the recruitment of a homosexual under threat of exposure. Yet if the jacket of the book (not an unbiased source) can be believed, Asprey has studied the files that survived Austrian efforts to suppress the Redl case as well as the inadequate and sensational literature that has grown up around it. He claims to have talked to survivors, including Redl's paramour Stefan, who were familiar with details. The end result should have been worthy of all this work.

Possibly it was. Asprey's first draft, a serious biography of Redl, was rewritten in its present form at the behest of his publishing agent, and the original manuscript destroyed. The result is neither sound biography nor good fiction, and it is essentially dishonest: it misleads the reader by combining fact and fantasy without discrimination. This deception is heightened by the inclusion of occasional footnote references to authorities (without citing specific pages) and a truly imposing bibliography. Unsuspecting readers may well accept as verified fact such sequences as Redl's meeting with the Italian military attaché in Vienna, completely fictional although Redl may indeed have sold information to both Italy and France. The "interpretive" invention of live dialogue protects the casual reader from boredom at the expense of the student who needs to get at the truth. Since the book market, to be sure, consists of many casual readers and relatively few students, writers and publishers who conspire to inflict "interpretive" biography on the public are not commercially at

In common with earlier writers on the case, Asprey trips over the hard fact that Redl, himself a Russian agent, continued to uncover and neutralize other Russian agents in Austria-Hungary. Asprey solves this problem through an imaginary face-to-face bargaining session between Redl and Batyushin, the Russian officer who is thought to have handled him. At this invented meeting Redl and Batyushin are shown arranging to sacrifice Russian agents in Austria as part of the payment to Redl. Asprey here follows without acknowledging his source a theory first developed by Tristan Busch in his *Secret Service Unmasked,*[1] but goes beyond Busch to suggest that more than one meeting was held. Only the German edition of Busch's work is listed in Asprey's bibliography. Busch, who claims a career in Austrian intelligence before and during the first world war, cites no authority for this doubtful story.

The true reason for this seeming inconsistency in Redl's actions was probably more prosaic: what better cover could he have than an active career as a catcher of Russian spies? Arrangements to sacrifice occasional Russian agents, if they were in fact made, could have been set up through whatever normal channels Redl had for passing messages and photographs to the Russians. (We know virtually nothing of these.) The Russian case officer, whatever his personal feelings, undoubtedly reconciled himself to the loss of a few minor agents if he could keep the big one securely hooked. Until evidence becomes available—and we know nothing of the Russian side of this case—the face-to-face meeting of Redl and Batyushin must be regarded as a myth. Indeed, until Russian files are opened, we can only speculate about Redl's motivation, the operational techniques he employed, and his true relationship to his Russian case officer.

At this late date, two great wars and half a troubled century later, why should overburdened American intelligence officers interest themselves in the uncertain career of a dimly remembered Austrian officer who was trapped into espionage by his homosexuality and a passion for luxurious living? What can the tragic story of Alfred Redl mean to us?

[1] Tristan Busch (pen name for Arthur Schuetz), *Secret Service Unmasked* (London: Hutchinson & Co., Ltd.), pages 35–36.

We should remember, first of all, that the case of Alfred Redl forms part of the intelligence tradition of our Soviet adversary. The recruitment and direction of Redl shows a skill and daring that modern intelligence officers in their ignorance rarely grant to the services of Imperial Russia. The Soviets inherited no mean tradition in intelligence, and it is our business to know this background thoroughly. If this means a study of history—anathema among many American intelligence officers—we must make the best of it. How can we know the character of the enemy if we do not know his background and tradition?

It is a common American practice, one that shows through all our history, to judge events and activities primarily as successes or failures. This narrow pragmatic view is applied to our intelligence operations in an abnormal degree. If it succeeded, fine; if it failed, try something else. Almost no one bothers to ask why it succeeded or failed. The result is considerable groping in the murk. When the English indulge in this same practice we laugh and say they "muddle through." Success and failure, however, are really not so simple. In every successful operation there are elements of failure, in each failure some success. If the Redl case can teach us anything, it teaches us the danger of brushing failures under the rug. No evidence now available indicates that Austrian counterintelligence ever tried to explore the ramifications of the case. Its criminal failure to interrogate Redl thoroughly before he was allowed to kill himself shows how eager it was to bury the case along with Redl and forget it. No vested interest should ever stand in the way of the investigation of operational failures.

The story of Colonel Redl is a magnificent case history in the seizure and manipulation of one human personality by another. Human motivation and the manipulation of personality to achieve desired ends is our eternal study. It is precisely here that Asprey fails us. When his book is finished we know something of Redl's glittering facade, but little of the man himself. Asprey was simply not up to this task. The career of Redl, in truth, is the subject for a great novelist. Any perceptive reader of *Darkness at Noon* is helped to fuller comprehension of the great Soviet purge trials, though Koest-

Recent Books: Espionage

ler's book is frankly fiction. It is a pity that no novelist of Koestler's stature has been attracted to Alfred Redl.

Redl's career illustrates for us once again the supreme irony of espionage: it is the unsuccessful agent who gains lasting fame. Nathan Hale and John André, both notoriously unsuccessful, are the two best remembered operatives of our own Revolutionary age. Alfred Redl has given his name to the classic case in which Colonel Batyushin, his supposed case officer, the truly successful man, is hardly remembered. Indeed, Colonel Batyushin was so successful that we cannot be certain he ever existed!

COMPETITIVE INTELLIGENCE: Information, Espionage, and Decision Making. Research report prepared by nine students at the Harvard Graduate School of Business Administration under the direction of *Georges F. Doriot,* Professor of Industrial Management. (Watertown, Mass.: C. I. Associates. 1959. Pp. 78. $10.)

For all its arresting title and respectable sponsorship this brochure contributes little information not generally known about commercial espionage, and it treats its interesting subject in a gauche and superficial manner. The authors assume at the outset that the field of business intelligence systems is largely unexplored, and they appear to accept businessmen's own comments on their use of espionage at face value and without serious challenge.

The report, which tends to present espionage as a phenomenon peculiar to the postwar period of business in the United States, is based on interviews with business executives and responses to questionnaires sent U.S. industrial firms. The corporate responses suggest that all competitive intelligence systems were begot by the threat of penetration by other commercial espionage organizations, and that self-defense, being best served by a good offense, eventually required the introduction of the demobilized OSS officer or FBI agent as a professional commercial spy.

The brochure concludes with a recommended program of action which embraces the preparation of requirements, the exploitation of collection opportunities, collation and evalua-

tion, the dissemination of finished intelligence, and its use in the decision-making process. The report contains no information of significance to the professional intelligence officer.

RESISTANCE MOVEMENTS

THE GERMAN RESISTANCE: Carl Goerdeler's Struggle Against Tyranny. By *Gerhard Ritter*. (London: George Allen and Unwin Ltd. 1958. Pp. 330. 35/-.) Translated and abridged by R. T. Clark from the German *Carl Goerdeler und die Wiederstandsbewegung* (Stuttgart: Deutsche Verlags-Anstalt, 1954). Published also in France as *Échec au Dictateur* (Paris: Librarie Plon, 1956).

The intelligence officer who picks up this book expecting to learn how Carl Goerdeler, the heroic Lord Mayor of Leipzig, organized resistance against Hitler and the Nazis is doomed to disappointment. Professor Ritter, himself one of those arrested and imprisoned as holding anti-Nazi views, has devoted his work primarily to the political philosophies of the anti-Nazi elements, Goerdeler and other individuals and groups, including those in the Wehrmacht. While the book contains some pickings for the intelligence officer, the picking is not made the easier by Ritter's exhaustively discursive treatment.

The author does trace the origins of the opposition and resistance, describing in some detail the extensive travels Goerdeler undertook in trying to secure support from abroad as well as at home for the struggle against Hitler. He gives considerable space to the opposition in the Wehrmacht, which he shows to have been at its strongest under Beck's leadership before the occupation of Czechoslovakia and then to have waned in the face of Hitler's successful conquests, reviving only when it became apparent that Germany could not win the war. The Communists, according to Ritter, were unskillfully led and ineffective in their underground activity; their one large-scale venture, the Rote Kapelle espionage net, was not a resistance organization but one to serve the Soviet enemy. The Social Democrats went into exile. "It was in fact," Ritter writes, "only the churches which created a genuine popular movement against National Socialism." An important part was played by the Catholic labor movement.

Hans Oster, Admiral Canaris' deputy in the Abwehr, was the soul of the military opposition. Protected in his activity by Canaris and the successive chiefs of the General Staff, Beck and Halder, he was able to keep the opposition alive from 1933 until 1943, when his removal left Goerdeler with only Olbricht, Chief of Staff of the Army of the Interior, as military organizer. Graf Schenck Claus von Stauffenberg, the man whose bomb came closest to eliminating Hitler, is acknowledged to have been the one to act while the rest of the military only plotted; but Stauffenberg obviously does not stand high with Professor Ritter, who shows his sympathy with the belief of Goerdeler and many of the military that assassination was not the way to handle the evil Fuehrer.

The book gives peripheral treatment to the Kreisau circle or "Counts' Group" of Helmuth von Moltke and Peter Yorck von Wartenburg, describing principally its plans for a future Germany and comparing them with Goerdeler's. It also has only a few sentences on the contacts between Peter Kleist of Ribbentrop's staff and a Russian, identified only as Klauss, who conveyed purported Russian proposals for a separate peace.[1] Ritter throws doubt on the authenticity of these offers, but shows that they influenced some of the resistance groups to consider approaches to Stalin in 1944.

From the historical point of view, the reader of this book can but be left with the net impression that the German opposition—with the exception, to be sure, of a few high-principled men—found that it was able to tolerate Hitler as long as he was winning, and that by the time he was losing it was too late for them to act effectively.

SHAI: The Exploits of Hagana Intelligence. By *Ephraim Dekel*. (New York: Thomas Yoseloff. 1959. Pp. 369. $5.00.)

The SHAI was the intelligence arm of Hagana, the Zionist paramilitary organization which flourished underground in Palestine from the inauguration of the British Mandate Authority in 1921 to its termination shortly before the outbreak of the Arab-Jewish war in 1948. This account of its activities, like most popular treatments of intelligence subjects, leaves for the professional reader much to be desired. Although the

[1] See Kleist's *Zwischen Hitler und Stalin: 1939–45* (Bonn: Athenaeum-Verlag, 1950).

author was an officer of the SHAI, and in spite of documentary garnishment with reproductions of official British CID reports and orders, the book fails to give any real insight into the organization, resources, and methods that lay behind the episodic series of exploits it narrates.

Much of this failing is apparently due to continuing security restrictions: the present Israeli intelligence service is the immediate lineal successor to the SHAI. Names of individuals and organizations are disguised or omitted; the reader learns only in a most general way in what headquarters these exploits were conceived and by what means successfully executed; the Jewish Agency nets in Europe and America, which furnished such active and important support for the underground, are never mentioned.

But the stories also bear the imprint of the author's exclusively Zionist perspective. His tone is strongly anti-British, less immoderately anti-Arab. He credits only the two or three British officers who showed their sympathy for the Jewish cause by turning informer. He projects sequences on SHAI operations in arms smuggling, protecting arms factories and caches, and introducing illegal immigrants in which the British Army, the Mandate Police, the CID, and MI–5 are repeatedly penetrated, outwitted, deceived, and circumvented until it is made to appear that the British either were imbeciles or just didn't care.

The Jews of Palestine during the Mandate period were an intelligent, homogeneous minority (several hundred thousand in a population of approximately a million and a quarter) with a passionate ideological motivation which can be compared only to that of the early Christians. The British, confronted with an extremely hostile Arab majority, were forced to rely inordinately on Jewish officials in their civil administration and in the police. The Jews, however, whether they were trusted officials of the Mandate government or police officers or just plain citizens, held their first loyalty to their own people. They would always give advance warning of impending British actions they learned about and would co-operate in deception and diversion to protect the underground activity. This situation, together with the low internal cohesion of the Mandate Authority and its doubtful morale,

Recent Books: Resistance

made it an easy penetration target for the small, secretive, and beleaguered SHAI.

It was almost impossible, on the other hand, for the British to penetrate even small segments of the Jewish underground because of its tight loyalties and its rigorous internal security measures—compartmentation, the screening and testing of new members, physical protection for group assets, security of meetings, speedy communications, discipline and control of outside contacts, the threat of death to Jewish traitors and informers in or outside the organization, and lavish use of bribes and emoluments among Arabs and Gentiles. The hard-core action group was solidly backed by the general Jewish population, which looked to the SHAI and the Hagana for security. All this the author takes for granted in displaying the successes of the underground.

In spite of these weaknesses, *SHAI* does have specialized value as background for an understanding of the present Israeli intelligence service. It is also important reading for anyone who may be confronted with the problem of what can be done with—and what should not be attempted against—a small, fanatical, and absolutely loyal group of people bound together by ideology, religion, blood, and history, who know no other cause but their own.

GRIVAS: Portrait of a Terrorist. By *Dudley Barker*. (London: Cresset. 1959. Pp. 202. 21/—.)

GRIVAS AND THE STORY OF EOKA. By *W. Byford-Jones*. (London: Robert Hale. 1959. Pp. 192. 21/—.)

In the eyes of most Britishers George Grivas, dedicated leader of the EOKA underground organization which held the island of Cyprus in turmoil for four years, terrorizing its whole population of half a million, is a frustrated and ruthless murderer. These two British authors, not surprisingly, share this view; but as factual accounts of the underground campaign, its aims, objectives, and methods, their books are most informative. Written soon after the demobilization of EOKA, the two tell essentially the same story in more or less the same way. Mr. Barker is more thorough in describing the intricacies of organization, techniques, and operations of the movement, whereas Mr. Byford-Jones' personal contacts

with several key figures in the Cyprus campaign, including Grivas himself, add the authenticity and interest of first-hand experience.

It is ironic that the outcome of the successful terrorist campaign, prospective independence, was not its goal: Grivas had devoted his whole effort to the union of Cyprus with Greece. Cypriot-born professional soldier of the Royal Hellenic Army and a guerrilla leader during the war, having lost out in extreme right-wing postwar Greek politics and been relegated to inactivity, he turned to drawing up a plan for a private army to operate in the Cyprus mountains for the *enosis* cause. In this he was encouraged and sponsored by Archbishop Makarios III and the Cyprus Church. The Greek Church has for centuries kept nationalism alive in areas where Greeks are subject to foreign rule, and Cyprus had been a major target of its efforts.

It is made clear in these books that Grivas' aim was primarily to influence world opinion, to inflame a propaganda battle. Neither he and Makarios nor the Greek government imagined that the British could be driven from Cyprus by force, but they calculated that an armed Cypriot insurrection would convince world opinion that Cyprus was oppressed. That situation created, the Greek government could then exploit it in the United Nations.

For five years Grivas studied hard and carefully the organization and techniques of the Communist guerrilla forces in Greece. He was especially impressed by their practice of working through youth organizations and their ruthless pressure on the civil population. His plan for Cyprus was prepared in great detail. It was organized in three stages—first, sabotage plus rioting and insurrection by school children; second, assault and murder of pro-British Greek Cypriots; third, attacks on British soldiers and civilians. These steps were designed to inflame the youth, frighten ordinary Cypriots into expressing fervor for the cause, transform into national heroes any young EOKA gunmen that were caught, and lastly, provoke disciplinary and repressive measures by the British.

How Grivas kept the terrorist campaign going four years, eluding the 25,000-man British security forces, is thoroughly and chronologically described by both authors. With very

little real guerrilla fighting, the program was one of sabotage, ambush, assassination, and execution, mostly carried out by a small number of youths. Radio Athens poured out inflammatory propaganda, and the Church used spiritual sanctions to turn the faint-hearted into active supporters.

Both writers acknowledge that British ineptitude contributed to Grivas' success and the ease with which he evaded capture. The troops, especially in the early stages, were gullible and easily diverted. Cooperation between the troops and the police was lacking. Not until Field Marshal Sir John Harding took personal command were the anti-terrorist operations effective; and then Harding's vigorous measures brought precisely the reactions that best suited Grivas' purpose. Although they badly crippled the EOKA they made it easy for the resistance to present itself to world opinion as a national effort to attain freedom from an oppressor.

When Grivas' strategy succeeded and the U.N. General Assembly heard in February 1957 the Greek plea for Cypriot self-determination, Grivas seized upon the chance to reconstitute his decimated organization, offering to suspend violence as soon as the Archbishop was freed from exile. The British, in the face of the U.N. resolution, had no choice but to accept the truce. During the quiet which followed, Grivas recruited new EOKA leaders, formed new terrorist groups, continued smuggling arms, and taught his followers how to make homemade weapons. At about this time Harding was replaced by Sir Hugh Foot as Governor of Cyprus.

Foot was more competent in the propaganda field. He moved freely about the island, mingling with the Cypriots. He found the situation dangerous in two ways; conflict had arisen between EOKA and the left wing, and tension was mounting between the Greek and Turkish Cypriots. A Turkish resistance movement appeared and began intercommunal fighting to insure that Cyprus would not go wholly to Greece. Violence was no longer logically controlled. Murders and ambushes occurred without political objectives. In a last wave of assassination and terrorism in the autumn of 1958, EOKA attempted to regain the center of the stage through a harassing program of killing British soldiers.

When at the end of 1958 the Greek, Turkish, and British foreign ministers reached agreement on the creation of an independent Cyprus, Archbishop Makarios, whom Grivas revered, assumed full responsibility, and Grivas reluctantly abandoned *enosis*. He left Cyprus for a briefly sustained hero's welcome in Greece, and he sits now in Athens, where Byford-Jones saw him as "the Lieutenant-General of the Royal Hellenic Army he had always wanted to be, bemedalled as any officer in the country, honored and yet feared. The picture I carried away with me when I left Greece was of a prematurely old, almost broken Grivas, a disappointment, a shock to anyone who had seen only the heroic photographs of him on his arrival. He was a man lost, spiritually alone. What is to become of him? Is the cycle to take a full turn? Is he again going to turn to politics as he did after his last illegal guerrilla adventure?"

SOVIET BLOC INTELLIGENCE SERVICES

IN THE NAME OF CONSCIENCE. By *Nikolai Khokhlov*. (New York: David McKay. 1959. Pp. 365. $4.50.) Translated from the Russian *Pravo na Sovest* (Frankfurt: Possev Verlag, 1957.)

In this skillful translation, Khokhlov's moving personal memoirs—recounting his eager wartime enlistment into the NKVD, his training for a stay-behind operation in Moscow, his frustrations in deep-cover assignments, his partisan activities, his gradual postwar disaffection, his resolve to use an assassination assignment as a means of escape, and the tragic disappointments of his reception in the West—are changed only by the elimination of a few unessential passages and the addition of a postscript describing what he believes to have been a Soviet attempt in 1957 to poison him with radioactive thallium. A convincing and informative book for the lay reader, it slights details which would make it more valuable for the student of Soviet intelligence.

In describing Soviet intelligence, Khokhlov concentrates on personalities rather than structure. The reader cannot reconstruct with any assurance the organization of Directorate I (foreign intelligence) or the Partisan Directorate and its successors, in which Khokhlov was employed. During most of his intelligence career he was, to be sure, in staff agent status and presumably not very familiar with organizational details, but his long service enabled him to acquire some knowledge of his own component. This information is passed on to the reader in no organized form: data on organization is given only incidentally as required by the story. Personalities do make a story, however, and Khokhlov is best in describing such men as General Pavel Anatolyevich Sudoplatov, chief of the Partisan Directorate and its sucessor unit until 1953, and General Leonid Alexandrovich Eitingon, his deputy. Their subordinate officials are equally well portrayed. Reconstructed conversations, of which there are many in this book, must always be regarded with suspicion; but Khokhlov uses them well to acquaint the reader with the Soviet intelligence bureaucrat, both male and female.

The story gives some data on agent training, unfortunately without much detail. It may be revealing that in late 1941, with the Germans in front of Moscow, time was taken to teach the stay-behind agents table manners; and that Khokhlov could be expected after three weeks' training, without knowledge of the language or country, to pass as a Pole in Rumania, where there were many Poles at the time. Khokhlov apparently experienced the hurry-up-and-wait phenomenon well known to soldiers and members of intelligence services: he cooled his heels for long periods of time in several countries, beginning with Rumania.

The time spent abroad doing nothing was not all lost, of course. Khokhlov seems to have had the misfortune to appear on the scene at just the time when Soviet intelligence recognized its lack of Soviet citizen agents who could pass as foreigners abroad, a lack with which the great purges of the late thirties probably had something to do. Undoubtedly we are seeing through Khokhlov's eyes the beginning of the shift in policy toward the use of Soviet citizens in illegal capacities abroad. Although some wartime successes with foreigners had been achieved—witness the Rote Drei in Switzerland—Soviet intelligence bureaucrats were probably conscious of the failures that had occurred and wanted to take advantage of the greater control that would result from the employment of Soviet citizens in deep-cover assignments. Khokhlov's mission to assassinate the NTS leader Okolovich is the only one thoroughly described, from planning to dispatch of the agents. Although many operational details are omitted even here, the reader gets an insight into Soviet planning, briefing, and training procedures.

If Khokhlov's story is true, he—almost uniquely among defectors—left the Soviet service for ideological, ethical, and patriotic reasons, in order to work with the NTS émigré organization for a better Soviet regime. His version, of course, cannot be fully checked; but it is notable also that while in the United States he would never accept any monetary compensation for his services. He made it a point to sign a receipt for any cash advanced him, and he always repaid the advances, being apparently reluctant to become indebted to the U.S. Government in any way. The least plausible aspect of his account, his misjudgment of the operational potential of the NTS, which he was counting on to rescue his wife and child from Moscow, seems to have had some real basis in Soviet intelligence files.

If the Russian edition of Khokhlov's book is clandestinely circulating in the USSR, as he claims, his unfavorable description of American intelligence officers, their boorish conduct, rapacity, lack of depth and operational skill, and their inability to help him in any way, will not encourage defections to American intelligence. A poor impression of the State Department is conveyed, too: a daring plan to save Khokhlov's wife—by having our Moscow Embassy arrange that American correspondents go interview her at her apartment while Khokhlov's press conference was under way in Bonn—was rejected by the Embassy, apparently too late to stop the rather theatrically staged conference. Khokhlov's inability to achieve his objective of saving his wife and child is not surprising. His anger at the Americans may be considered a reflection of his bitterness at his own failure to comprehend the situation in the West.

THE BRAIN-WASHING MACHINE. By *Lajos Ruff*. (London: Robert Hale. 1959. Pp. 176. 16/–.)

A STUDY IN INFAMY: The Operations of the Hungarian Secret police. By *George Mikes*. (London: Andre Deutsch. 1959. Pp. 175. 15/–.)

The Brain-Washing Machine is the tale of a Hungarian refugee who had spent three years in the hands of the secret police. He emerged from this experience with a new theory of the Communist show trial and the abject confessions which are essential to it. These confessions are made possible, he asserts, by a "magic room" so designed as to drive its inhabitant into a state of schizophrenia.

Ruff says he spent six weeks in such a room. He describes in detail the lights which constantly revolved and threw kaleidoscopic patterns on the walls, the furniture so constructed as to make sleep or even comfort out of the question, the constant showing of surrealistic pornographic films, and the regularly administered injections of scopalamine and mescaline. Ruff himself managed to escape from the magic room, and did not come to trial. But he concludes that such a room

must be the answer to the conundrum of the Communist confession, from the trials of Zinoviev and Kamenev to those of Rajk and Mindszenty.

The difficulty with Ruff's hypothesis is that his magic room explains altogether too much. It is not necessary to combine drugs, rotating lights, the showing of films, etc., to create illusory surroundings. Any *one* of these devices could usually accomplish the desired result. In some cases, in fact, schizophrenic reactions can be induced by simply reducing the level of sound in the prisoner's cell from a normal 75 to, say, 5 decibels. And if the AVH did not need such an elaborate magic room to induce schizophrenic reactions, we may doubt that such a room in fact existed. The AVH, moreover, or anyone charged with staging a show trial, would not find the production of artifical schizophrenia in a prisoner a very profitable technique. A schizophrenic prisoner is a prisoner out of control. His actions, whether before a court or elsewhere, would be unpredictable.

It thus seems likely that the magic room, far from serving to explain the Communist confession, is only the consequence of the experimental administration of mescaline to prisoner Ruff by the physicians of the AVH. Mescaline is the drug used by the Peruvian Indians to induce religious ecstacy, and Ruff's magic room has all the earmarks of a mescaline dream. This view of Ruff's room is all the more persuasive since so much else in his book is both senational and difficult to document, as for instance his suggestion that a homosexual relationship existed between Matyas Rakosi and Janos Kadar.

Mikes' book is also disappointing. It is a summary of several issues of the *State Security Review*, house organ of the Hungarian secret police, together with a brief and not very perceptive history of the AVH itself. The *Review* was classified top secret and circulated among ranking AVH officers in only 210 copies. The issues which came into Mikes' possession discuss the recruitment of informers, particularly among intellectuals, the problems faced by principal agents, the establishment of safehouses, and the techniques of infiltration, surveillance, and censorship. But there is very little in all this which is not generally known in the intelligence community, and even to the reading public.

PSYCHOLOGICAL ASPECTS

THE WEAPON ON THE WALL: Rethinking Psychological Warfare. By *Murray Dyer*. (Baltimore: Johns Hopkins Press. 1959. Pp. 269. $6.00.)

Spurred on by an avid interest and manifold experience in the communication of ideas in peace and war, Murray Dyer has written a thought-provoking review of our methods and policies in using the propaganda and psychological weapon. Taking a broader and more elevated view of psychological warfare than the black-art connotations of this term evoke, he prefers to speak of "political communication" and include in it the whole gamut of actions, policies, and attitudes, as well as words, which are used to influence the political behavior of others. Most of his book is nevertheless concerned with what we normally call propaganda.

Even without benefit of Mr. Dyer's broadened definition, the intelligence specialist can count the psychological warrior his most demanding customer. Planners and operators in the political, economic, or military field have intelligence requirements of a more or less well-defined scope and normally in sufficiently long term to give time for careful collation and evaluation. Psywar needs, on the other hand, cover the waterfront, and "crash" requirements are the rule: the psywar business is much like that of the newsman and public relations officer. *Weapon on the Wall* puts these needs into three seeming categories—knowledge of the psychological, political and economic climate; information on which the operator can select his targets and the time and means to attack them; and finally facts and estimates upon which to evaluate the impact of operations.

The author observes, however, that "political communication, as yet, cannot specify with precision the kinds of intelligence it needs and wants," and he calls for extensive research in psywar doctrine, techniques, planning, and evaluation. As an ex-psywarrior and intelligence officer, this reviewer submits that the inability to specify intelligence needs stems precisely from lack of doctrinal clarity among the political com-

municators as to their role. Operators who differ on what their mission is will naturally differ as to the intelligence they need. This is what makes trouble for the intelligence supplier, adding confusion to what is at best a large and harassing order. Given consistent requirements, the flow of intelligence is likely to be troublesome chiefly in its abundance: requirements in the psywar field seem to fascinate collectors. During the war an Army G–2 who had been on psywar duty with the SHAEF was distressed to find that his conscientious spelling out of psywar requirements in the EEI for his POW interrogators produced the unhappy result that many of them spent more effort on this material than on order of battle.

Mr. Dyer's book, intended primarily for the makers and executors of high psychological policy, will give the intelligence officer a useful perspective on the needs of this customer of his as it outlines the dimensions of the customer's policy problem.

THE EXECUTIVE OVERSEAS. Administrative Attitudes and Relationships in a Foreign Culture. By *John Fayerweather*. (Syracuse: Syracuse University Press. 1959. Pp. 195. $4.00.)

Although restricted to the special problems of business executives overseas and pertaining especially to the Mexican scene, this study makes a contribution to the embryonic but growing social science field devoted to the effectiveness of all kinds of American efforts abroad, a field particularly relevant to intelligence activities. The author, Associate Professor of International Business at Columbia University, interviewed 45 U.S. and six Mexican businessmen and conducted observations on the relationships among six U.S. and ten Mexican executives working with each other over a period of four months. He analyzes the resultant data, augmented by comparable observations from European, Indian, and other societies, in a framework of behavioral and social science concepts. Concentrating upon the achievement of understanding of the foreign national as the key to effectiveness in a foreign society, he makes his major contribution in presenting a methodology for working toward this goal.

Professor Fayerweather distinguishes five main problem areas—working relationships between men in a business or-

ganization; individual attitudes towards innovation, analysis and action; basic motivations derived from the individual's objectives in life; difficulties in teaching foreign nationals American ways; and special problems arising from foreign nationals' attitudes toward Americans and the United States. He recognizes that all members of a national group are not identical in behavior, each being conditioned by his own unique combination of inner personal qualities and environmental conditions, but identifies different generic national approaches to business relationships. The American way, he says, produces a group-oriented personality disposed toward cooperation, confidence, fellow-feeling, mutual trust, and other qualities advantageous in the operation of a business organization. Other cultures produce an individualistic personality characterized by distrust, hostility, local loyalties, sense of separation, and authoritarianism, generally detrimental to organizational welfare.

The U.S. executive, however much he deplores the foreign deficiencies, is exhorted to handle them with enlightenment based on an understanding of their causes and the peculiarities of their manifestation in the particular society in question. The pattern of action suggested as applicable especially in Mexico is one of accommodation of American ways to those of the local scene, including more reliance on indirect communication in place of straight-to-the-point frankness, the adoption of local virtues—to become for example *simpático*, "making life pleasant with understanding," and *sencillo*, "fitting into the local society in an unaffected way"—and an emphasis on personal relationships in business dealings.

This book is welcomed as a serious attempt to sensitize the American executive to many of the problems of interpersonal relations abroad. Looked at from the standpoint of the concepts and methods of the behavioral sciences, however, its shortcomings are evident. Its theoretical approach is one of rough and ready selection from currently popular concepts and a generally shallow application of them. It points out the surface manifestations of cultural interaction without any real attempt to get at the value premises that lie behind individual and group behavior: frameworks for studying value systems such as those presented by Cora DuBois, Margaret

Mead, and others are needed. Its definition of culture as "sets of customs" is essentially superficial, showing the lack of any comprehensive view of the structure and function of society and culture such as is given in the works of W. Lloyd Warner.

Professor Fayerweather uncritically assumes that American business methods are correct and good ways which should be imposed on backward societies. The assumption may be justified, but it would have less flavor of the "white man's burden" if works of specialists on cultural evolution, such as those of Robert Redfield on the urbanization of folk cultures, were taken into account. The modus operandi suggested for the U.S. executive, on the other hand, is presented too much as a surrender to local tradition rather than as a strategy of realistic maneuvering. The author's failure to make a scholarly approach through the materials of the social and behavioral sciences now available on his subject has resulted in a conglomeration of case-study data mixed with haphazard conceptual approaches and cultural analyses apt to be more confusing than enlightening to the serious student.

The Executive Overseas is not, then, a definitive study of overseas effectiveness even in the business field. But it is a readable and highly interesting introduction to some of the problems of working abroad, and it at least attempts to suggest a frame of mind conducive to their solution. In this sense it performs a valuable task in helping to open a critically important subject for investigation. It provides much thought-provoking material for more penetrating studies which, we hope, will follow.

STUDIES in INTELLIGENCE

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Awards will normally be announced in the first issue (Winter) of each volume for articles submitted during the preceding calendar year. The editorial board will welcome readers' nominations for awards, but reserves to itself exclusive competence in the decision.

Evidence that Soviet plan fulfillment figures are not seriously fudged or fabricated, but need be interpreted with care.

THE VALIDITY OF SOVIET ECONOMIC STATISTICS

Edward L. Allen

The publication, beginning in 1956, of a variety of Soviet statistical handbooks on the economy of the USSR signalled the end of a twenty-year data drought. This shift from the Stalin-imposed era of virtually complete concealment, when even a report on the production of samovars was considered a state secret, has been most welcome. No longer is the student of the Soviet economy forced to function like an archeologist, spending most of his time digging for individual isolated facts. He now can start with figures which, while far from complete, indeed quite skimpy by comparison with data published on the U.S. economy, provide a sufficient basis for serious analysis.

A sufficient basis, if a valid one. Can we accept these Soviet-supplied data as reliable and bona fide? Has the Central Statistical Agency at the bidding of N. S. Khrushchev perhaps erected a Potemkin village of false figures, deliberately fabricated to deceive the West? Or, alternatively, are the data so distorted at their source on the enterprise level as to be meaningless when aggregated? Both these possibilities are briefly examined in this paper.

Checks at the Enterprise Level

First, let us look at the possibility of falsification at the source. Consider at the outset the environment in which the enterprise director works. He is an instrument of the centrally directed, government-owned and -operated economy. The government collects economic data in order to facilitate planning and as a basis for the allocation system which channels materials and supplies where they are needed to fulfill its objectives. The operation of an economy through a system of material balances, by allocation, requires accurate data. It is therefore to the interest of the central control authorities

that enterprises provide accurate statistics, and falsification has been made subject to severe punishment.

Yet plant managers do manipulate output and inventory data, at the risk of their careers and stiff jail terms, as evidenced by the many horrible examples cited in the Soviet press and technical journals. Why is it they resort to extralegal practices? The usual reason is that the centrally determined production goal for the enterprise is very high; and also the director is at the mercy of his suppliers in his efforts to fulfill the plan. The successful industrial leader in the Soviet Union, as in the United States, plays the game by the rules which are actually in force, not according to a strict interpretation of legal statutes. The question is whether these manipulations are so widespread or of such a magnitude as to invalidate production figures across the board.

There are a number of in-built controls over the director within the enterprise itself. The chief accountant is responsible to the state for refusing to execute any orders from the director or other senior officials to fudge his accounts and for reporting such demands "up the line." Another plant official, the chief of the quality control department, is subject to imprisonment if he falsely certifies substandard products as meeting stipulated technical requirements. A more knowledgeable representative of central authority within the enterprise is the secretary of the Party organization in the plant, and his salary is paid from Party funds, not by the enterprise. The role of the Party apparatus in guiding and monitoring the activities of enterprises has been greatly increased since Stalin's death.

Another completely independent plant official is the chief of the "special section," or secret police, who is extremely well paid and who maintains dossiers on all key enterprise personnel. This enforcement officer is almost certainly aware, through his network of informers, of any shady or illegal activities being carried on in the plant. If some such activities, however, are necessary to carry out the government's plans—black-market purchase of materials needed to meet the current production goals of the enterprise, for example—he may decide to tolerate them.

Finally, the books of the enterprise are subject to inspection by outside agencies reporting directly to the Council of

Ministers. Representatives of the Ministry of Finance, periodically collecting profits and taxes, check this aspect of the enterprise's financial performance against the plan. The Ministry of State Control polices all enterprises charged with carrying out the decrees of the Council of Ministers and has broad powers to subpoena the records of any unit under suspicion. The State Bank also plays an important role as a control and inspection arm of the Council of Ministers. Virtually all financial activities of an enterprise—its purchases, wage payments, sales, etc.—are reflected in the transactions recorded in its account at the Bank's local branch. The Bank is responsible for auditing these transactions to insure that they correspond in detail to the specifications of the plan for production. Capital expenditures of the enterprise are similarly controlled and reviewed by the Construction Bank of the Ministry of Finance, which disburses investment funds.

As long as the enterprise is functioning successfully, the watchdogs of the central authorities permit the director a little elbow-room. Thus, if he needs to "borrow" one percent of next month's expected output to reach this month's plan and no one is likely to object to his reporting the plan as fulfilled. But this borrowed production must be made up in the following accounting period by subtraction from the then current production. If the director continues to fall behind, one or another of the enterprise watchdogs will denounce him to the superior authorities and receive credit for uncovering the scandal."

The system, as it is reported by hundreds of Soviet refugees operate in practice, thus lets only marginal and discontinuous manipulation of output data go unpunished. The error introduced into Soviet production figures by such distortions, one would then conclude, is in all likelihood too small to interfere with their usefulness.

Intelligence Verifications

Western intelligence have further means to check the reasonableness of individual enterprise reports. Military and civilian attaché officials have been engaged in observational reporting behind the iron curtain countries for many years.

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Within the past few years, opportunities for observational reporting have been multiplied as a result of the East-West exchange program. Visits to the USSR by U.S. experts which followed the signing of the Lacy-Zaroubin agreement of 27 January 1958 have been particularly valuable in providing a check on official reports of industrial production. In 1958 and 1959, U.S. technical personnel visited Soviet factories in the iron and steel, electronics, plastics, electric power, and antibiotics industries. Similar exchanges have taken place between USSR and United Kingdom experts.

[1] See H. H. Hemenway's [redacted] *Studies* II 4, p. 7.

In some cases, though not in all, the Western experts have been able to check production records against observed plant capacities. In the Soviet iron and steel industry such a check was extensively carried out, plants representing 40 percent of total Soviet capacity being included on the itineraries. No case of falsification has been reported, although some data given the U.S. delegates by the Soviets are regarded with skepticism.

Agricultural Enterprise

Special mention should be made of particular problems which affect the collection of agricultural statistics. First of all, there is the problem of the competence of the rural collector. Despite the sweeping claims made for Soviet education, only 40 percent of the adult population in 1959 had had eight years of schooling, and the proportion in the rural areas was undoubtedly lower than this nation-wide average. The quality of Soviet agricultural statistics has suffered from the consequent lack of adequate training given the collectors.

Secondly, the typical peasant expertise at *ochkovtiratel'stvo*—throwing dust in the eyes—had developed to a fine art in response to the challenge of the Tsar's tax collectors. That it continued to be practiced long after the Communist takeover was shown by the 1951 Soviet decree that no report of a collective farm claiming the death of an animal from natural causes would be accepted without a veterinary's corroboration.

Through most of the years of the Soviet regime, the final authority for estimating crop production lay with the Office of the Chief Inspector for Estimating Crop Yields, attached to the Council of Ministers. This office relied on a staff of local agents to inspect reports and used historical correlations of weather conditions with crop yields to check the validity of local reports and determine output. It is interesting that U.S. intelligence officers now use this same technique to judge the reasonableness of official Soviet claims for agricultural crop production. Agricultural output statistics are still regarded as generally less reliable than industrial production data, and the agricultural delegations which have gone to the USSR under the exchange program have provided few, if any, checks on the published figures.

There are, however, a number of current developments favorable to improved agricultural reporting, to wit:

- The rapidly increasing size and decreasing numbers of collective farms—from 250,000 in 1950 to about 55,000 in 1959—must be resulting in the assignment of better qualified personnel to prepare statistical reports.
- The increasing percentage of agricultural output given food-industry processing before going to consumers requires that the center receive relatively accurate data in order to plan for the food processing plants.
- The progressive substitution of money wages for payments in kind to labor will reduce independent marketing of collective farm produce, putting more of it under state control and facilitating the spread of economic accountability.

Integrity at the Center

We can move now from the origination of statistics at the farm or factory to their collation and publication at the center. Statistics are an essential operating tool for an economy that relies on allocation rather than a market price system as its controlling mechanism. Lenin's decree of 1918 set up the first Soviet statistical organization, and an industrial census was taken the same year. Since 1948 the Central Statistical Administration has been an independent agency reporting to the Council of Ministers, with jurisdiction over reporting forms and authority to check on the accuracy of reports received from subordinate echelons. The CSA runs its own schools for training accountants and statisticians, writes textbooks, and develops calculating machinery. It receives quantities of reports covering quarterly, monthly, ten-day, and, if the subject is important enough, even daily results.

The reports that CSA receives must be reasonably accurate if the central system of allocations is to work. Despite cutbacks, from 700 to 800 commodities were still reported under centralized distribution in 1959, including the most important ferrous and non-ferrous metals, fuels, chemicals, and machinery. The question of the integrity of the CSA statistics is thus reduced to whether it publishes total production figures unrelated to the sum of the plant production figures it receives.

In other words, does it keep two sets of books, one for the internal operation of the economy, and another to throw dust in Western eyes?

Our most comprehensive check on centralized reporting became available at the close of World War II. The German Army, in its penetration of the USSR, had captured a 750-page statistical document carrying the official Soviet security classification *Not for Publication* and entitled "State Plan for the Development of the National Economy of the USSR in 1941." This document was recovered from the Germans by U.S. intelligence personnel, and the data contained in it were compared with openly published statistics, particularly those given at the 18th Party Congress. It was found that the openly published data were identical, except for minor discrepancies that could be accounted for, with those in the classified document intended for the official use of Soviet planners.

It should also be remembered that Soviet officials need not falsify data to keep the West uninformed. The USSR can easily withhold information either for security reasons or because it would reflect unfavorably on the regime. Since the Communists first came into power they have followed a policy of selective release of data. The controlled release of information, although usually designed to mislead, is conceptually and practically quite different from falsification.

One of the best examples of Soviet manipulation of data for propaganda purposes was in reporting grain production, when they shifted, for the years 1933–1954, from quantity harvested (barn yield) to the larger figures for the size of the crop in the field (biological yield). Although they made no secret of this switch from standard world-wide procedure, some unsuspecting and careless Western writers accepted the biological yield figures without correction for comparison with Western barn yields.

Need for Interpretation

The interpretation of Soviet commodity statistics, in comparison with those of other countries, depends upon definition of the categories being measured. Soviet definitions and usage are often different from those commonly accepted in the United

States. Some such lack of direct statistical comparability exists, of course, in the economic data of any two countries, but the reconciliation of Western data is usually an easy task because of explanatory notes appended or explanations available in convenient source books.

Such is not the case in the USSR. Often terms are not explicitly defined, and their meaning must be determined by laborious cross-checking. For these reasons, the statistics released by the Soviet Union must be screened very carefully and not assumed to be comparable to U.S. figures unless so proved by rigorous analysis.

Finally, Soviet aggregate statistics, such as those stating total industrial and agricultural production and national income, whatever merits they may have for internal measurement of progress or external propaganda purposes, cannot be compared with similar measures of total economic activity released by Western nations. The conceptual differences between East and West are too great. For example, the Soviet definition of national income is one of physical production, excluding most of the governmental, professional, and domestic services included in Western income definitions. Variant methods of pricing manufactured products probably introduce another area of noncomparability.

The Soviets have released enough data on physical production, however, to enable us, by augmenting it with additional commodity figures obtained through intelligence research, to compute reasonably satisfactory indexes of both industrial production and national income in terms of Western concepts. These computations will remain a necessity: no matter how liberal the data disclosures of the Soviet leadership in the future, it is unlikely that they will supply us with computations of aggregate indexes based on non-Marxist definitions.

We can be reasonably sure that economic data presented by the Soviet Union will continue to have both meaning and significance. The major research problem will remain in the future what it has been in the past—to find out just what this meaning and significance is.

Description and empirical analysis of the interrogation process as applied to East European defectors, bona fide and mala.

THE INTERROGATION OF DEFECTORS

Stanley B. Farndon

In time of war the most massive source of information regarding the enemy is the flow of prisoners and deserters from his ranks. In a cold war era an important segment of positive and operational intelligence is similarly derived from defectors, refugees, and would-be agents. Their offering of information, however, is not laid freely and untainted at our feet. It must be extracted from them, sometimes against the utmost resistance, and the authentic sorted out from the deceptive, the useless from what fills our needs. This process, the job of the interrogator, is made less difficult in wartime by our having the prisoner wholly at our mercy for the duration; over peacetime enemy sources the equivalent control must for the most part be achieved by psychological means.

Particularly the critical first phase of an interrogation—that undertaken to determine whether the defector is genuine, an enemy agent, or just a swindler—demands much poise, knowledge, human understanding, dexterity, and perseverance. The interrogator must have the manner and bearing to impress his subject as a person of authority. His knowledge of the subject's country should be such as to evoke respect, and his command of the language so fluent as to permit easy, natural conversation and an instant grasp of subtleties. He needs to sense the kind of person he is dealing with and discern quickly any change of attitude reflecting uneasiness, relief, reserve, or unrestraint. He must be able to convince the subject of his deep personal interest in his welfare. He must be tactically skilled and flexible in his approach, keeping the spun threads of the story effortlessly in mind, spotting inconsistencies, exploiting openings, recognizing significant information, learning without revealing his interest. With some subjects he needs inordinate patience and determination.

Aims and Precepts

In all three types of defector interrogation—the initial counterintelligence probing of the subject's bona fides, debriefing a bona fide defector of his knowledge useful to intelligence, and the extraction of operational information from the purported defector in intelligence employ—the interrogator's aim is to get the subject to give information willingly and without reserve. This he can accomplish best by achieving a harmonious atmosphere and creating a close personal rapport with the subject, a rapport based on the subject's respect for the interrogator and confidence in his good will. To this end he must on the one hand be understanding, just, and friendly, and on the other maintain the psychological superiority essential to control.

During the early stages of an interrogation, the interrogator's main objective is to discover exactly what sort of person he is dealing with, and so how best to use his own personality to get the subject to answer questions willingly and truthfully. But the subject also tries to use his personality. He usually assumes a number of poses by means of which he hopes to gain the good will and trust of his interrogator in order to assure his own future well-being, or if he is an agent, in order to pass safely through the security channel and end up in position to fulfill his mission. Regardless of the capability of the interrogator and the character of the subject, these assumed poses make it very difficult to achieve frankness and sincerity during the initial interrogation periods.

The process can be hastened, however, by preparation in advance, and the interrogator should try to forearm himself with all available information on the subject's professional interests and the details of his everyday existence in his homeland. Thus he can start a flow of conversation on topics within the range of the subject's knowledge and interest. Then as he senses the subject's outlook on life and his views on matters discussed, his sympathetic understanding of these will lead the subject to talk more freely. Every effort should be made to induce him to speak freely rather than merely answer questions. Uninterrupted privacy is an important condition at this stage. Once the interrogator has gained his own

impressions of the subject's personality and character, his background knowledge of the case and his first-hand observations will enable him to sort out the various poses from his true characteristics, motives, and intentions.

The tension of the interrogation situation makes the subject wide awake and perceptive to everything that goes on. The interrogator must therefore also maintain a state of keen perceptiveness in the battle of wits, fitting his observations quickly into the emerging picture as the interrogation progresses. An interrogator not physically rested and mentally alert will have a most difficult time gaining psychological superiority. Even intellectually inferior defectors have a fine instinct for sensing the interrogator's qualities and spotting flaws in his attitude or reasoning which tend to destroy the respect necessary for psychological control.

The fact that a defector is dependent on the West's good will for his future well-being is a lever which the interrogator can utilize to control him; it does not take a defector long to realize that he enjoys favors in direct proportion to his cooperation. Yet the prospective source may be under physical control and still fight the interrogator with his brains and spirit. At least he may be sizing the interrogator up, carefully observing his statements and mannerisms, in order to find an area for maneuvering. And if he should be an agent, he can be expected to have been carefully trained and briefed in anticipation of questions he'll be asked. The problem is one of motivating the subject to cooperate, usually of developing confidence in the integrity of the interrogator and assurance that his future will be adequately taken care of in resettlement.

The best results are obtained when the subject is impressed with his interrogator's good judgment and sense of justice. The interrogator should make only such commitments as lie within his authority and ability to keep. One of the worst possible practices is that of making promises that he cannot or knows he will not keep. The reversal of promises indiscriminately made destroys the subject's respect for him and the rapport between them. The interrogator should have enough authority and latitude to approve or disapprove most

of the requests made by a subject; he needs to create the impression that he is a person of consequence, not just a linguist who must check everything out with his boss. When faced with a request beyond his authority he should give the subject a logical reason for delay without revealing that he must ask permission from above, explaining perhaps that this is a matter to which he must give some thought before deciding. In rejecting a request he should be careful not to leave any suspicion that he is discriminating against the subject (unless he is using this tactic as a device in the process of breaking an agent subject).

It is best for the subject to be brought into the interrogation room after the interrogator is already seated there in a good position to observe him during the interrogation. A common error made by some interrogators is to keep the subject waiting for some time for them in the interrogation room: waiting gives the subject too much chance to get a comfortable familiarity with his surroundings. The questioning should be done in carefully chosen phrases on the subject's own language and vocabulary level. The questions should be clear, direct, and simple: a subject is often unwilling to expose his ignorance by asking for clarification of intricate ones. Leading questions should be avoided; they generally result in the subject's giving an answer he thinks is wanted, and so, frequently, to a good deal of fabrication.

The subject's behavior must be interpreted in the light of the interrogator's observations of his personality. A fundamental point is whether he is naturally communicative or hard to draw out. If an inhibited man is taciturn when questioned on personal aspects of his life, that reticence is significant only in showing the interrogator that he must work the harder to gain his confidence. But if an uninhibited subject becomes suddenly taciturn, the interrogator can conclude that his reticence, not being characteristic of his personality, hides deception. Some subjects, particularly Russians, pretend to be quite simple-minded and stupid in order to avoid talking too much, but reveal their native intelligence once they are induced to talk freely.

Defector Behavior Patterns

With the hazards that always attend thinking in terms of types and with the reservation that the essential thing is to understand the individual subject's background and psychology, it is helpful to have in mind some behavior patterns observed in the East European defector and several distinct variant types of personality which occur among the Slavs.

Like all human beings, Slavs are particularly talkative after a harrowing experience such as that which they have usually had in escaping from their homeland. Whatever their beliefs and loyalties may have been in the past, the treatment they experience in the West creates a tremendous psychological impact. They realize how much better Western standards of life are than those in the Soviet orbit. Since self-preservation is a strong factor in defection motivation, they can be expected to try to ingratiate themselves with their interrogators in the hope of getting special consideration in their resettlement. They are susceptible to flattery and can readily be convinced that sincerity and cooperation will exonerate them from any guilt in defecting. They tend to undervalue the importance of any information they have, especially if it appears that the West already has some knowledge along the same lines.

Slavs are inclined to be cooperative when confronted by superior authority. They are particularly sensitive at having outsiders belittle their national heroes. They respond humanly and well to kindness, consideration, and understanding. Once induced to talk, it is a simple matter to keep them talking on subjects of interest to intelligence.

I have found it advantageous, in my experience with East European defectors, to conceive of four variant types of personality requiring distinctively different approaches in interrogation. Two or more of these conceptual types, of course, can mingle and modify one another in a concrete individual, and the interrogation must be adjusted accordingly. The personality structure predominant in the four types is respectively what I shall call rational, vital, emotional, and tense.[1]

[1] *Cf. Guide for Intelligence Interrogators,* 707 European Command Intelligence Center, April 1948, col. 10ff.

The *rational-structure* personality is one under superior control by the mind and will. It is characterized by natural assurance and reserve, with very little outward display of emotions such as fear, surprise, joy, or sadness. An individual of this type is attentive during interrogation, frankly curious, and privately he is estimating the situation with objectivity. His speech is well controlled and modulated. There is little difficulty in establishing points of contact for conversation with him, but it soon becomes evident that there is a well-defined area of personal matters to which he uncompromisingly denies access.

The interrogator must recognize these characteristics in time to avoid using an inappropriate approach that would spoil all chance of achieving any degree of psychological superiority. He must be something of a rational type himself to cope with one, adopting an objective, cause-and-effect attitude. He must recognize the logical validity of the moral or material considerations that underlie the subject's behavior. It is rarely that a rational-structure personality turns out to be an agent.

The *vital-structure* personality, characterized by self-assertive energy and resilient vitality, is most often found in Russian subjects. Its intense energy often gives it charm and the momentum of great self-confidence, but it is likely to be driven by instinctive urges without deliberate rational purpose. It can endure long suffering and emerge with vigor and self-assurance.

If a subject of this type is met with inconsiderate harshness, he will defend himself with tenacity and resilience. He patiently stores up his emotions to react when he finds a vulnerable spot in his interrogator. On the other hand, any soft, sentimental approach makes him suspicious. He is shrewd and adaptable, and can conceal his true character by playing any part assigned him or one to support some theory he feels the interrogator has formed. Then he can reverse the field and produce an entirely different story, rendering the results of all previous interrogation useless, in order to gain time and a fresh stand for resisting the investigation.

Psychological superiority over the vital-structure type is hard to attain. The interrogator must likewise display a

strong and assured personality, with similar vitality and resilience. He must avoid any effort to play on the emotions, because these subjects do not soften up in their attitude. Under no conditions should he attempt to bluff one of them; all his declared intentions must be meticulously carried out. Patience is an important virtue for the interrogator dealing with a vital-structure personality, and he should do more listening than questioning. The best method of establishing rapport with such a subject is by showing an interest in the details of his life history, his environment, profession, family, and his desires for the future.

The *emotional-structure* personality is dominated by ill-controlled emotion, rather than mind and will or the drive of impulsive energy. It is manifested by visible or audible expression of any joy, excitement, pleasure, depression, defiance, or other feeling caused it, by sensitive or violent reaction to any changes of treatment, by emotional exaggeration and pleading, and by general sentimentality of outlook. Emotion may drive this type to overflowing recklessness and the senseless risk of his whole career and life, or to a blind beating of his head against obstructions and limitations. He usually has a basic yearning to escape the realities of life and a tendency to lean emotionally on another person, and so to hero-worship.

The emotional type, being easily impressed, is susceptible to almost any skillful approach employed by the interrogator. But the interrogator must be particularly alert, self-controlled, and quick on his feet in dealing with these subjects in order to take full psychological advantage of their changes of mood. They tend toward extremes, and the interrogator must reach them at the right extreme. Logical arguments and persuasion can rarely bring about a change in their mood, and trying into their emotional depths should also be avoided. They should be made to feel at ease in conversation on some objective topic, and a rapport established with developing acquaintance on the basis of confidence and respect for the interrogator.

It is particularly advantageous with this type that the interrogator be presented as a person of rank and dignity. He can take full advantage of the subject's characteristic need

for another person to lean on, one in whom he has a feeling of personal confidence. Under no circumstances should the interrogator be persistently cool to the subject when he seeks support. This is the proper psychological moment for him to show not only strength and firmness but sufficient benevolence and interest in the subject's future to warrant the subject's putting himself in his hands.

An intelligence agent with an emotional-structure personality normally does not bear up well under long strain. It is often possible to catch him off guard by deliberately arousing certain emotions. After tenaciously holding out for some time he may suddenly abandon his position, having decided that it is senseless to continue his deception, and in a display of characteristic recklessness confess that he is an agent. This breakdown usually follows an inner struggle that is sometimes obvious or at least noticeable in an attitude of gloom, brooding, and apathy. The interrogator should be sufficiently sensitive to recognize that such an inner struggle is going on and not be too aggressive: overvigorous handling could cause stubbornness and an increased will to resist. He should observe perceptively the source's moods and calculate what steps he can tactfully take to remove the last obstacles of reason and will power. Then a little prompting at the right moment can often bring on the spontaneous outburst with a full confession. Sometimes a change of quarters and treatment produces the additional momentum needed. This spontaneous self-abandonment is usually genuine in an emotional-structure personality, but is sometimes simulated by others, most successfully by the vital-structure type, in order to get the pressure off and feed the interrogator a new cover story.

The *tense-structure* personality results from an irreconcilable discord of psychological forces which prevents the subject from achieving a satisfying dignity and meaning for his life. His behavior manifests his desperate striving for such dignity and meaning; he is strongly egocentric, with a tendency toward absurd boasting and exaggeration. He often appears to act from contradictory motives. His artificial poses and unnatural attitudes may sometimes genuinely express his personality, but even then they appear insincere and inappropriate to his true character.

Most such subjects act diffident and are difficult to approach. They are unlikely to have any appreciable reserve of vitality. Close scrutiny of a subject's life history may reveal symptoms of a tense-structure personality in advance—frequent personal quarrels with superiors and equals, claims of intrigues and plots against him, evidence of difficulty in adapting himself to social environments, explanation of his failures as the result of vicious actions of others, or pretended resignation to the whims of fate.

Subjects of tense-structure personality are most difficult to interrogate. By nature distrustful of people, they shy away from the interrogator's efforts to win their confidence. It is hard to find a thread of continuity on which to build rapport with them when they deny obvious truths stubbornly and senselessly, becoming subjectively convinced of the plausibility of their stand. In their constant striving to protect their own egos, they lose the normal instinct to tell the truth. All facts obtained from them have to be checked out carefully against other sources of information. It is quite often impossible to establish their bona fides, and even when they have confessed to being agents the truth of their accounts must be constantly rechecked.

The CI Interrogation Center

A safehouse should be established in a somewhat isolated area for exclusive use as a CI interrogation facility. If it is used as a holding area where several defectors are handled at the same time, its internal arrangement should be such that no one of them can ever see or contact another. Quarters for the defectors should be of three types—ordinary rooms furnished with a bed, small table, and a dresser; a more elaborate room for high-level defectors or for those who, their bona fides established, are awaiting transfer for positive intelligence debriefing; and a cell with only cot and mattress, a small indirect light, and a slop bucket—no furniture, no wash basin, no conveniences.

There should be at least two ordinary interrogation rooms and one special isolation room for obstinate cases. One of the two ordinary ones must have an adjoining room for making recordings and visual observations unseen. They should be furnished formally, with facilities for either a friendly or an

unfriendly atmosphere, for example with a desk and executive chair, one or two easy chairs, a small table, one ordinary straight-back chair, and one uncomfortable straight-back chair. There should be a buzzer to summon the guard.

On the wall behind the interrogator's desk there should be a one-way mirror, in which the interrogator, ostensibly not watching the subject as he asks a key question, can observe his unguarded reaction. The mirror also provides for observations from the adjacent room: agents who, for example, after a particularly strong session the image of abused innocence, are left alone, have been seen through it to smile slyly and preen themselves at having put their act over on the interrogator.

The Establishment of Bona Fides

The defector is brought to the safehouse at night, on a roundabout route and wearing dark glasses, to protect its location. He spends most of the first day in administrative formalities, being photographed and fingerprinted, taking a medical examination and an IQ test, and filling out a questionnaire that covers the salient facts of his life history and defection. He also begins to get acquainted with his interrogator before the day is over, at an informal dinner on the first night. The interrogator encourages his subject to relax and talk freely on topics of his own choosing. Recorded for later comparison with statements made during the formal interrogation, this spontaneous talk immediately after the shock experience of successful defection often provides valuable leads. Even penetration agents are affected by the informal atmosphere and let slip clues that prove useful in unmasking them.

The interrogator studies his subject's personal history questionnaire for further clues to his personality, as a basis for planning conversation and the sequence of investigation topics, and to spot items that appear illogical or vulnerable. Then on the second day the formal but friendly CI interrogation sessions begin. The initial phase is important. The interrogator should be formal but not officious, sympathetic but not maudlin. He should strive to be the subject's superior and yet his good friend, an investigator and yet a defense counsel. This attitude produces good results even when the subject turns out to be an agent.

There are many psychological burdens weighing heavily on a defector. Regardless of his motivation for coming over, his spirits are low at this stage of what might be called defection shock. Guilty about his desertion and apprehensive over his future, he feels lost and friendless in a foreign land. Above all else, he wants to be understood. The interrogator can profit from his feeling of loneliness by showing the friendliness and solicitude he needs and thus earning his gratitude. This moral support is probably more important to him at this time than any possible material considerations. An atmosphere of relaxed, natural orderliness will help to eliminate his fears and increase his desire to cooperate with his benefactor. If he is an agent, the growing sense of relaxation may still throw him off guard and cause slips that can be exploited later.

Natural behavior on the part of the interrogator often induces his subject to drop any feigned idiosyncrasies by which he had hoped to keep the interrogator from prying too deeply into his background or extracting information of such significance as to aggravate his guilt in deserting his native country. Slavs seem to feel a deeper devotion than some other peoples to their native land, but most of them do readily adjust their psychological outlook. Often they are receptive to the suggestion that in cooperating with their interrogator they are not traitors to their country but rather fighters against its alien Communist rulers.

The approach of the friendly interrogation can be slanted to take advantage of the subject's individual propensities. If he has deep religious convictions he can often be made cooperative by pointing out the great harm done to religion by the preachings of Communism. Even agents, if they have been coerced into espionage by fear of reprisal against themselves or their families, can be helped by religious convictions to throw off this fear and cooperate in a crusade against Communism. With vain subjects, and ones in lowly status accustomed to being ignored, the interrogator can successfully employ a subtle flattery, building up their egos to the point where they brag about the things they know to show what big men they were in their own country.

It takes from one to four weeks to establish the bona fides of a legitimate defector. Most of them are thus cleared for positive exploitation within two weeks or so, but when they stubbornly refuse to talk about details of their biographies that happen to be embarrassing to them, more time is required to clarify discrepancies. After each session the interrogator should write a report of the interrogation and analyze the data obtained, particularly with respect to those aspects of the subject's biography, stated motivation for defection, and escape story which experience has shown to be vulnerable points in an agent's legend.

A good biographical legend for an agent is likely to follow quite faithfully his true life story, omitting only his recruitment and intelligence activity. It is to this point we look for danger flags in a defector's story. Certain incidents he describes may be ones which normally would be followed by some kind of security service investigation and involvement with him. If he claims there were no such consequences, the suspicion arises that this purported lack of security service action is attributable to a relationship between him and the service. Unless he can explain any such flags, the defector must be considered suspect and be subjected to more intensive interrogation. No single flag is necessarily an indication that he is controlled by the hostile service, but several such flags establish a strong prejudice. Some important flags are the following:

- Contact with foreigners which the security service is claimed not to have investigated or questioned. (Makers of such contacts are usually interrogated and warned.)
- Mere reprimands for anti-regime activities while a student. (Such activities usually call for severe punishment.)
- Blackmarketeering or embezzlement.
- Arrest and periods of imprisonment for criminal or anti-Soviet activity. (Often used to account for a long gap in employment history actually devoted to thorough agent training.)
- Inability to account for any period of time.
- Membership in anti-Soviet elements during World War II, including German POW labor force and any underground movements.

- Membership in an ethnic underground movement.
- Success in having lived under a false name.
- Admitted informant activities for the security service. (A tactic to gain the interrogator's confidence and lull suspicions, as well as to account for any reactions that may show up on the polygraph.)
- Manifestations of security service interest in him, but no approach. No recollection of topics, events, and people that he obviously should remember.
- Indications of high standard of living or educational advantages but denial of Party membership.
- No normal fear of the security service while planning defection and escaping.
- Residence in the United States and return to the Soviet Orbit in the early thirties.
- Relatives living in the United States.
- Understanding of terms normally known only to persons familiar with intelligence activities.

The subject's real motivation for defection is an important determination in establishing his bona fides. Agents under defector cover usually claim to be anti-Communists, saying that regime reprisals against family members, for example, caused their defection, or that they escaped to take up the fight against Communism through Western émigré organizations. Questionable motivation claims, however, do not constitute evidence of espionage, since most genuine defectors also claim to be ideologically motivated. A detailed probing with a follow-up polygraph test is often necessary to obtain the truth. Under searching interrogation many of them reveal that they escaped to avoid prosecution for a crime, because they had family trouble or an unfaithful wife, or because they had violated some decree and feared exposure.

In analyzing motivation for defection, a careful look at the defector's financial status is important. It is unlikely that a man of ample financial means occupying a position of dignity and a satisfying station in life would give all this up for an unpredictable future in the unfamiliar competition of the Western world.

The defector's escape story also provides a number of flags signaling the possibility of an agent legend. Some points to be considered suspicious and in need of clarification are the following:

- The claim that he burned or buried all his documents before crossing the border, or that he does not remember what documents he used to pass known security check points.
- The claim that he encountered no patrols, barbed wiring, or other border controls at places known to have them.
- The claim that a person he met by chance willingly aided him in spite of the risk.
- Implausibility of escape with respect to weather conditions, mode of transportation, border guard, or internal security measures.
- Physical condition inconsistent with declared hardships of escape.
- Condition of clothing, especially shoes, inconsistent with escape story.
- Inadequate explanation for having large sums in money or jewelry.
- Participation in tourist group trip while under investigation for anti-regime sentiment.
- Inadequate explanation for success in escaping from the main body of the tourist group and its security officer.

In a careful review with the subject of all the information and background furnished by him, the interrogator must keep in mind that people's lives in Communist countries are deeply and directly affected by the internal security services. Above all, a defector fears reprisals against his family if the regime authorities learn that he has escaped to the West and is cooperating with the American intelligence service. This fear is often sufficient reason for a bona fide defector to give evasive and misleading answers. By showing full understanding of this and using every means at his command, the interrogator must convince him that truthfulness and cooperation will not cause hardship to his family, since the information he gives will never be disclosed.

The defector's story is checked out against every available record and all other sources of information, care being taken

not to divulge to him any information received from other sources. Then, after analysis of all this material and its implications, a series of questions designed to resolve all discrepancies is composed and presented to the defector in a polygraph examination.

The moment of polygraph soul-searching is one of the most strategically valuable parts of a CI interrogation. The polygraph should not be used, however, until the interrogator is certain that he has obtained all pertinent information or has reached an impasse. It should be used not to reach but to *substantiate* conclusions. When working with a suspected agent source, the interrogator should try to obtain a confession before polygraphing. In borderline cases the polygraph will usually pinpoint the area of sensitivity and perhaps help to resolve doubts, but it should not be allowed to become a crutch. The psychological approach by the polygraph operator plays an important part; when feasible he should be proficient in the required language, so that the interrogator can remain outside the room and monitor the test by listening in and by one-way mirror.

Quite often, the defector clarifies the discrepancies in his story during or immediately after the polygraph examination. If a re-examination verifies these explanations, and if the preponderance of the interrogation material indicates that the defector is genuine, a statement of his bona fides is issued and he is removed, at night, from the CI safehouse to an overt residence for positive intelligence exploitation.

Positive Intelligence Debriefing

The newly assigned PI interrogator normally needs only a very short time to get into rapport with his source. He picks up where the CI interrogator left off, and his task is made much simpler by his being able to approach the source without suspicion. Since his duties call for promoting his well-being, he should be able to gain his full confidence and respect and elicit whatever information he has. Nevertheless he should put some effort into cultivating a friendly relationship before jumping into direct questions, and he should continue to emphasize that all information divulged will be carefully insulated from the authorities of the source's homeland.

As a bona fide source, the defector enjoys a comfortable life in which he receives lodging, excellent meals, clothes, toilet articles, and a small salary. In return for this support, he has to report for work five days a week, or oftener if necessary, and give his full cooperation in the PI interrogation. Although he is a free man in the West, he is thus immediately dependent upon the intelligence service for lodging, sustenance, and clothing, and ultimately for documentation to legalize his immigration and for assistance in resettlement. Because of these controls and because he is no longer under any suspicion, it is assumed with reasonable certitude that he will be truthful in the information he furnishes.

Before beginning his debriefing, the interrogator should study carefully the report of the CI interrogation in order to provide himself with all available background information and foreknowledge of the source's psychological characteristics, his special fields of knowledge, and the extent to which he can be exploited. Familiarity with the details of the source's past life will also be of immense help in establishing quick rapport.

The aim of the PI interrogation is to fill consumer requirements without revealing to the source what specific information is sought. It is most important that the interrogator know exactly what information is required. The more he learns about the customer's needs, the more flexible and ingenious he can be in the interrogation. On his broad understanding of requirements depends also the degree to which wandering off from specified topics is permissible. Such wandering sometimes leads to topics of even greater value than the requirements being serviced, but the interrogator must be capable of distinguishing useless drivel from worthwhile information. The amount of research he needs to do in any particular case depends upon the subject matter and what the particular source is likely to know; but the interrogator's chief weapon is knowledge, and his effectiveness is directly proportional to its readiness.

The debriefing will usually proceed much more smoothly if the questions asked are worded in such a manner as to elicit specific answers. Each topic should be thoroughly explored and completed before going off into another area. The interrogator should never accept a negative response to a question until he has covered all possible variations on it: quite often a source knows things which he does not even realize he knows until a probing question brings them to the surface. His first answer covers what immediately comes to mind, but his thoughts can be channeled to surface further observations by brief follow-up questions—"Can you explain that in more detail?" "Can you give an example?" "How did you learn this?" Under no circumstances, however, should the interrogator ask leading questions or make hints which might influence the substance of the replies.

The PI interrogation is usually not recorded verbatim; a record is written up from the interrogator's notes. These are best transcribed on the same day as the interrogation session. Then if they are found to be incoherent or incomplete at any point, they can be clarified at the next session.

In most respects the PI interrogation of a bona fide defector parallels ordinary debriefing and interviewing procedures. Let us return now to the CI interrogation which does not issue in the establishment of bona fides.

The Extraction of Confessions

When the CI interrogator feels that a preponderance of evidence turned up by interrogation and polygraph examination indicates that the defector is an intelligence agent, he begins a more intensive interrogation. This intensive approach to the clarification of existing discrepancies must be carefully planned. The methods that may be used are complex and varied, depending among other factors on the character of the subject and the capabilities of the interrogator. If the interrogator decides that drastic measures and strong control are necessary, he must be sure that he can play the tough disciplinarian's role.

The variety of techniques for unfriendly interrogation run from mildly unpleasant ones to measures just short of violence. In one type of approach the subject may be made to feel it futile to protect information that apparently is already in the interrogator's hands, especially if he has to experience discomfort and unpleasantness to do so. The interrogator must be thoroughly briefed for this approach; he begins by

posing questions to which he already has the answers. When the subject hesitates to reply, the interrogator then scornfully gives the answer himself, until the subject feels foolish at trying to hide things that appear to be common knowledge when by cooperating he would become eligible for better treatment.

The interrogator may exploit the subject's emotional entanglement in personal problems and desires, playing up his anger, jealousy, homesickness, or other passions until he has developed a state of emotional confusion and instability. He may create in the subject a sense of insecurity and anxiety by becoming vociferous, kicking furniture around, banging on the table, and giving vent to well-acted rage, until the subject is willing to talk simply to escape this wrath. He can let the subject know that he is fully familiar with Soviet interrogation tactics and could practice them himself if provoked by continued lack of response to humane methods. He can bluff with specific threats if he is sure the bluff won't be called.

Sometimes it is decided to use two interrogators with two completely different approaches, the first displaying a great deal of aggressiveness, discourtesy, bluster, and threat, the second soft-spoken, kind, and sympathetic. The subject often comes to look to the second man for sympathy and protection from the first, and eventually converses freely with him.

If the subject is especially stubborn, he may be moved to the windowless room with only a small light built into the wall. He is deprived of most of his cigarette rations and reading materials. Only his underwear is left for clothing. He has very little chance for suicide with no light cord and little clothing. He is not permitted to shave. He is deprived of all human contact and attention except for being brought basic sustenance. The interrogator keeps reminding him that he wants to be a friend, that he would like to ease the discomfort, that he could make everything all right if only he had a statement of the full truth, whatever it might be. Most people, and especially the gregarious and talkative Slav, cannot endure this prolonged confinement in utter loneliness, and in time become willing and eager to talk freely, resorting to the interrogator as their only friend.

If the bewilderment of loneliness does not produce results, however, two or more interrogators familiar with all of the facts of the case may take turns at continuous interrogating, so that the subject cannot rest and keep his mind clear. His resulting confusion leads to slips that disclose new evidence. Under further continuous questioning he usually reaches in time a point where he sees no sense in resistance and makes a confession. When the confession is reduced to writing and signed, a probing for details should commence immediately, tempered only by the subject's condition at the time.

Among the psychological pressures that can be brought to bear at various phases of these techniques are the following:

Pointing out the subject's untenable position, the fallacy of his story, persuading him that his service sold him down the river by providing him with such a stupid legend; emphasizing that American intelligence has no interest in punishing him, but does have interest in his cooperation in the future.

Isolation in a dark, sound-proofed room, depriving him of sight, hearing, and mobility; consequent development of claustrophobia. (A psychiatrist should check to ensure that his sanity does not reach the breaking point.) Return to isolation after removal and requestioning without response.

Irregular scheduling of interrogation, waking subject say at 2 a.m. for a six-hour debriefing and on the following day at 1 a.m. for a 12-hour session.

Alternating light and dark, preventing rest and sleep.

Sound waves.

Creation of terror illusions.

Raising or lowering temperatures to point of discomfort.

Limiting washing and latrine facilities.

Cutting food ration to minimum sustenance. Manipulating cigarette ration.

Jostling without actual physical harm.

Heavy physical training exercises.

Medical examination disclosing fictitious dread disease; treatment to depend entirely upon the good will of the interrogator.

If all else fails, the interrogator may request permission to use drugs and narco-hypnosis or hostile methods that may endanger the subject's mental and physical health. The need to apply hostile methods represents a degree of moral victory for the suspect even though he may subsequently confess. Before making such a request the interrogator must have exhausted all other means, must be convinced beyond reasonable doubt that the subject is an agent, and must have reason to believe that his confession would reveal information of critical importance to the national security.

The severer methods seldom need be used. Agents sometimes follow instructions to be insubordinate and insolent if pressure is brought to bear on them, an attitude which bolsters their self-confidence and may also incite an interrogator into thoughtless punitive action that in turn reinforces the agent's resentment and increases his will to resist. But the exceedingly stubborn agent suspects are relatively few. Most suspects, after a period of shocked innocence and steady denials, suddenly and recklessly confess. When the interrogation first became unfriendly they realized that they were suspect, and their worry, loss of sleep, and fear of the future began eroding their will to resist, especially if they had been forcibly recruited by the intelligence service, having neither stomach for espionage nor patriotic motivation.

Under these conditions the interrogator can utilize his subtlest weapon, his art of asking just the right question at just the right moment, and in just the manner to elicit an answer that may lead to a confession. The questioning may either aim directly at the discrepancies in the defector's story or search roundabout and apparently random paths for clues to concealed facts.

When a confession comes too quickly, a thorough and probing inquiry for detail should be made. The hostile services know that a man cannot be successfully prosecuted for spying against the Americans in Europe, and that if an agent confesses he may before long be legitimately documented and free to carry on any line of activity he wishes. The interrogator should obtain as much information as possible about the ready confessor's service and his purported intelligence activities. When he seems to have told all he knows, he should be polygraphed again. If discrepancies still exist, the interrogation must be continued until they are clarified or until the permissible period of confinement is exhausted.

Operational Interrogation

In any case, the debriefing of a confessed agent for operational information should normally be conducted by the CI interrogator. A confessed agent will frequently try to conceal certain elements of his mission and training, and it is a relatively simple matter for the CI interrogator to switch from debriefing back to his old technique to impress the agent with the error of his ways and obtain his subsequent cooperation. When all operational information has been obtained he can be transferred if desired for regular PI debriefing. The CI debriefing should cover:

- Name, rank, position, unit, personality description, and all details regarding his case officer and any other intelligence personnel with whom he has been associated.
- Assigned mission, in detail, and time limit for completion.
- Area in which the mission is to be performed and main target field—American intelligence, military installations, political organizations, émigré groups, economic information.
- Exact method of crossing border and passing various check points.
- Communications, *i.e.*, radio, codes, dead drops, courier, secret writing, rendezvous points.
- When recruited, how, and by whom.
- Remuneration.
- Intelligence training, *i.e.*, location of school, names of instructors, kinds of courses taken, duration, number and names of other students, unit sponsoring the school.
- Documents, currency, equipment, and clothing furnished for his mission.
- Names of any persons who may have assisted him to cross the border.
- Method of accomplishing his mission.
- Extent to which the mission has been accomplished.
- Knowledge about his own intelligence service, its organization, command structure, personnel.
- Knowledge about American intelligence.

Any special knowledge he may have.
Overall positive and operational intelligence knowledge.

Extreme caution must be exercised when a confessed agent discloses his knowledge readily, divulges important-appearing information, and offers his services as a double agent. It is quite possible that, acting according to the hostile intelligence service's plans, he is making a play to gain the confidence of American intelligence. The authenticity and completeness of his operational statements should be rigorously checked on the polygraph.

If the results of probing operational interrogation and of the polygraph examination are compatible, then a double-agent play may be considered. Upon the man's agreement to work for American intelligence, his true intentions must be examined again by polygraph with extreme care. It is desirable to place him under careful surveillance and closely evaluate the take resulting from his activities. He should be checked periodically by all possible means.

Some past results and future prospects for technical instruments to sense deception.

THE POLYGRAPH IN AGENT INTERROGATION

Chester C. Crawford

Philosophers and psychologists, and indeed most of mankind, have always been fascinated with the phenomenon of lying as an aspect of human behavior. It is only during the past sixty years, however, that researchers and investigators have proceeded beyond the study of its cognitive phase (the decision to lie) and behavioral phase (the overt act which deceives) to examine its emotional phase (the ensuing bodily agitation), which is the most significant of the three for purposes of detection. It is therefore only recently that attempts to detect deception have advanced from the uncertainty of personal judgment and the brutality of primitive physical ordeals and torture to the use of scientific aids in humane interrogation. The "lie detector" or polygraph in use today, a simple but sensitive device for tracing blood pressure, respiration, and perspiration, is the most advanced instrument thus far developed for the detection of deception.

Deception is intrinsic to espionage activity: the ability of a clandestine operator to deceive his opponent is his most critical qualification. Conversely, however, the ability to detect the deceptions of the opposition is the most critical requirement of a counterintelligence force, and it was inevitable that the polygraph would become a counterintelligence aid. Although the use of this instrumental technique is associated in the popular mind primarily with criminal apprehension, the history of its application in clandestine government operations is almost as long as that of its connection with police matters.

One of the first plans for instrumental means to detect deception was in connection with clandestine operations. In October 1917, at the request of the Psychological Committee of the National Research Council, research was undertaken at Harvard University to investigate the value of using instru-

ments in deception tests on World War I court-martial cases and in Military Intelligence Department investigations of suspected enemy agents. Early in World War II an officer of the Berkeley Police Department in California advocated the use of the lie detector in the interests of national defense. In 1945 Leonarde Keeler carried out polygraphic experimentation on several hundred prisoners of war in Rhode Island with an eye to assessing the practicability of lie detection programs in government agencies.

Successes of a CIA Program

On 12 August 1948 CIA ran its first polygraph case—the routine security screening of an applicant. In 1949 it began planning the use of the technique in Europe to test the honesty of agents recruited for clandestine operations. In 1951 it conducted polygraph experiments in the Far East. By 1952 the CIA polygraph program was operating on a world-wide basis. Its effectiveness in practice has firmly established it as a valuable adjunct to clandestine operations.

Its achievements can be illustrated in three studies analyzing the results of polygraphic interrogation over sample periods of time in operational cases from particular geographical areas. The first, covering the period from inauguration to 1953, is based on the area interrogators' reports for some three hundred cases. The use of the polygraphic technique elicited not otherwise obtainable admissions of deception in the following categories from the indicated numbers of the 300 agents.

Falsification of vital statistics (age, birthplace, employment, education, etc.)	32
Concealment of past membership in Communist and Communist-front organizations	16
Concealment of other past Communist activities	23
Deception regarding past association with hostile or friendly foreign intelligence services	18
Deception regarding past criminal arrests	22
Concealment of past undetected crimes	17
Concealment of aliases	11
Deception regarding security violations	23
Deception regarding medical or mental treatment	4
The filing of false reports	4
Deception regarding use of drugs	21

In addition, 21 instances of deception indicated by the polygraph but not admitted were later confirmed through other sources. Only 6 instances of indicated deception remained unconfirmed.

Thus more than one in ten of the agents and prospective agents had deliberately falsified his biographic data; honest biographic mistakes were not counted as deception. More significantly, six percent of them had hidden their past connections with other intelligence services. It is obvious that without polygraphic interrogation this sample of 300 could not have been properly assessed.

In another study 123 agent interrogation reports made in a different geographic area from January to December 1958 were carefully examined. With the aid of the polygraph the interrogators had obtained previously unknown information in the following categories from the indicated numbers of the 123 subjects:

Biographic information	61
Counterespionage information	17
Past employment by a foreign intelligence service	8
Present employment by a foreign intelligence service	4
Fabrication of reports	5
Hidden ideological affiliations	5

This time at least half the agents were shown to have practiced deception of some kind, and the percentage is still higher if the 61 listed as having misrepresented their biographies does not include all the deceivers in other categories. Six percent had worked for foreign intelligence services, and three percent were still so employed. At least ten agents were terminated as a result of these polygraph interviews. But about fifty—and this is an important positive product of the polygraph technique—were cleared of allegations that had been made against them.

The third study covers 70 agents interrogated between January and June 1959, who revealed previously unknown information as follows:

Biographic information	24
Counterespionage information	2
Past employment by another service	10
Current employment by another service	5
Fabrication of operational reports	11
Hidden ideological affiliations (usually Communistic)	6

Here at least one agent in every three was shown to have practiced deception of some kind. One in seven was found to have had past connections with other intelligence services and one in fourteen to have current affiliations. The polygraph interrogations led to the termination of at least five of them, and twenty-three were cleared of allegations against them.

In summary, out of about five hundred agents and prospects whose polygraphic interrogations were analyzed in these three studies, from ten to fifty percent revealed deceptions of some significance. A total of thirty-six agents were shown to have previously unknown connections with other intelligence services, some of them current affiliations which presumably made them instruments of infiltration.

Procedures and Limitations

It should be strongly emphasized that these results, although unobtainable without the polygraph, must not be credited to the polygraph *in vacuo*. They were achieved by professional interrogators using the instrument as an aid to diagnose deception in their agent subjects. The interrogator is thoroughly briefed on all aspects of the subject's personality, from sense of humor to skill at sports, on all available biographic data, on questionable and verified items in the subject's account of his background, and on the extent of his access to other intelligence services. He studies the reports from any previous medical or psychiatric examinations and from any previous interrogations, particularly any previous polygraph tests. In consultation with the case officer he determines the topics to be covered in the test and constructs questions designed to elicit information on them. He is prepared to probe for detail regarding the modus operandi, personnel, and tradecraft of a foreign intelligence service with which the subject is suspected of having past or present contacts.

The examination begins with a pre-test period in which the interrogator and the subject preview the questions for discussion and qualification. The examiner often takes advantage of this opportunity to make his own first-hand assessment of the subject, chatting about apparently unimportant matters and watching for any tell-tale reactions or idiosyncracies that may be exploited in the test. The polygraph is then connected and the test itself administered—perhaps twice, four times, or on occasion many more. Then, when indicated by a study of the charts, there follows a post-test interrogation wherein an explanation, admission, or clarification of recorded emotional responses is sought.

The polygraph lays no claim to one-hundred-percent reliability. Test results can be as varied as the individuals tested, and the interpretation of the charts is not a simple question of deciding whether the subject reacted or did not react. Many charts are quite definitive; but some indicate only a probability, and from two to five percent of the cases tested end up being classified as inconclusive, with crucial areas left unresolved.

Although sources of error in the instrument itself can be eliminated—it is not hard to maintain a perfectly functioning machine—the human variables in the interrogator and the subject are less easily controlled. And while error potential in the interrogator can be reduced by careful selection and long training, the endless variety of human subjects and their endless variety of reactions to human situations will not ever be subject to measurement with infallible precision. Different subjects tend to put different weights on the value of individual questions; deceivers may show emotional disturbance only at the points where they know their fabrication is weakest, and sometimes not even then.

For all this reservation, the polygraph technique has established its place in clandestine operations. Although in many situations there is no need for polygraphic scrutiny, the problem of veracity being more easily resoluble through other sources, in many others, as these studies show, the duplicity of an agent cannot be discovered without the use of the polygraph. Add to these revelations the previously unknown information of a positive nature that is a by-product of an agent's polygraph test and the many cases of confirmed veracity that enable a project to get under way, and the value of the technique to clandestine operations becomes a thing beyond debate.

A more general dividend realized from the polygraph is its disciplinary effect on the agent. He is usually a better clan-

destine operator after being polygraphed. He realizes that he is working for a highly professional service, concerned about security for itself and for him. He sees that he will be expected to account for his activities. Loyal agents almost always appreciate this attitude and look with greater respect on the American service after their "ordeal."

An even greater role may be played by the technical detection of deception in clandestine operations of the future. There are indications that sensational developments are about to occur in its instrumentation, and drastic changes in technique made possible by the utilization of new recording devices. The polygraph of the future may require no physical attachments on the subject, perhaps utilizing electronic circuitry to tap physiological phenomena far more subtle but every bit as diagnostic as the currently used blood pressure tracings, respiration recordings, etc. It is unlikely that improvements will ever fully eliminate the human variables that make any technical assessment less than infallible, but a paper written on this subject ten years from now may show the uncertainties and limitations still further reduced.

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Technical devices and plan of operations for eavesdropping on the adversary.

AUDIOSURVEILLANCE

Alfred Hubest

The relatively modern art of technical audiosurveillance is the counterpart of audiocommunications, following like a shadow close on the heels of every development in the latter's techniques. Shortly after the first telegraph for commercial purposes was installed between Washington and Baltimore in 1844, private individuals began intercepting its messages in order to grab profits in east-west marketing manipulations, to steal exclusive news stories, and to further other unlawful purposes. By 1862 public concern over the interception of telegraph messages was shown in California's enactment of legislation prohibiting the practice. Extensive military use of wire-tapping during the Civil War established it as a recognized tool of the intelligence services of both armies.

Similarly, telephone tapping had its beginning soon after the first commercial telephones were installed in 1878 in New Haven, Connecticut. During the early 1890's it was practiced to some extent throughout the entire country by private individuals, and police services had adopted it for active use. In 1892 New York State made telephone tapping a felony.

The clandestine installation of concealed microphones—"bugging"—was not long in following. Newspaper files and court records have for years been full of scandals and expoures featuring not only the tapping of telephones and wires but also the bugging of rooms, both by the police and by private citizens. The records of intelligence services are less readily available, but there is abundant evidence that even World War I intelligence made extensive use of microphones along with other forms of clandestine eavesdropping. During this period the monitoring of all kinds of communications media, including radio, came into its own with the establishment of large organized systems of illegal listening-in and

cryptanalysis as necessary arms of the military and political intelligence services.[1]

During the past 10 years there has been a great new surge in the use of audiosurveillance by intelligence services. This phenomenon can be attributed in large part to the development of improved listening, transmitting, and recording devices, new installation tools and techniques, a systematized operational approach to making audio installations, and advances in rapid processing and full exploitation of the take.

Technical Developments

All the many methods of audiosurveillance are variations of three basic forms. First, both in frequency of use and in volume of take obtained, is the telephone tap; second comes the concealed microphone connected by wires with a recorder; and third, the microphonic pick-up of a concealed wireless transmitter in circuit with a monitoring receiver. There is no mystery about any of these methods; the principles involved are common knowledge among communications and electronic engineers, and they are employed in practice to a greater or less extent by all intelligence and policing agencies and by private investigators. There is considerable variation, however, in the technical sophistication of these devices and in techniques of using them for audio operations. Many inventions for the development of hearing aids, radio communications, broadcasting, and recording have been adopted or adapted for use in organized eavesdropping. The mention of only a few of these that have had an especially great impact on audiosurveillance will serve to convey an idea of the technical advances recently achieved.

It is now virtually impossible to detect when a telephone is tapped by the most sophisticated methods without visually inspecting every inch of the wires and every element servicing it, down to the last screw connection. Only crudely placed taps cause give-away noises such as clicks or crackling or produce easily detectable changes in line voltage. Electronic search has been frustrated by the use of new devices. And the tap can be made more productive by any of several effec-

[1] See Wilhelm F. Flicke, "The Early Development of Communications Intelligence," *Studies* III 1, p. 99.

tive techniques for "hot miking" which convert the telephone into a microphone for general eavesdropping when it is not being used to make a call.

For telephone calls an instrument known as the Dial Recorder automatically starts a recording on magnetic tape as soon as the earpiece of the tapped phone is picked up. It records the number of the outgoing call being dialed. It transfers the conversation from the tap to the recorder at a constant output level, so that a play-back of the tape will show no volume variations with the distance of the answering telephone. When the earpiece is returned to its cradle the recording is stopped. The electrical characteristics of the Recorder's input section can be made such that an electronic check of the line will not reveal the presence of a tap.

Developments in the hearing-aid field, together with the invention of the transistor, have opened new horizons in the design of miniature microphones, amplifiers, and recorders. Highly efficient microphones only half an inch square and a quarter-inch thick, small enough to hide behind a dime, are now commercially available. Wires and shielding for them have also been vastly improved, made stronger, more resistant to weather and bruising, and at the same time thinner: some of them are no thicker than a human hair. Miniature pre-amplifiers combine with the high-quality microphones and new mike wire to make possible runs to greater distances without loss of signal, deterioration from moisture, or rupture under stress. Telephone lines have also been turned to use as clandestine carriers.

Transmitters have undergone a similarly tremendous change with the advent of transistors. The small size of these elements and the fact that they generate no heat have opened the way to miniaturization, and their low current requirements have made it possible to design smaller and better batteries for use with them. We now have self-powered transmitters only slightly larger than a package of cigarettes. Both these and current-powered transmitters can be equipped with remote-control switches to turn them off during inspections by countermeasures technicians or simply to prolong their service life. They are made in a variety of different shapes to facilitate concealment.

There has also been considerable improvement in the tools and materials for making audio installations—quiet drills, pipe-pushers, collapsible ladders, acoustic plasters that need no audio opening, better paints and paint-matching methods, and an array of new techniques for installing microphones without actually entering the target area. The countermeasures technician can only hope to find traces by examining all wall surfaces for merest pinpricks and exploring behind every crack in the walls and floors, as well as every fixture and electrical outlet.

Important corollary advances have been made in the development of recorders. The first magnetic recorders, patented in 1898, used wire as the storage medium. They were inefficient, however, and further development was slow. It was not until 1935 that tape coated to retain magnetic impressions was successfully, if still cumbersomely, used for audio recording, and not until 1948 that it was developed to the point that it revolutionized broadcasting practices.

Up to that time the effectiveness of audiosurveillance in intelligence operations had been limited by its dependence on bulky and inefficient equipment and, more importantly, by the requirement that a monitor familiar with the language, dialect, and terminology actually listen to the live conversation and with the help of notes retain the desired information from this single hearing. The advent of an efficient tape recorder brought a completely new concept of audio operations. Recordings could now be taken to a processing point for full transcription and thorough analysis. The fact that three or four hours are now devoted to processing each hour of tape, and considerably more if there are several different languages on it, gives some measure of the limitations from which audio operations have been freed by the availability of a compact, dependable recorder of high fidelity.

Effective systems of processing the recorded material have been evolved in order to extract quickly items of immediate intelligence or operational value. These systems feature both technical advances and other processing devices. Fundamental factors are the improved fidelity of the take and the training of personnel in translating and evaluating it. The accumulation of voice libraries and aids like lists of dou-

ble meanings have also helped to get more out of the raw material. IBM machines and other electronic classification devices are being used increasingly to speed up analysis and tabulation of the product.

Organizing an Audio Operation

Viewed from an operational standpoint, the setting up of an audio installation must be the execution of a "perfect crime." It must be perfect not only in that you don't get caught, but also in that you give no inkling, from the inception of an operation until its termination sometimes five years later, that such an operation was even contemplated: any show of interest in your target would alert the opposition to lay on countermeasures. This secrecy and smooth dispatch require much foreknowledge, a well-laid plan, and the synchronized coordination of a many-talented team.

Today's audio operations are a far cry from those of the very recent past, when the responsibility for making an installation would simply be turned over to a technician. The audio installation team now includes operational officers who are experts on the area, skilled in the tradecraft necessary for the particular operation, and professionally committed to the success of the job. They work in unison with technicians who take pride in demanding of themselves that each job show the flawless perfection of a masterpiece and who have the versatility to become at different times master carpenters, plumbers, masons, plasterers, painters, gardeners, laborers, and artists.

Since most audio operations are directed against targets of opportunity, they must be got under way on short notice. It is therefore necessary, in any given locality, to have accumulated data in advance regarding local building practices, radio frequencies in use for civilian and military purposes, telegraph, telephone, power, and water plants, equipment, methods and service practices, traffic patterns and regulations, local policing capabilities, and other pertinent conditions. A capability for covert casing and surveillance must also have been established in advance. Then when an opportunity for tapping an audio installation presents itself, the local operational officers, having this background information on hand, can concentrate on casing the target and collecting the spe-

cific information necessary to plan the operation while they are awaiting the arrival of technicians.

When all the required information, together with photos, sketches, and floor plans of the target in its orientation to the listening post, has been assembled and screened, the operational officers and technicians together formulate a plan that covers in detail all the facets of the coming operation, however complex it may be. In every case the plan will contain the following elements:

- Cover and method for approaching and entering the target to be bugged or the place where a line is to be tapped.
- Preparation of the required tools and equipment and method of packaging and delivering.
- Protective surveillance prior to and during the operation, with a primary and an alternate means of communication between the surveillance team and those inside the target.
- Membership of the team assigned to the job, its chain of command and distribution of responsibility.
- The specific assignment for each man, and how it is to be executed. For example: planting the mike or transmitter and the exact method to be used; digging a channel in the garden; manning the communications link with the surveillance team; checking for any tell-tale traces of the work done—scuff marks, scratches, bits of wire, etc. No detail is left unassigned.
- Manner and timing of departure from the target on completion of the job, and alternatively in the event of emergency.

The operational plan is set forth on a master sketch of the area, so that each move is marked out much as in the diagram of a football play. When the action begins every man will know exactly what he is to do and when.

Equal care is exercised in renting and establishing a listening post to monitor the target: a never so perfect installation would be useless if compromised before activation by attracting attention to the listening post or the monitors being quartered there. These arrangements must usually be so handled as to assure secure operation over a long period of time, sometimes years. And finally, with the greatest circumspec-

tion of all, communications are established from the listening post to the intelligence center receiving the take; the exposure of this link would not only spoil a particular operation but set off a compromising chain reaction that might have far-reaching effects on the intelligence service itself. The whole operation is undertaken in full awareness that it will be only as successful as its weakest point, and no foreseeable circumstance is left to an on-the-spot decision.

Countermeasures

Our Sino-Soviet bloc adversaries are aware of the danger of audiosurveillance—more so, unfortunately, then we—and accordingly take elaborate precautions to thwart our efforts. In selecting new quarters for diplomatic or trade mission offices, they regularly make it a point to show equal interest in as many as eight or ten different buildings at the same time, and at the last minute close a deal for one on terms of immediate occupancy. They then post a guard and closely supervise any alterations or improvements to be made, in most cases selecting their own contractors. They are likely to import their own equipment and technicians to set up the internal telephone switchboards. In some cases they have dug a trench six feet deep around the entire building, and have severed and inspected every pipe and wire servicing the installation. Their technicians "sweep" the premises immediately upon occupation and periodically thereafter. They take similarly great pains to protect the residences of their officials abroad.

Despite these extreme preventive countermeasures, we have continued to operate successfully against them. Our operations, profitable during normal periods, sometimes become even more productive during crises when security is sacrificed for speed and clarity.

Our success in the face of such vigilance makes dubious the security of our own overseas offices against hostile audio operations. Although it is not proposed to treat here the countermeasures we should take, it should be noted that we are like sitting ducks by comparison. Since March 1949, when the first hostile audio device was found in the Prague residence of our military attaché, several hundred have turned up in

many locations, mostly behind the iron curtain; and their advanced technical sophistication is illustrated in the Great Seal installation recently publicized by Ambassador Lodge. Yet, even after more than 100 devices were discovered in the first few months of 1956 and the National Security Council alerted the intelligence community to take countermeasures, U.S. installations overseas have tended to be complacent about being targets of hostile audio operations. A thorough exposition of the dangers and of the possibilities for countermeasures should be the subject of an article in a future issue of this journal.

Some of the possibilities, methods, and results of submitting written materials to examination by test tube and microscope.

LABORATORY ANALYSIS OF SUSPECT DOCUMENTS

James Van Stappen

Seven or eight years ago an intelligence officer came into possession, under circumstances which aroused his professional ardor, of a small scrap of notepaper bearing only an address and a very common first name scribbled underneath it. For two years he persisted in trying to identify the writer of this note, collecting handwriting specimens from a number of likely places and submitting them for laboratory comparison. Some of them matched the original. The points of venue of these marked the writer's trail through several trouble-ridden countries, but none identified him. Finally, back in his own country, the traveler wrote to one of the prospectively useful acquaintances he had made on the trip, and this correspondent was careless enough to let the letter fall into our intelligence officer's hands. Verified as the same handwriting, it gave a complete name and home address. A search of visa records and other materials on file now yielded the true identity of the writer, his cover story, background, and even photographs of him. He is a Soviet intelligence officer, who since then, thanks to this identification, has unwittingly kept us informed by his presence of certain activities of his organization.

. . .

For twelve years, beginning during World War II, an agent in Europe had provided generous and significant reports from around and behind the iron curtain. He had apparently built up a network of informants extending deep into the denied areas. But now a sharp-eyed postal intelligence officer noticed an incorrect postal cachet on one of his envelopes, and his whole file of 300-odd reports was therefore brought to the questioned document laboratory. Analysis showed that the

reports were written by eight different typewriters, which might correspond to eight different informants; but some reports from widely separated places had been produced on the same day by the same machine, and the principal agent's own correspondence turned out to have been written on one or another of the typewriters supposedly used by his secret informants behind the curtain. It was not a crude paper mill, but careless enough to get caught, finally.

. . .

At a time when one of the countries that are pulled between East and West was negotiating for a tremendous Western loan, one of its pro-U.S. representatives, a personage internationally well known, offered a letter typed on blue stationery as a sample of the Communist blandishments which he was trying to resist. An awkward signature prompted the submission of this letter to the questioned document laboratory. The signature was found to be indeed a crude attempt at handwriting disguise, executed in American-made fountain-pen ink, Waterman's Blue Black. The blue watermarked stationery could have been bought only in Australia or New Zealand, on the other side of the world from the purported Communist writer. Moreover, the Communist's letter was typed on the same machine—a 1927 Underwood Standard rebuilt after 1940—that this Friend of America had some time before used to address an envelope to us. A file of miscellaneous documents our Friend had turned over to us in the past was now examined, and all were found to be forgeries. Upon interrogation he admitted his duplicity and begged not to be exposed.

. . .

These are three of the more startling questioned document cases of the 1,500-odd on file, some of them not worth to anyone the paper they were written on, some of international consequence. They include analyses of propaganda leaflets which led to the very presses that printed them. They include restorations of charred documents, erased and obliterated writings, carbon paper impressions, and writings indented on sheets of paper underneath the ones used by the writer. They include the investigation of crank letters and of forgeries using both Dulles brothers' names. They include examinations of credentials, complementing the work of the

identity document analyst[1]; in one outstanding case a suspected hostile agent's passport was found to have 27 recordable errors in make-up, and a complete physical analysis disclosed its probable area of origin and a considerable amount of information on adversary capabilities and modus operandi in agent documentation.

Of the tell-tale manifestations by which any intelligence operation necessarily runs the risk of exposing itself, documents constitute one of the most rewarding to the investigator. Being as they are a permanent, physical item, they are devoid of the human foibles which so often bear uncertain witness—poor observation, bad judgment, opinion and hearsay, insincerity, malice. Used to support duplicity, they often, under expert analysis, tell the truth, and in many cases much more, not only exposing the particular operation that occasioned them but supplying intelligence of far-reaching significance. By laboratory examination it may be possible to develop the complete text of indented or other imperfect writings, establish the validity of a document, detect any alterations or erasures, identify the author by analysis of the handwriting or typewriting, determine the kind, specific type, origin, and approximate age of the paper and ink used, and find the kind, specific type, and origin of the writing instruments.

Analysis of Paper

Although a document is legally defined as being of any material on which marks may be inscribed, including gravestones and in a recent case a silver goblet engraved with Josef Stalin's true signature, the material used for most documents is of course paper. The laboratory analysis of paper must take into account its color and opacity, the size of the sheet, its weight and thickness, its fiber content, the direction of the grain, the finish, and the watermark. Comparison in these respects with exhaustive files of domestic and foreign paper stock samples serves to identify most papers. If the paper is a common, low-grade type, it will yield no clues to the originator of the document except perhaps his area of operation.

[1] For a description of this field see David V. Brigane's "Credentials—Bona Fide or False?" in *Studies* IV 1, p. 37ff.

But if it is a rarer and more expensive one, with few dealers and retail outlets, it may be possible to trace through these the limited number of people who had access to it. A unique paper may be, and in actual cases has been, traced to a single individual. The secret markings that identify paper used by governments, banks, and other official organizations are also many of them on file along with the paper stocks, as an aid in checking the authenticity of official documents.

It can be established that a document is forged by showing that its paper is not as old as its purported date. Sometimes the age of the paper can be determined from its composition or watermark, by referring to a file of manufacturers' formulas and watermarks in use at different dates. More often it is necessary to measure the effects of age on its chemical content and color, taking into consideration the type of fiber in the paper and the climatic conditions under which it was stored. Using chemical reagents and a tintometer or similar instrument for gauging shades of color, the expert can usually determine the approximate age of the paper. If the paper has been artificially aged, a practice forgers often try, the age test will not be valid; but the false aging can often be detected and the document thus proved a forgery.

Analysis of Inks

The identification of an ink is begun by determining the type to which it belongs. The three chief types in use today are gallotannic (the most common), chromic, and anilin. Others are China ink, the colored vegetable-dye inks, a few dark ones like those made from wolfram and vanadium, and those for special application as for mimeograph and stamp pads. Chemical differences enable the laboratory to identify these types.

The age of the ink, which has the same bearing as paper age on the validity of a document, may sometimes be determined through data on file regarding changes in the manufacturers' formulas. Waterman, for example, has changed formula four times in ten years, so that a sample of Waterman's may often be associated with a particular period of manufacture. Another test is color. Permanent inks contain a temporary dye which soon fades, an iron and sulphur compound, and a weak acid. The action of the acid, oxygen, and humidity produces

first a dark color and then over a period of years a slow fading to a weak stain. By using chemical reagents, the age of the ink can be approximated by comparing its color, taking into consideration the color of the paper, with standard color charts. If ink has been artificially aged the age test is impossible, but the induced aging itself is sometimes detectable.

Writing Instruments

When a stroke of ink writing is magnified fifteen or more times, the two tracks made by the point of the pen stand out much clearer than the line of ink between them. If the pen is new, the width of these tracks, compared with standard-brand widths shown in test charts, sometimes serves to identify the type of pen. When a well-worn pen has been used, the difference in width and appearance between the two tracks usually indicates whether the user is right- or left-handed. If a pen is worn badly enough, it may leave regular, easily identified scratches which provide positive identification of the very pen itself. The fact that most people fill their fountain pens with different kinds of ink at different times may also serve to identify an individual pen through the unique combination of inks in it.

The ball-point pen is more easily identified than an ordinary one. It uses a unique ink, there is a specific width of the ball point for each brand, and the surface of the ball, smooth as it may seem to the unaided eye, is really full of scratches which leave a pattern on the paper—the pen's own fingerprints. Any non-standard type of pen is the more readily identified because of its scarcity.

If a document is written in pencil or crayon, the laboratory may be able to determine the formula of the material and through file comparisons perhaps identify the manufacturer. The age of pencil or crayon writing can be determined only as to whether it was done within the last ten or fifteen days. A unique or unusual pencil or crayon may possibly be traced to the individual who used it.

Identification of Handwriting

Handwriting, like other physical acts performed by adults, is characteristic of the individual writer; there is probably no act more characteristic of an adult than his writing. It can

therefore be used for positive identification of the writer through comparison of the unknown specimen with known writings. This comparison is a matter not only of letter forms but also of many other characteristics, among them movement, muscular habits, pen position, line quality, shading, retrace, proportion, connections, spacing, and embellishments. If a sufficient number of similarities are found between a known handwriting and the questioned specimen, with no dissimilarities which cannot reasonably be accounted for, it can be concluded that both were written by the same person.

A person's handwriting is developed by constant repetition over the years until it becomes second nature to him, a succession of deeply ingrained habits. The obstacles which confront a forger or a disguiser of his own writing are therefore manifold and great. It is practically impossible for a writer to divorce himself from certain inherent characteristics manifested in pressure points, pen lifts, the shading of strokes, etc., of which he is not even aware. In order to succeed in a forgery he needs not only to throw off his own characteristics but to assume the inherent characteristics manifested in another person's writing, also a virtual impossibility. Handwriting comparison, however, should not be attempted by an amateur. Its most difficult aspect is evaluating the weight to be given each of the various distinguishing characteristics.

Typographical Identification

The identification of typewriting is similarly based on a sufficient combination of peculiar characteristics. Some of the more outstanding of these characteristics are the defects in type faces, the design of the type, misalignment due to maladjusted type bars, and uneven printing due to twisted type faces. The make and model of a typewriter can be determined by an examination of its product, and a used typewriter can be individually identified with certainty. Since manufacturers change type design from time to time, a document may also be proved fraudulent by showing that its type was not yet manufactured at the time of its purported date.

Aside from type design and the individual peculiarities of used type, the machine may be identified as one on which worn type has been removed and replaced with a new set. This new "retread type" may be distinguishable by its sharp, angular corners, by special retread designs, or by comparison with the type faces of the numerals, which get little use and are rarely changed, and therefore will not match the retread font used for the other characters.

It is occasionally possible to identify the individual who typed a document from his habit of using particular pressure on certain keys, making unique mistakes, and in some instances using unique spacings. If a suspect is made to type a dozen copies of the questioned document on the same machine, he will follow the same psychological patterns each time, and a comparison of the test specimens under magnification with the original document will make it apparent that they were typed by the same person. A person who uses the "hunt and peck" system, for example, characteristically hits the period so hard that he punctures or almost punctures the paper. Many people put much more pressure on combinations of letters found in their own names than on the other letters they type.

The Submission of Questioned Documents

The fruits of this analysis are available, of course, only when documents have been questioned or found suspect and submitted to the laboratory. This questioning is generally the obligation of the intelligence officer who first receives a document or of some staff analyst who finds that it does not fit well into the pattern of things already known about a case. The decision to request technical aid for analysis of written materials connected with an operation has in retrospect often turned out to be the most important decision made during its course. The use of this facility for counterintelligence purposes has been a steadily growing thing, for every find encourages other intelligence officers to bring dead files back to life for comparison with the newly identified material. Different areas have on numerous occasions found, when certain documents were compared, that they were host to the same adversary agent.

Many intelligence officers, however, still overlook the very evidence which might successfully terminate a case for them. It is often thought, for example, that a handwriting expert's services are necessary only when a document is suspected of being forged, whereas the results of expert examination may

be much more far-reaching in identification cases. The handwriting on an automobile ownership certificate, a piece of paper found at the scene of a meeting, an ink offset on a blotter, notations in a memorandum book, or any of a multitude of other writings may upon analysis prove to be of value to an operation. In clandestine operations where secret writing is used as a means of communications, it is often advisable to have the developed secret writing, as well as the cover letter, checked in the questioned document laboratory against the possibility that the agent has been killed, captured, or doubled and his communications taken over by the adversary. An earlier article in the *Studies*[2] showed the value of this procedure also for the purpose of assessing the agent's stability under strain.

In order to obtain a maximum benefit from the laboratory analysis, the intelligence officer should exercise great care in collecting and preserving the documents he submits. He should make every attempt to get samples of a suspect's handwriting without his knowledge—his signature on pay vouchers, for example, or reports or letters in his natural writing. The highest quality of evidence is an uncontaminated original document. Anything less than that, such as a photocopy, is better than nothing, but still yields only qualified results. When it is known in advance that a document is to be submitted to the laboratory, it should be enclosed in a transparent plastic envelope large enough that folding is unnecessary. Thus protected, it can be read in transit on both sides and handled without soiling, wetting, or any physical alteration that might modify or destroy elements of the evidence.

This brief review should be sufficient to show that the science of questioned document analysis requires highly qualified professionals and, like surgery, should not be attempted by do-it-yourselfers. Among the cases on file that attest to the hazards of self-service in this matter is that of the 12-year-old paper mill cited above; it would have been detected at least two years sooner if the case officer involved had not imagined he could train himself in the technique. Even the experts employed in Washington are professionally impotent if separated from their standards, specimens, files, reference material, and technical facilities. Therefore this work cannot be done on a local basis in the field with any assurance of success.

[2] "Graphological Assessment in Action," III 4, p. 49ff.

The sharp-eyed philatelist spots vestiges of wartime intelligence operations and learns something of their nature.

POSTAL FORGERIES IN TWO WORLD WARS

Gordon Torrey and Donald Avery

The history and high state of development of stamp collecting has long since made collectors alert to forgeries of postal stamps. Not long after the first stamp appeared in 1840 forgery began to plague collectors, and as early as 1862 a Brussels dealer published a treatise on the subject. As stamps proliferated and the rarer early issues brought a higher price, the forgers' techniques improved. Collectors were forced to educate themselves in methods of production, papers used, postal rates, and cancellations. Today thousands of collectors in all countries can differentiate at a glance among fine color shadings, perforation gauges, papers, and printing methods.

Government-sponsored postal forgery for intelligence purposes began near the end of the first world war. Thereafter, and again after World War II, collectors found on the philatelic bourses of Europe both forgeries and political parodies of wartime postage stamps. Although the intended or actual use of these stamps is obscured from the public by government secrecy, serious devotees of philately were able to identify the origin of many issues by deductions from sketchy evidence and comparison of production techniques. They found that in both wars stamp forgery proper was done only by the western allies, and that of these the British were by far the most active. For intelligence officers, the archives of the Central Intelligence Agency contain definitive operational information on American forged printings and reveal by analogy the probable purposes of those sponsored by Great Britain.

Purposes and Problems

Postal forgery was done for purposes of psychological warfare rather than of espionage. Agent communications are in

such small volume that genuine stamps could be obtained and used without risk. But the mass nature of psywar mailing operations precluded purchase of genuine stamps from legitimate dealers in neutral countries, once hostilities were under way. A sudden demand in Sweden or Switzerland, for instance, for 100,000 12-pfennig German stamps of the regular 1941 issue would have betrayed the probability of a mass mailing operation, which then might have been traced to its source before it started. Thus large-scale forging was the only feasible approach.

Also to psychological warfare belonged the political parodies of enemy postage stamps. Whereas the forgeries were a means for disseminating black propaganda through the enemy postal services, the political parodies were themselves black propaganda. The production of both kinds of stamps was a sub-operation of complex and varied clandestine printing enterprises that included stickers, leaflets, music, pornography, newspapers, surrender passes, and false documents. The elaborate stamp operation also usually produced forged envelopes, addresses, postmarks, and sometimes even mailbags.

The quality of the intelligence forgeries varied considerably. The British were by far the best because they were done by regular postage stamp production facilities in England. Those of the Americans and the French resistance were a good deal poorer, reflecting the cruder production facilities available in the field. It was apparently considered unnecessary to create exact reproductions for mass mailing purposes, and imperfections were probably unavoidable because of wartime shortages of material and technicians. A major problem in some British and all American issues was color control, achieving and maintaining precisely the right mixture of the printing ink; in wartime this is a problem even for legitimate postal administrations. Field production required substitute printing methods as well, with photolithography replacing engravure. Paper shortages and the apparent lack of suitable perforating machines led to other major technical discrepancies. But the imitation of watermarks on postal paper proved unnecessary: the watermark is undetectable once the stamp is affixed to an envelope.

The production and operational use of postal forgeries reached a climax toward the end of World War II. British production, judging from the relative quantities of stamps that eventually reached collectors and the time periods during which the German and French originals were in use, appears to fall roughly into two stages—a few issues of high quality during the first years of the war, and more varieties of a slightly poorer quality in later years. American postal forgeries were first used in full scale in early 1945. Political parodies also multiplied as the war went on, the intensification of effort paralleling the social disintegration of Germany. Opportunities to use the intelligence forgeries increased as enemy postal services were increasingly disrupted, and the divisive potential of the political parodies was augmented with the growing prospect of Axis defeat.

Britain Takes the Lead

In 1918 the British, having decided to organize a propaganda system to undermine the enemy will to resist, mounted from Crewe House, their propaganda headquarters, an operation for distributing antiregime pamphlets, leaflets, and newspapers in the territory of the Central Powers. They planned to use air drops but also to post propaganda to selected addresses through the enemy mails. For this purpose they reproduced regular-issue common-denomination stamps—the German of 10 and 15 pfennig, the Bavarian of 5, 10, and 15 pfennig, and the Austrian of 5, 10, and 25 heller. All of these were probably printed within the same period of a few months, and the die proof of one shows the date "25 September 1918." The end of the war overtook the project before it became operational, but it is worth noting that it contained all the basic ingredients used by the allies during World War II.

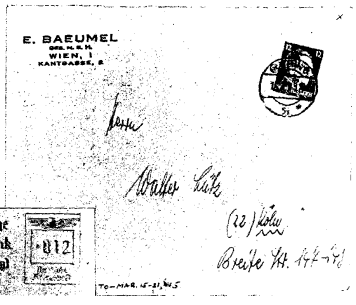
When copies of these stamps appeared on the philatelic market in 1921 the philatelists soon discovered where and by whom they had been printed. They found, by comparing the papers, printing methods, gums, and perforations, that they could have been produced only in England, and only in the plant of De La Rue and Company, one of the three printers then making stamps for the British post office. The British government, pleading the Official Secrets Act, has never admitted to authorship of these issues.

British forgeries of German stamps, 1918

French stamps produced in the U.K. in World War II

Hitler heads

British American Genuine



"Cornflakes" stamped envelope and meter mark

Postal Forgeries

SECRET

In World War II the first reported instance of postal forgery was a German operation: in December 1939 British newspapers said envelopes containing German propaganda had been delivered to British householders. These, franked with stamps of neutral countries, had forged postmarks and had not passed through the mails. But this early case is the only evidence that the Germans were at all active with postal forgeries, and the British held their lead.

The British origin of many forged French and German stamps could be conclusively established by virtue of a slightly misplaced pin in the perforation machine used in their production. The resultant perforation drop at a certain position in the second vertical row of stamps in each sheet is exactly the same as that occurring in the regular British 1937 issues printed by the government's contract printer, Harrison and Sons of London. It is therefore virtually certain that Harrison's produced the stamps; they were definitely perforated on a machine owned by that firm.

French Stamps

Forgeries of French stamps used during the Pétain regime are practically all British in origin. Earliest were the 25- and 30-centimes values of the 1938 "Mercury" regular issue, which was in use until 1942. The forgeries are typographed, like the originals, and the color matching is very good. But aside from minute but definite printing variations, they differ from the originals in the gauge of their perforations. The forgeries of the Pétain issues could pass scrutiny the more readily because of a wide variation in the printings of the genuine French stamps resulting from the scarcity of proper paper and inks.

The British also forged a single value of the "Iris" issue of 1939 and eight varieties of the Pétain regular issue used from 1942 until the invasion. While no samples of the forgeries have turned up in used condition, it is likely they were widely and successfully used in the extensive agent operations run against France from the United Kingdom.

A single forgery of the Pétain issue was produced in France itself by the French resistance movement at the so-called "Atelier des Faux de Défense de la France" on the Rue Scribe

in Paris. Its actual use in mailing operations is questionable: it is ungummed, printed on poor quality paper, obviously perforated differently from the originals, and lithographed instead of typographed; the whole design is clogged with color. Remainders were exhibited in November 1945 as part of the production of the Atelier.

German Stamps

Both the United States and Great Britain forged German regular issues. That the British started early in the war is evident in the existence of a forged 12-pfennig stamp of the 1933–36 issue with a portrait of President Hindenburg: by the end of 1942 all stamps of this type had been superseded by those with Hitler's portrait. This stamp is technically the most deceptive forgery of the Second World War; single copies almost defy detection. It is identical with the original in color, paper, perforation, and method of reproduction. It was printed in sheets of four, however, and examples with sheet margins are readily distinguished by a wide colored band not seen on the margins of original sheets. It was used on envelopes, probably dropped inside Germany. An envelope with stamp uncancelled, containing a propaganda leaflet and addressed to Munich, is extant. None showing postal usage have been discovered.

The British subsequently forged the 3-, 4-, 6-, and 8-pfennig values of the Hitler head regular issue current from 1941 until the end of the war. They were printed in accurately perforated sheets of twenty (5x4) with plain margins, but the forgery has no watermark and the gum is yellowish rather than clear. The engraving also can readily be differentiated from the original by highlights on the portrait. It is fairly certain that these saw operational use, probably in airdrops.

Military franchise labels for German army field mail were also reproduced by the British and apparently used in disseminating propaganda to troops on active duty. Except for some small discrepancies of color and perforation the reproduction is quite passable. They were printed in sheets of twenty with plain margins, rather than the colored and numbered margins of original sheets.

American forgery of German stamps was first made public with the sale of President Roosevelt's stamp collection after the war. The examples in this collection were accompanied by a letter from OSS head General Donovan saying they had been "printed in Switzerland by O.W.I. representatives" and used since November 1942 in cross-border mailing of the Frankfurt Zeitung and other propaganda material.

These forgeries are rather poor in quality and easily distinguished from the originals by a great difference in perforation, a poor cloth match, and in the case of the 12-pfennig stamp by the fact that they were done by photolithography while the originals were recess printed (engraved). In one case the reproduction was reportedly so poor that a second printing was necessary before it could be used.

Italian and Dutch Stamps

Only one forgery of an Italian stamp is known; details of its production suggest that it is British. It is an unwatermarked reproduction of the 25-centisimi green of the 1929–42 regular issue bearing the portrait of King Victor Emanuel. It is extremely deceptive, being readily distinguishable only by sheet size (20) and the lack of a watermark. Like the original, it was produced by photogravure, and its perforation differed only very slightly from the original. In 1941 the only printers among the allies with facilities and experience in the photogravure process were Harrison and Sons, the owners of the faulty perforation machine. The absence of further Italian issues is probably accounted for by Italy's early surrender.

There was a very poor forgery of unknown origin of the 1½-cent stamp of the 1934–46 Netherlands issue, used during the war to mail printed papers. The reproduction was presumably intended for propaganda papers and leaflets. Its poor technical quality suggests that it may have been done by the Dutch underground in the Netherlands itself or with makeshift facilities abroad. The color, paper, perforation, and even size are wrong. The ink is a bluish gray, not the clear gray of the original, and sunk into the paper. It could have passed in a dim light, but it is doubtful that any postal clerk used to handling the genuine article would be deceived.

Operation Cornflakes

In mid-1944 the Office of Strategic Services began planning that led to the production of forged 6- and 12-pfennig stamps of the regular German issue to be used for mass mailing of anti-Nazi propaganda. Earlier attempts to disseminate propaganda widely in the Reich had been frustrated by lack of access. A complicated operation was devised by which the Army Air Force, after shooting up enemy mail trains, would drop faked German mail sacks containing subversive material in forged envelopes alongside them.

During the first four months of 1945, 21 people in the OSS Morale Operations unit attached to the Mediterranean Theater of Operations were occupied in carrying out this scheme, labeled "Operation Cornflakes." Their task was to exploit the disintegration of German administrative functions in the last weeks of the war by infiltrating printed propaganda—principally the "underground" newspaper *Das Neue Deutschland*—into the Reichspost. Their objectives were to weaken further the will of the German people to fight, to increase confusion in the communication and transport services, and to convince the German people that there was an anti-Nazi underground in Germany especially active in business and banking circles.

"Cornflakes" was built up from scratch. Interrogators, under cover of "administrative research," debriefed former mail clerks among the German prisoners on postal procedures and packing and labeling methods. The MO unit studied the latest German postal regulations and reproduced German stamps, postal cancellations, business stationery, and mail sacks. A special unit in Rome culled from German telephone books more than two million names and addresses in cities all over the Reich, and typists addressed forged envelopes at the rate of 15,000 a week. Some envelopes were addressed by hand to provide a plausible mix in each bag.

The drops were executed by the 14th Fighter Group of the 15th Air Force, a unit which was successfully conducting low-level air attacks against rail traffic in southern Germany and Austria. The letters to be dropped on each bomb run had to be so addressed that they would have been carried to, from, or through towns on one of the rail lines on the day's hunt;

and this meant that postal cancellations, prepared and predated in Rome, had to be stamped on the envelopes at the airfield immediately prior to takeoff. In order to avoid the telltale traces left by the ordinary leaflet bomb, a special bomb was developed that would eject the mail sack from the canister on signal from a control button on the pilot's panel.

The 14th Fighter Group worked out its technique for the mixed mailbag and high explosive bomb runs in several practice sessions and began operations in early 1945. The Group would seek out an enemy train, preferably with a mail car attached, moving north from southern Austria, and attack and demolish it. The mailbags would be ejected from fifty feet above the train, so that they would drop undamaged. In the resulting confusion the bags would be picked up from the debris and forwarded to the nearest post office.

In February and March 1945 ten sorties were successfully run and about 120 mail sacks dropped. Prisoners interviewed following the surrender of the German army in Italy verified the receipt of *Das Neue Deutschland* through the military post and said the paper was known as far north as the Baltic ports. They reported it widely rumored in Germany that an underground movement called "Das Neue Deutschland" existed in Austria and parts of Germany.

"Cornflakes" was not executed without mishaps, however. At least one bag, dropped near St. Poelten, Austria, in February 1945, was neutralized by the misspelling of a return address printed on an envelope. A German postal clerk noticed the substitution of *C* for *K* in the word "Kassenverein," and postal inspection followed. The project was also endangered at one time by attempts of the screened German prisoners employed for hand addressing to use it for their own purposes. They were discovered addressing envelopes for letters written home.

Propaganda Stamps

Propaganda variations of enemy postage stamps resulted naturally from combining the practice of stamp forgery with the simultaneous production of miscellaneous propaganda stickers and labels. They can be considered in two classes—comparatively subtle changes meant to serve specific propa-

Goering and Himmler substitutions

Liberation propaganda

Hitler skulls

WER EIN VOLK RETTEN WILL, KANN NUR HEROISCH DENKEN

German anti-British efforts

ganda ends, and broad propagandistic parodies probably intended for world philatelic markets.

In the first category, several stamps produced by the British and apparently intended to promote divisions within the Nazi leadership may represent different facets of a single operation launched late in the war. They all follow the principle of removing Hitler's portrait from a regular stamp and substituting that of another Nazi leader. The Hitler birthday commemorative was used as the prototype for a souvenir sheet of six stamps showing Field Marshal Goering and commemorating his birthday on 12 January 1944. The frequently forged 6-pfennig Hitler head regular issue was changed to show Himmler. (Harrison's perforating machine is again in evidence on sheets of the Himmler stamp.) Hitler's head was also removed from one value of the Polish occupation issue and replaced with that of Governor Frank. This stamp was reproduced by Harrison's photogravure method.

Two efforts, one German and one British, were made in support of national liberation and resistance movements. In 1944, when the leader of the Azad Hind movement, Subhas Chandra Bose, followed the Japanese into India, the state printing works in Berlin issued a series of ten Azad Hind stamps which were never used. And the British, some time after the August 1944 execution of General Erich von Witzleben, one of the chief conspirators in the 20 July bomb plot, substituted his portrait for Hitler's on a German stamp issued in November 1943 to mark the 20th anniversary of the Munich uprising. Changing also the legend on the original, they retained its color and design.

The broad propaganda parodies are chiefly American and German. American production centered around a reworking of the 12-pfennig Hitler head stamp to show a Hitler skull, under which "Futsches" (Collapsed) was substituted in the legend "Deutsches Reich." One important item in this production was a photolithographed parody of a Hitler Souvenir sheet with four skulls resembling Hitler.

German efforts were late, amateurish, and ineffective. Himmler reportedly broached the idea of philatelic parodies to Hitler in February 1944 in answer to the Fuehrer's complaints that the German foreign propaganda organs had failed to tell

the world how completely Britain had sold out to the Russians. He was authorized to market parodies throughout the philatelic world to deliver this message and use the proceeds to finance SS development.

Parodies were made of one value of the 1935 issue commemorating the Silver Jubilee of King George V, of a single stamp issued for the Coronation of George VI, and of six low values of the then current regular British issue. Himmler's design ideas are reflected in liberal use of the Star of Zion and the substitution of Stalin's head for those of the British monarchs. Some of the regular issues were overprinted to advertise the "Liquidation of Empire." The German parodies were printed on the watermarked paper used for ration books. Few examples are extant because the idea never got far beyond pilot production.

Himmler's scheme met with widespread resistance from officials of the intelligence services, who regarded it as a waste of time. Attempts to market the stamps through the "Operation Bernhard" network, already engaged in forging and selling British banknotes, and through agents of the foreign Sicherheitsdienst never panned out. Himmler, at last thoroughly frustrated by the failure of his idea, ordered that the stamps be given to Sir Oswald Mosley's Black Shirts for dissemination in England, but with the incipient collapse of Germany the confusion in Berlin overtook this final alternative as well.

The Outlook

Forgery of postage stamps for intelligence purposes may be unnecessary in future operations. Postage meter marks have already largely replaced stamps for commercial mailing purposes in most countries of the world. The most widespread use of meters is for bulk mail and newspapers, printed matter, precisely the medium through which written propaganda is most easily disseminated. Meter marks eliminate the need for both stamp and cancellation forgeries, and reproduction of the simple red-inked double-purpose impression should be quite easy and effective. In any one country, meter impressions are to a high degree standardized in design, differing only in the letter and serial number of the machine. Unlike postage stamps, moreover, which are changed every few

years, meters remain in use for long periods of time, the widespread distribution of all sizes of machines in post offices and business firms precluding frequent change. The American directors of Operation Cornflakes anticipated this development in including a meter mark—the only meter mark known to have been forged in wartime—in their mailbag mix.

The Soviet system of devious techniques to circumscribe the overt observations of foreign experts.

OBSTACLE COURSE FOR ATTACHÉS

Thomas W. Wolfe

It may be useful, now that it seems possible the Soviet Union may one of these days agree to admit nuclear inspection teams to its territory, to review the kinds of obstacles it regularly strews in the path of other legitimate trained foreign observers, the military attachés. As Soviet officials have already given voice to their suspicion that any nuclear inspectors will be bent on spying, so they have taken the attitude, in their obsession with secrecy, that the attachés are spies when they exhibit an interest in matters which in most other countries lie open in the public domain. Hence, although as a bow to international usage they accept the military attachés of foreign diplomatic missions, they severely circumscribe their opportunities to travel and make observations—a traditional attaché activity ever since the system came into being during the Napoleonic era.

Soviet measures to limit the observations of military attachés fall into two categories. First, there are express legal proscriptions on attaché movement and activities—off-limits areas, travel registration, prohibitions on photography, etc. Second, there is a large body of unannounced restraints—administrative, psychological, and physical—which take up where the legal obstacles leave off. It is this second category of obstructive techniques over and above the formal restrictions which I shall illustrate from my own experience in Russia as American Air Attaché from October 1956 to October 1958.

Manipulating transportation. This is one of the most common methods of interference through administrative measures after an attaché has obtained formal permission to travel. For example, you have made reservations for a flight in daytime from Moscow to Baku, but at the last minute you find that your seat has been switched to a night plane. If you

announce your intention of waiting for the first available daytime flight, you are informed that all day flights are sold out "for the indefinite future." The same thing happens on trains. Sometimes the schedules are altered to keep you from passing points of interest in daylight. I have been on trains which for no apparent reason pulled into a siding and waited until dark, to the bewilderment of Russian fellow-passengers and even some members of the crew. Similarly, civil air flights have altered their routes or skipped scheduled stops in perfectly good weather for no other reason than to deny us observation of some inconveniently located installation.

Compartment companions. Rarely are attachés able to secure a compartment to themselves on a Soviet train, no matter how far in advance they book transportation. The Soviet citizens who turn up to share a compartment are in most cases readily identifiable as security agents. They keep the attaché under constant scrutiny during waking hours and occasionally can be found going through his belongings in the middle of the night. An auxiliary practice is that of splitting up foreign travellers: even American husbands (including myself) have on occasion been obliged to spend the night in one compartment and their wives in another with male Russian companions. This sort of thing naturally does nothing to endear the watchdogs of Soviet security to members of the attaché corps, and run-ins with them have been frequent. After one such skirmish with a particularly obnoxious security type in the Caucasus, I was called a "hooligan" and other uncomplimentary names in the Soviet press, a publicity measure which serves to put psychological pressure on the attachés as well as to foster among the Soviet populace the desired attitude of suspicious vigilance toward foreigners.

Timely interruption technique. Even if an attaché and his friends or family have managed to secure a train compartment without Soviet company, their privacy is seldom respected for long. Whenever the train approaches the industrial section of a city, for example, the car attendants suddenly find it necessary to tidy up your compartment. If the door happens to be locked they let themselves in with a pass key, so great is their urge to look after your comfort. The window always seems to need the most attention, and they swipe away at it with a dust-rag, effectually blocking the view, until you have passed through the factory district.

If this routine cannot be stretched out long enough, there is a variation which I encountered once while travelling through a large industrial city on the Volga. Factories were strung out for several miles on the outskirts of the city, among them a big aircraft plant. It stood alongside the tracks, offering about the same view you get from a train of the Martin plant in Baltimore, except that the Soviet plant was boxed in by a high board fence. On this occasion I found the view spoiled not only by the fence and the customary activity of the car attendant. Making doubly sure that I would have no chance to observe this particular stretch of industrial scenery, the attendant rubbed the window down with a greasy rag.

Frosted window routine. On train trips in winter, nature often cooperates with the Soviet authorities by frosting over the windows of your car. When nature fails to do the trick, however, there is usually someone around to lend a hand, as I found once when boarding a train in Rostov. It was a clear, cold day and every window in the train was completely free of frost and ice, with one exception. The window of my compartment, in the middle of a car, had been sprayed on the outside until it was covered with a quarter-inch glaze of ice. When I attempted to chip some of the ice away, I was immediately stopped by a detail of militiamen. "You are violating Soviet regulations," they said. "You might scratch the glass."

Helpful hostess. When attachés board an airplane for a trip in the Soviet Union, word is passed along to the crew that foreigners are aboard. The hostess then makes it her business to distract the attention of the foreign traveller at moments when he might observe installations of military or industrial significance. A favorite technique when an airplane is taking off or approaching an airport is for the hostess to lean over your seat with an offering of reading material. Somehow she usually manages to hold a magazine in front of your face so you can't see out the window. If you wave the solicitous girl away at such a moment you are of course being rude and unappreciative.

Smoke screen. When the Soviets are particularly anxious to conceal some installation from foreign eyes, they may use this standard military device. It takes a certain amount of preparation and good communications to time a smoke screen to go up just as an attaché drives down the highway or passes on the train, but they usually pull it off without a hitch. This technique, however, has the disadvantage of calling attention to the very object they wish to hide. On one train trip in central Russia an airfield we passed at a distance of three or four miles was ringed with upwards of 50 smoke generators belching away. "What's going on over there?" I asked one of the Russians who had been assigned to keep an eye on me during this journey. "It looks as though that airfield is on fire." I got a blank stare in return. "Airfield? Fire? I don't see anything," said the Russian, as though he could persuade me thus that there was nothing in sight but the natural Russian landscape.

Highway escort. When attachés undertake an automobile trip in the Soviet Union, they are accompanied by several cars of plain-clothes security agents. These keep shifting the order of their line-up along the highway to preserve the fiction that there is no surveillance of foreigners; but since auto traffic on most out-of-town roads in the Soviet Union is very light, the pretense is bound to wear thin as the same "protective" cavalcade of Pobedas and Zims rolls along behind you hour after hour. When you stop by the roadside to stretch your legs, the cavalcade pulls up a hundred yards or so away. For some reason, the security personnel always make a minute inspection of your stopping place after you have moved on. Perhaps they imagine that attachés may plant nefarious devices or hide messages to conspirators along the highways.

Roadside reception committees. Should an auto trip take you through a region in which military or industrial installations are located, the motor escort is usually deemed inadequate to keep a proper curb on your curiosity, and the local militia and troops from the nearest military base are turned out en masse. They stand guard at every intersection to prevent you from turning off the designated route. Along some stretches of road they are posted at 10-yard intervals to keep you from making an "unauthorized" stop, thus often calling

attention, like the smoke screen, to the very installation you are supposed not to observe. Running the gauntlet of such reception committees is generally bothersome, however, especially when they bar access to the only decent roads in the vicinity and require you to detour along rutted backcountry wagon trails to get to your destination. Frequently the only satisfaction an attaché gets from such a trip is the knowledge that the Soviets have tied up an inordinate amount of manpower to control his itinerary.

Phoney militiaman routine. Around cities it is not always feasible to have a guard posted at every corner when attachés happen to be in town, and a portable militiaman must be improvised. The militia are the uniformed police, whom you are legally required to obey when they flag your car down and tell you to turn around. Not so the security agent in plain clothes unless he shows his credentials, a revelation which security operatives are loath to make. To get around this difficulty, each auto-load of security men has in its kit a militia uniform which one of the operatives may put on as occasion demands. The car speeds ahead, the phoney militiaman jumps out still buttoning up his jacket, and you are hailed to a stop. This technique more or less effectively confines attaché sightseeing in the environs of a Soviet city to churches, cemeteries, and other approved cultural attractions.

Frequent interceptions on a drive about a large city may produce the curious result that you keep encountering the same phoney militiaman at widely separated points. Once in Leningrad an agent with a torn shoulder strap on his militiaman's uniform flagged us down several times in the same afternoon. As the crowd of onlookers would gather around we would ask him, each time a bit more caustically: "So it's you again. Haven't you got that strap fixed yet? Bozhe moi! you sure are setting a sloppy example for all the genuine militiamen in Leningrad!" His wrathful frustration was a pleasure to behold, for no one wants less than a security agent to become the butt of attention in front of a crowd of fellow-citizens: his next assignment might involve checking up on one of those same citizens.

"Road under Repair" routine. The pretense that a bridge is out or that a particular stretch of road is under repair is

often used to keep motoring attachés from reaching a destination the authorities do not want to declare formally out of bounds. On one occasion, when some travellers were told by local Soviet officials that they could not proceed to the town of Pskov because a bridge en route "had been washed out in a storm," they insisted on going ahead anyway. They had not got very far along the road when a truck full of soldiers sped past. A few minutes later they came to a small wooden bridge in time to see the soldiers beginning to take it apart plank by plank.

Kerosene in the crankcase. When other devices fail to discourage attachés from an undesirable motoring itinerary, there is always the alternative of a little midnight attention to their automobile. Cars which had passed a searching inspection before the start of a trip sometimes used to develop peculiar ailments after having been parked overnight in the courtyard of a Soviet hotel. I had a brand-new automobile, mileage still under 3,000, break down with burned-out engine bearings on a trip in southern Russia. Kerosene in the crankcase—hardly the work of a mere prankster—turned out to be the cause.

Indignant citizen act. The attitude of ordinary Soviet citizens toward foreigners is generally a combination of curiosity and friendliness. Deliberately hostile behavior is quite out of character, for ordinary citizens are aware that they can get into trouble by unsanctioned demonstrations of ill will. It is an obvious artifice, therefore, when planted agitators attempt to incite a crowd of Soviet citizens against attaché travellers. I recall a typical instance wherein two attachés were set upon while visiting the historic Kremlin of the city of Kazan.

The Kremlin, sitting on high ground, affords a distant view of the city's industrial suburbs. Apparently the Soviet authorities thought it best to deny this view to foreign attachés, but since the Kremlin was open to the public they had no plausible excuse for barring admittance. Professional agitators were therefore called into action to create a scene. They collected a crowd, ranted at the travellers, and threatened to shoot them if they did not leave the premises at once. When the agitators were asked to show their credentials, they

claimed to be "indignant citizens" who did not have to identify themselves. This tactic usually proves effective, for attachés cannot afford to become involved in altercations with Soviet citizens, however strong the provocation, lest they be officially accused of violating Soviet order. As on many similar occasions, the attachés in this case were harried off the streets and obliged to take refuge in their hotel room until time to catch the next train out of town.

The foregoing provides a sample of the harassments and petty subterfuges by which Soviet authorities prevent military attachés travelling in nominally open areas from making the most commonplace observations, observations of a kind which Soviet representatives in Western countries are perfectly free to make without hindrance. It seems reasonable to expect that nuclear inspectors, if they are admitted, will be faced with the frustration of these and similar obstructive contrivances.

COMMUNICATIONS TO THE EDITORS

The Military Attachés

Dear Sirs:

Lyman Kirkpatrick's "Unrecognized Potential in the Military Attachés"[1] is such a good summary of important considerations with which I have been closely concerned over quite a period of time, as a former G–2 and Army attaché now with CIA, that I cannot resist the temptation to comment on it. The article, affirming that attachés contribute heavily to our national intelligence and defending them against some of their critics, notes deficiencies resulting from the cross accreditation system; but its main burden is that attachés in many countries have a natural entrée, one that should be more fully exploited, to political leaders with a military background, and especially to junior officers who are likely to become the country's future leaders. In an extension of this thesis the author notes that of the many foreign officers that come to the United States for training a number have later turned out to be political leaders in their countries; he suggests that there is a great potential for intelligence and covert action operations in this situation.

Mr. Kirkpatrick's observations are all sound. If anything they are too conservative. The distressing thing about them is that they need to be made at this late stage of the intelligence community's development. For this reason I make bold to amplify his views, speaking in perhaps painfully plain terms, and make some further suggestions, particularly with reference to the role CIA should play.

The attaché system is recognized, at least in military intelligence circles, as an effective collection arm. As in any system, there are some weak individuals and features and some proportorial sins of omission and commission, but it is my observation that the percentage of these is very low indeed, comparing most favorably with that of any other group of U.S. intelligence collectors. Certainly there is continuous attention to the selection and training of attachés, to the guidance of collection, and to the evaluation of performance: the

[1] *Studies* IV 2, p. 1ff.

important practice of commenting on reports is, at least in the Army, on a sound and effective basis.

In the matter of distribution of attachés and the problems of cross accreditation, it would seem wise in the long run to work out a scheme of joint service representation by an attaché in residence. Most observers recognize that an embassy without a service attaché lacks an important component. Although in some cases the attaché's value will lie more in prestige considerations than in intelligence collection, that value is nevertheless a real one. The services have repeatedly wrestled with this problem and sought various joint ways of meeting it. I agree that the results of these efforts have not been quite adequate; but at least they have been made. Budgetary and personnel considerations may be at the root of the trouble. There is a role that CIA could play in this matter that is worthy of reconsideration.

Mr. Kirkpatrick is too diffident about the practicability of attaché contact with junior officers for assessing their potential. He need have no qualms on this point. Such contact is, as a matter of fact, a part of basic attaché guidance. While the situation varies in each country, a study of reports will show that most attachés can and do make these contacts. In friendly countries junior officers can be cultivated through all sorts of activities: one attaché organized an annual golf tournament between officers from two areas; one used to make it a point to attend any amateur dramatic presentations; an air attaché arranged that a delegation including junior officers visit U.S. military installations. Arrangements like these are difficult or perhaps even precluded where the atmosphere is unfriendly, but something can generally be developed.

One of the more disturbing aspects of Mr. Kirkpatrick's comments is that he finds it necessary to emphasize the political intelligence value of contacts with the military. This potential is recognized and stressed in guidance to Army and Air Force attachés, and although I do not know about the Navy, which has not combined its attaché training with that of the other services, I assume that its position is similar. Perhaps the civilian agencies need to be prodded; but to my knowledge the importance of military contacts has more than once been raised in CIA. If the needed U.S. interdepartmental

coordination is not in effect, the proper steps to capitalize on this important opportunity should be taken by command decision.

It is similarly disturbing that there should be a need to point out the intelligence potential of foreign officers studying in the United States. I know that the Army is alert to the situation, and I know that it has been brought to the attention of responsible persons in CIA. I know of cases where individual attachés have worked along these lines. But I also know of efforts to take advantage of this opportunity which failed to gain support. After a British officer, formerly a Leavenworth instructor, had spent time, money, and effort establishing informal contacts between UK and U.S. Leavenworth graduates in England, the expected U.S. help fell through. Remarking on Iranian and other foreign officers who wore with pride the badges of the U.S. schools they had attended, I was told there were no measures, not even subtle ones, being taken to keep alive this alma mater spirit. A project to provide a periodic news letter to foreign officers failed to win support. A regularized system for getting the kind of biographic data on foreign military students that Mr. Kirkpatrick advocates was deemed comparatively unproductive when proposed a few years ago.

It should be evident that activities like these would be highly useful and that they can be accomplished cheaply. We can, however, not rely on the armed services alone to carry them out. They constitute a project that needs centralized development and coordinated execution both in the interest of full coverage and for the sake of efficiency. Such a venture could advantageously be coordinated with other programs involving foreign officers that come to the United States for school and other purposes. CIA has the intelligence coordinating job. This is one part of it it should pursue.

Mr. Kirkpatrick's analysis does not cover three other aspects of the military attaché program which are of significance for the intelligence community—attaché-MAAG relations, CIA briefing of attachés, and collection coordination in the field. In the first, the ball is only partly in our CIA court, but in the others the next move is squarely up to us.

There are a great many papers and doctrines treating the relationship between attachés and MAAG's in the matter of intelligence collection, but their application is no simple matter; certainly it is not uniformly successful. While both our friends and our enemies assume that MAAG's as well as attachés collect information, we must maintain the fiction that MAAG's do not. Open recognition of their collection mission would in fact result in many embarrassments, because MAAG personnel lack understanding and skill in intelligence collection. Although a MAAG is for obvious reasons the dominating U.S. military influence in a nation while it is there, its job is to work itself out of business; and we cannot afford to let misguided views on intelligence collection damage the attaché collection system, the permanent mechanism upon which we will have to rely when the MAAG's are gone. It would be most logical that the attaché be given responsibility for coordinating the MAAG's collection activity with his own. A standing operating procedure covering the subject might be established whenever the attaché or MAAG chief is changed.

One item on which we can and should take action is the matter of CIA briefing of attachés. There are good Agency directives on this point, but the follow-through is spotty. We leave too much to busy and often too security-conscious persons who may lack confidence in the discretion or understanding of military personnel. It is to our advantage to make good briefings, and in my experience any personal foibles are evenly distributed: neither military nor civilian intelligence operators have a corner on good sense or on blundering.

Another place CIA can help is in better collection coordination in the field; this will be particularly needful under the new DCID's. Here the onus is strictly on us and on the embassy. One aspect of this coordination should be the development of a process for adjusting NIS collection responsibilities to the facts of the collection situation in the field. Responsibilities for formulating the different NIS sections, established after long and thoughtful study, fit the U.S. intelligence and government structure quite well. The same distribution of responsibility for collecting the information, however, does not always meet conditions in the field, sometimes because the

structure of the foreign government differs from ours, sometimes for other reasons.

To illustrate, the Army is supposed to collect information on railroads; but railroads often come under a part of the foreign government with which military liaison is impracticable or unwise. The supply and finance aspects of many foreign military forces are controlled by civilian agencies to which State might have best entrée. On the other hand, matters for which State is assigned responsibility are sometimes to be found in agencies with which the service attachés have unusually good contact. In addition, it often happens that personal relationships are such as to give opportunities for collection in fields outside assigned areas: one attaché had a golfing companion who gave good economic and political information, while a colleague in the political section of the same embassy had a lucrative contact in the general staff, and a USIS officer had one in the troop information service. Surely such opportunities should be exploited in disregard of bureaucratic allocations of responsibility. Finally, no matter how wise Washington may be, it often turns out that what seemed at headquarters to require covert collection in fact does not, and vice versa.

There is no reason why the collection responsibilities at each embassy should not be adjusted periodically to the facts of life. If necessary, agreements on this point could be reduced to writing and forwarded for official approval. Or if Parkinson's law and other bureaucratic propensities make such flexibility too difficult in Washington, the collectors should perhaps just go ahead and collect as convenient for them, give each other the appropriate credit in their reports, and let it go at that. Either from Washington or through its Chief of Mission, CIA should play a leading role in such a coordinating process. It can be done without prejudice to security if we are as skillful as we ought to be.

In summary, I agree with Mr. Kirkpatrick's views on the attaché system and its new horizons, with the reservation that what is needed in order to reach those horizons and certain other ends is for CIA to get moving. We have the men and the resources. All we need is the decision to act.

Peter J. Dorondo

Assessment by Graphology

Dear Sirs:

Keith Laycock's extravagant article in your journal on the use of handwriting analysis in character assessment,[1] which claimed for graphology the capability of disclosing personality traits ranging from talkativeness through capacity for abstract thinking to sex difficulties, was answered by Dr. Rundquist's skeptical appeal for scientific evaluation;[2] but you have now left the last word with James Van Stappen, who writes that there is no need for such scientific proof.[3] As a layman to both psychology and graphology but a professional in intelligence, I should like to take up the cudgels for science on behalf of all intelligence officers who refuse to be seduced by untested claims.

I note with pleasure that Mr. Van Stappen does not claim the swamiesque capabilities listed by Laycock. But neither does he deny them; and his smokescreen of European university citations and long bibliography do nothing to lift the veil of swami from graphology. That graphologists are sometimes the product of European rather than Indian universities does not preclude their being charlatans. A number of fakers have held degrees from first-line universities, especially from European ones; European schooling in psychology runs the gamut from excellence to pure fakery. Phrenology and astrology have had their day there, and physiognomics (the art of determining character by facial contours) is still in vogue in European police schools and seriously studied at leading universities. Only two years ago, the Chief of Training of a European intelligence service asked which American university he should write to for a bibliography of American scholarly works on physiognomics! The fact that graphology is seriously studied in Europe does not make it a valid science. Nor does a long bibliography make it valid: there are extensive bibliographies on astrology, phrenology, and physiognomics too.

[1] *Studies* III 3, p. 23.
[2] *Studies* III 3, p. 45.
[3] *Studies* III 4, p. 49.

The live illustration given in the Van Stappen article demonstrates changes in a single individual's handwriting as that individual underwent a disturbance. Even in the United States, where graphology has not been generally accepted because scientific testing has not validated its claims, psychiatrists in some cases use graphology as one of many tools in their attempts to probe the roots of a mental disturbance. Van Stappen's case is a valid example of such use. Periodic testing of an agent's handwriting by competent psychiatrists may tell whether he is undergoing emotional strain.

It is also possible that graphology, used as a tool by professional psychologists, may have a place in agent assessment; but the Van Stappen article does not show this, and by failing to deny the claims made by Laycock it implies acceptance of them. Its description of the Lewinson method is interesting, illustrating a device for graphic representation of differences in samples of handwriting. But it leaves us in the dark as to the next step—how one can determine an individual's "disposition to talk," for example, from a single sample of handwriting. Its silence in this respect leads one to suspect that the author is afraid to lay his cards on the table or submit graphology to scientific checks.

The article lists four other categories of cases where graphology may be of assistance because it is the "only available method—the unknown source who supplies your agent information, the agent who refuses to submit to ordinary assessment, the VIP who cannot be asked to undergo tests, and the writer of anonymous letters." These are cases in which we are interested, but no examples of how successful graphology may be in such cases are offered. The fact is that these are situations where no controls for scientific investigation are available, and operations chiefs and case officers who use this "service" therefore have nothing upon which to base an estimate of its value. With Dr. Rundquist, I am afraid of unwarranted credence in graphological findings until we have a statistically valid comparison of the performance records and standard assessments of individual agents matched against their graphological assessments under controlled circumstances.

I am not one of those too skeptical to try out graphology. But I will refuse to consider it seriously until a methodical validation of its use for intelligence purposes is carried out. I have had experience with its misuse and the dangerous consequences thereof, and sincerely hope that its advocates will have the courage to submit it to scientific tests instead of appealing to the "authority" of European universities and a bibliography which beclouds the question by citing a number of works that have absolutely no application to the points at issue.

Peter Showell

Jet-Age Reporting

Dear Sirs:

A well-known Washington plumber once answered an irate housewife's complaint that after his ministrations the water tasted terrible, "Dear lady, all I do is handle the pipe. What goes in and comes out ain't my department." Like the plumber, the designer of our jet-age reporting system[1] has designed a many-splendored network of pipes without adequate attention to either input or outflow. He has made only a half-hearted attack on the real problem vexing intelligence collectors and users since Eve failed to recognize the significance of the biological intelligence she received from the first E–5 source, SERPENT (fnu).

In his system overt, marginal information, or information responsive to a parochial request not even remotely related to a set of priorities, is carefully reproduced by the perforator unit of a standard M–19 teletype machine, with its rows of up to five holes in different position combinations, each representing a letter or function punched on the keyboard of the machine. This is then fed with loving care into a flexowriter, by-passing all intelligence criteria, and sent on its mechanistic way to a staff communications group, where it is put into permanent form and disseminated. Bilge is thus mingled indiscriminately into the untreated effluent of the pipeline. One can imagine that over every automatic machine in this vast jet-age system there hangs mockingly a sign which reads "THINK."

The jet-age contraption really reaches its ionospheric apogee when the afterburners are turned on. The feedback to dissiminators (machines!) and the feedback to collectors are the ernier burners which are supposed to impart the correct azinthal attitude control. Every analyst can then influence rectly the orbit of our intelligence missile, and every punch- nuance can have its impact in space. We can confily look forward to some analyst's query as to whether the n is *really* made of green cheese; and we can be sure that, e absence of any critical control, the green cheese rements will carry priorities equivalent to those on the ca-

[1] William Earling, "Design for Jet-Age Reporting," *Studies* IV 2, p. 7.

pability of submarines lurking in the Chesapeake Bay. Bilge, untreated effluent, and green cheese in the feed-back hold great promise of causing a flame-out in our intelligence missile in outer space.

Francis Tempone

* * *

Dear Sirs:

Even in the jet age there are still areas in which the analyst does not need to get his field report within a week, areas in which pouch reporting is adequate and even preferable to more rapid channels. Much economic intelligence falls in this category. Among the very best economic reports are detailed documentary lists and studies which are best presented in upper *and* lower case, with full punctuation and adequate attention to proofreading. Speed of transmission is only a minor factor in presenting such information to the proper customer.

A great deal of other good information is being reported satisfactorily by pouch. True, there is much marginal and bad information arriving daily by pouch, to be disposed of at leisure by area desks, not rushed to customer analysts. We should be well advised to leave this pouch channel open and allow the inevitable flow of marginal information to settle there. Faster channels will not improve the judgments of field reporters, and unless there is a careful screening of incoming information by officers with specialized area knowledge there is real danger that more speed will not mean more quality, but rather the opposite.

Your jet-age writer, conceding that "formal collection requirements alone cannot do the job" of controlling quality, seems to believe that formal requirements plus numerous rapidly transmitted evaluations can. No one would deny the usefulness of requirements, especially in fields where collectors need support from technical specialists; but already too much effort has been devoted to generating requirements which any red-blooded intelligence officer would take for granted or which bear no relation to existing collection potential. There are fields—politics, for example—where requirements are feeble aids indeed and where one politically alert case officer is worth more than volumes of questions unrelated to the facts of any specific operation.

As for his "new system for rapid and frequent user criticism of individual reports in order to point up good material and weed out at the source any information below the level of significance for the intelligence community," those who have observed the impact of customer evaluations on field operations will be unimpressed. While evaluations from customer analysts range from very useful to counterproductive, their net effectiveness in guiding the collection effort is not very high. Furthermore, because they are normally prepared by persons unaware of what access and potential the producing sources have, even good evaluations of a report at hand are not very helpful regarding problems of further exploitation. With respect to significance of information, customer evaluations in general are not thorough enough in their review nor well enough coordinated with the scale of priorities to provide a reliable guide. On the big question of which sources to terminate and which to encourage, their impact, if any, is difficult to detect.

Bad evaluations, on the other hand, can have a negative effect. And so many evaluations are prepared cursorily, in haste, that perhaps we should try rather for fewer evaluations to which more time could be devoted. It is not uncommon that evaluations indifferently prepared or unrelated to existing priorities serve to encourage the marginal operational activity which we are striving to eliminate. The prospect that they might be fired indiscriminately to the field in greater numbers is frightening to contemplate. It would certainly do more harm than good.

In any age, information from a source with real access to a good target looks impressive even when it is a few weeks old; but in the horse-and-buggy age, the marginal product from not-very-well-placed spies must have looked like old lettuce leaves by the time it finally arrived at headquarters. Possibly we have been somewhat slow in eliminating marginal operations because rapid communications have given their product enough timeliness to make them appear worth while. Why don't we try reporting all but the very best information by pouch for a few months and see which sources are being upheld just by the rapid transmission of their marginal output? Sources with no real access will wither and grow cold in the

weeks required for a pouch report, and it will be easy to terminate them. This practical approach offers better prospects for refining intelligence collection than a mechanistic scheme for greater speed.

E. H. Maydalle

...ticles and book reviews on the following pages are un-...sified and may for convenience be detached from the classi-...body of the *Studies* if their origin therein is protected. ...uthors of articles are identified in the table of contents ...ing page 1.

...editors gratefully acknowledge the assistance of Mr. ...Pforzheimer, Curator of the CIA Historical Intelli-...Collection, in scanning current public literature for in-...nce materials, and of the many intelligence officers who ...ed book reviews for this issue of the *Studies*. Most ...rthy in this respect are the following:

...s *The Stages of Economic Growth* ..
...*The Nili Spies* .....
...n Propaganda .....
...*The Man They Couldn't Kill* ....

Aspects of a classical scouting and resistance-leading unit behind Japanese lines in Burma, from the viewpoint of its commander.

INTELLIGENCE OPERATIONS OF OSS DETACHMENT 101

W. R. Peers

For Detachment 101 intelligence was an all-pervasive mission. The Detachment did plan and carry out espionage operations specifically to collect both strategic and tactical information, but intelligence was also a by-product of all its other operations, including guerrilla actions, sabotage, and psychological measures. Its intelligence activities were therefore augmented rather than decreased when large-scale guerrilla operations were initiated in the spring of 1944.

Early Operations

The history of Detachment 101 began in the spring of 1942, when a small group of officers and men was assembled in Washington under the Office of the Coordinator of Information. Captain (later Colonel) Carl Eifler was the first commander. After a short period of training and equipping, the unit shipped overseas to the China-Burma-India Theater. In the summer of 1942 it received its first directive from General Stilwell, short and to the point: "Establish a base camp in northeast India and from there plan and conduct operations against the roads and railroad leading into Myitkyina in order to deny the Japanese the use of the Myitkyina airfield. Establish liaison with the British authorities to effect coordination with their operations."

The remainder of the year was spent in locating and developing a base camp in Assam Province of northeast India and in recruiting and training agent personnel for subsequent operations. An office was established in Calcutta to receive supplies from headquarters in the United States and to procure

bulk goods from the Army Service of Supply. At that time there was available no small, portable military or commercial radio capable of transmitting from northern Burma to Assam, a distance of 200 to 500 miles. Accordingly it was necessary for the unit to design and construct its own radio set. The result was crude, but it worked well. It became the model from which the SSTR series of sets was built by OSS, which by now had succeeded to the intelligence and paramilitary function of COI.

In 1943 exploratory field operations were carried out in Burma on a trial-and-error basis. Some of them were failures; but they taught us many lessons as to what could be done and, even more important, what should not be done. By the end of the year six base camps had been established behind the lines in northern Burma, three east of the Irrawaddy River and three to the west. Each of these had recruited and trained a small group of indigenous Kachin personnel for local protection and to perform limited operations, principally simple sabotage and small ambushes. Each also trained a few native personnel as low-level intelligence agents, who reported their information by means of runners or via the bamboo grapevine. From the field bases this information was forwarded to the base camp in India by radio. By the end of the year it was possible to assemble a fairly comprehensive picture of Japanese strengths and dispositions in northern Burma.

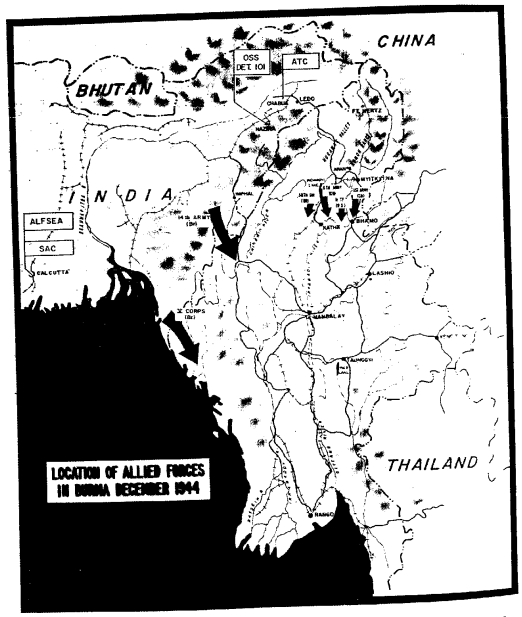
The field bases also selected native recruits for more intensive intelligence training. These were flown by light aircraft or infiltrated through the Japanese lines to the airfield at Fort Hertz in the northern tip of Burma and thence flown to the base camp in India. Their training, of three to five months duration, followed the normal curriculum for intelligence agents. The Kachins were particularly adept at CW radio communications; by the end of the course most of them were able to operate at 25 to 45 words per minute. When their training was completed, some of them were returned to their field bases to expand local information procurement and others were parachuted into Burma for independent operations.

The Myitkyina Campaign

With the initiation of orthodox military operations in the winter of 1943–44 by the Chinese ground forces, later augmented by Merrill's Marauders, General Stilwell directed the Detachment to expand its guerrilla force to a strength of approximately 3,000 in order to assist in the drive down the Hukawng Valley and the eventual attack on Myitkyina, and also to extend its intelligence operations south of Myitkyina at least to the area of Bhamo and Katha. He made available the arms, ammunition, personnel, and airlift necessary to fulfill this directive. He also stated that should the Detachment be successful in providing this clandestine support to the combat forces, approval would be forthcoming to expand its guerrilla forces to a strength of 10,000, with a commensurate increase in intelligence and other operations.

That the Detachment was indeed successful in this assignment can be illustrated by several incidents from the Hukawng-Myitkyina campaign. The final drive on Myitkyina was made in May 1944 by the Galahad Force (Merrill's Marauders and two Chinese regiments) across the Kumon Range and thence south through Arang to the Myitkyina airfield. Detachment 101 assisted this movement by providing two companies of Kachin guerrillas to reconnoiter and screen the front and flanks. When the Galahad forces reached Arang they picked up additional guides and scouts from a Detachment field base located there. One of the scouts, who had been bitten by a poisonous snake and was so weak that he had to ride horseback, nevertheless led the Galahad Force to the airfield over some old unused trails, completely surprising the Japanese. The airstrip was thus occupied with but little resistance. The part played by the Detachment in this operation points up the interrelationship between its intelligence and other activities.

A day or so before the Galahad Force seized the airfield, Detachment 101 had some of its agent personnel in and out of Myitkyina town. They estimated the Japanese strength there at that time to be only approximately 300, and this information was given to the Northern Combat Area Command and the Galahad Force. After the airstrip was seized, two Chinese



units were therefore assigned to secure the town. It was to be a double envelopment, one Chinese unit moving north along the Irrawaddy River and the other attacking from the west. All went well until the two converged on the railway station in the center of town at about dusk. It has been reported that Japanese snipers between them started picking them off. Whatever the reason, they soon became heavily engaged with each other and inflicted such severe mutual casualties that they had to be withdrawn. The attempt at an early seizure of the town thus came to nought.

It was two days before the forces were reorganized and made another assault on the town, and when they did they encountered a hornets' nest. In the interim the Japanese had reinforced the town from every direction. They came by road and railroad from Mogaung to the west, from the supply installations to the north along the Irrawaddy, from Maingna and Seniku across the river from the town, and from elsewhere. Within two days, it was estimated, Japanese strength in the town had been augmented to over 1,500, by the end of a week it exceeded 3,000, and it still continued to grow.

This build-up was so rapid as to create for a while the feeling in some quarters that our original strength estimates must have been wrong. But Detachment intelligence agents and guerrilla patrols placed along all the access roads and trails leading into the city confirmed by observation the frantic effort of the Japanese to reinforce the garrison. And subsequently the interrogation of Japanese POW's by NCAC and Galahad intelligence staffs verified as proximately accurate the 300 figure which had been provided by the Detachment. The only discrepancy was in the other direction: an original strength figure of 275 for the Myitkyina garrison was obtained through the interrogations.

The battle for Myitkyina town continued beyond June and into the monsoon. Meanwhile Detachment 101 had expanded its activities to the south as directed by General Stilwell and was providing intelligence and operational support to the combat forces. By the time Myitkyina fell to the allied forces in August 1944, the Detachment had organized its guerrilla forces across an area generally 100 miles farther south and was well on its way toward its ultimate strength of 10,000. Intelligence operations were also increased, and espionage groups were deployed along Japanese lines of communication as far south as Toungoo, approximately 400 miles away.

Mandalay and Beyond

In the fall of 1944 the allied forces in northern Burma opened their drive from Myitkyina toward central Burma. Detachment 101 moved its guerrilla operating area to a line generally through Lashio to Mandalay and thence to the Chindwin River and the India border. At that time it reached its greatest strength and highest stage of development. In the area

of Lashio there were seven separate battalions, each capable of independent operations. North of Mandalay there were approximately 2,500 guerrillas, organized into units of varying size, depending upon the local situation. To the west, between the railway corridor and the British 14th Army in the Imphal area near the India-Burma border, lay a stretch of over 250 miles in which no allied combat forces were operating. Through this gap ran a series of parallel corridors, excellent natural approaches for the enemy to the Ledo Road being constructed behind the allied combat forces. General Sultan, who had succeeded General Stilwell as Commanding General NCAC, directed Detachment 101 to utilize its guerrilla and intelligence resources to block these several approaches. Guerrilla forces were accordingly deployed in each of them, and with information supplied through intelligence activities were able—although not without some severe fighting—to fend off several Japanese probes through the area.

Intelligence operations during this phase of the campaign were widely developed and reached their greatest degree of reliability. There were over 100 operations involving in excess of 350 agent personnel. Through these and the collection of information by the guerrilla forces, Detachment 101 was able to stay abreast of the changing organization, deployments, and strengths of the Japanese forces. In fact, its intelligence officers probably knew at least as much about the Japanese tactical organization and capabilities as the Japanese themselves did.

When Lashio and Mandalay were captured by allied forces, the Detachment was directed to withdraw its forces from the field and inactivate. Soon, however, the combat situation in southern China became extremely critical, and it was necessary to withdraw all Chinese and American combat forces from northern and central Burma to try to stem the Japanese drive there. General Sultan therefore directed the Detachment to reconstitute whatever force was necessary to conduct a mopping-up operation in the southern Shan States and seize the Taunggyi-Kengtung road, the Japanese escape route to Thailand. Most of our intelligence operations had been retained, fortunately, so there was a sound basis for embarking on this assignment: with some of the Kachin guerrillas as a nucleus, a force approximately 3,000 strong was organized into four battalions. The Japanese, however, had evidently not been told that this was to be a mopping-up operation; it resulted in some of our bloodiest fighting of the war. In less than three months the Detachment's forces killed over 1,200 Japanese and suffered more than 300 killed in action themselves, far more than in any other period. When the escape route to Thailand had been secured, Detachment 101 was inactivated. This was 12 July 1945.

Requirements and Collection

Intelligence requirements on the Detachment stemmed from a variety of sources. Tactical information was required chiefly by Headquarters NCAC, its subordinate commands, and the 10th Air Force, but requests were also received from the British 14th Army and Headquarters Allied Land Forces Southeast Asia. Information of a strategic type would be requested by higher OSS headquarters, CBI Theater Headquarters, and the allied Strategic Air Command under General Stratemeyer in Calcutta. Detachment 101 itself required information of all varieties for planning and conducting its field operations.

With the NCAC, broad intelligence requirements were normally received from the Commanding General in conference. Specific requests came through the Detachment's liaison officer maintained on his G–2 staff. The same general procedures obtained with the 10th Air Force. On the basis of these requirements, along with all others, an intelligence plan would be drawn up, outlining the information to be obtained, the probable target areas, and the likely sources. If sources were already available in the target area, they could simply be asked for the information through normal communication channels. When sources were not available, it was necessary either to adjust operations to obtain the information or to plan new intelligence operations, for which indigenous personnel would have to be recruited, trained, and infiltrated.

The infiltration of agent personnel into proposed areas of operation was effected by parachute or light aircraft or along land routes. The infiltration procedures were in general similar to those used in other theaters of war; but there was one

device we employed that involved a unique use of pigeons. Each agent parachuted behind the lines had attached to him a small bamboo cage just large enough to hold a pigeon by which he could report the condition of the radio that had been dropped along with him. After the agent had landed, cleared the drop zone, and had an opportunity to test his radio, he would release the pigeon, preferably near daylight, with a coded message either indicating that all was well or giving instructions when and where to drop another one. For ranges up to two or three hundred miles the pigeons were highly reliable; beyond 400 miles their dependability decreased rapidly.

The intelligence requirements levied on the Detachment were such that almost anything taking place behind the enemy lines was of interest. Primary emphasis was placed upon military information, such items as the strength, identity, and movement of Japanese units, details on supply installations, airfields, and equipment, and whatever else was required to provide a continuous, composite picture of the enemy situation. Much terrain information was also reported, principally on the condition of roads and railroads, the water level and fordability of streams, and the location of potential airfields and drop zones. Since most of the Detachment's personnel were indigenous to the area and intimately familiar with its physiography, this information was rather easy to assemble and report. Economic, sociological, and political intelligence was also in great demand in higher OSS headquarters in the theater, in such agencies as OWI for psychological warfare operations, and in air units for pilot briefing and survival training. It was also needed by the Detachment itself both for morale operations aimed at psychological subversion and for developing agent cover.

The main sources of information were the numerous intelligence agents trained at the Assam base or in the field. Each major field unit had an intelligence officer, usually an American but in some instances a foreign officer or an indigenous recruit trained for the position, whose principal duties were to interrogate captured enemy soldiers or agents, debrief guerrilla personnel, and direct the activities of the espionage agents assigned to the unit. Intelligence personnel at the forward operational headquarters and at the base camp were also engaged in collecting information, principally through interrogation of prisoners and debriefing of operational personnel returned from the field.

Weather and Air Targets

In conjunction with Air Weather Service of 10th Air Force, the Detachment developed a capability for collecting and reporting weather data. The Weather Service provided the equipment, instruction, and weather codes. These were given to selected agents who were then so dispersed, singly or with other groups, that in the aggregate they provided coverage of all of central and northern Burma. According to the A–2, 10th Air Force, this service was of considerable assistance in developing meteorological forecasts for cargo flights over the "hump" and for tactical air operations in northern Burma.

Of especial interest were some of the procedures used in reporting air targets for the 10th Air Force. In the lower reaches of the Hukawng Valley an intelligence agent worked out some simple but ingenious ways to pinpoint and report Japanese supply installations concealed by dense jungle foliage. One method was to select a landmark such as a trail junction, bridge, or prominent tree which could be identified readily on an air photo or by the pilot of the fighter-bomber aircraft. From the landmark the location of the target was given by polar coordinates (distance along a given azimuth). Another method was to lead the pilot from such a landmark to the target by a series of reference points.

Numerous Japanese installations located by these means were bombed or strafed without the pilot being able to see his target; huge explosions or fires erupting through the trees would indicate a successful attack. The Japanese knew that something was amiss. Since the targets were completely hidden from the air, they deduced that the attacks were being directed from the ground and suspected the Kachins. They accordingly restricted entry to their supply areas and would shoot a Kachin on sight. To protect the Kachins these operations had to be suspended for a time.

In the later phase of the Burma campaign procedures were worked out with the 10th Air Force for immediate air strikes against targets of opportunity. Pilots flying air alert and

agents on the ground were given duplicate sets of air photos with a special grid superimposed. To obtain action against a target the agent would send a coded radio message specifying the type of target and its grid location to the Detachment's forward operations headquarters, located in the immediate vicinity of Headquarters NCAC and the 10th Air Force. 10th Air Force would relay this to the pilot in the aircraft, and after a normal elapsed time of 20 to 30 minutes from the origination of the message an air strike would be made on the target.

Transmission Channels

To expedite the flow of intelligence to user agencies the Detachment established comprehensive handling and transmission procedures. All messages from the field came in to the forward operations headquarters, where field operations were coordinated by an operations officer and a staff including members of the morale operations, intelligence, resistance, and other sections. The intelligence personnel on the operations staff screened all incoming information. If it was of an urgent nature, it was given a hasty evaluation and immediately dispatched to the using agency. Other intelligence messages were routed to the intelligence section for review and subsequent transmission to user agencies on a routine basis.

Detachment 101 had liaison groups with each of the major combat commands it supported—NCAC, 10th Air Force, British 14th Army, and ALFSEA. These officers represented the Detachment in all operational matters, an arrangement that served to enhance their stature and give them considerable prestige in their intelligence dealings within the headquarters. Intelligence-wise, they were responsible for accepting information requests from the headquarters and forwarding them to the Detachment, for passing information and intelligence received from the Detachment on to the intelligence staff, and for representing the Detachment in all other intelligence matters. Information was transmitted to NCAC and the 10th Air Force by teletype and could be moved most rapidly. The communication link with 14th Army and ALFSEA was radio, which required additional time for coding and transmission; the elapsed time, however, was sufficiently small that it could be measured in terms of minutes.

Field liaison groups were also maintained with the Chinese 1st and 6th Armies, the British 36th Division, and the Mars Task Force, which had succeeded Merrill's Marauders. These liaison groups were small, normally consisting of one officer (generally one with considerable field experience) and a radio operator. They performed intelligence functions comparable to those of the higher headquarters liaison groups.

The intelligence transmitted via radio and teletype was summarized and supplemented in the Detachment's weekly and monthly situation reports, distributed through ordinary military messenger service. These were given fairly wide distribution in the theater, going to approximately 100 agencies.

Reliability and Security

Detachment personnel concerned with the evaluation of information arrived at some unusual conclusions. They found, for example, that information reported by the Kachins was generally highly accurate, but that their reports of enemy strength were almost invariably about three times the actual figures. Strength reporting was then stressed in the training program to the extent that the pendulum swung the other way, and the strengths given in Kachin agent reports were so underestimated that they had to be increased by a factor of three. It was not until the winter of 1944–45 that it was possible to obtain reliable strength figures from Kachin personnel. Other ethnic groups were found to have comparable traits, more or less uniform within each group. The evaluators developed correction factors for the Shans, Chins, Burmese, Padaungs, and even the remnants which had remained behind in Burma from the original Chinese Expeditionary Force. All of these groups overestimated strengths, but the Chinese grossly exaggerated them. Their strength figures had to be reduced approximately ten times, and this practice remained constant to the end of the campaign.

The Detachment's counterintelligence operations were purely defensive, designed to protect it and its field operations from infiltration by enemy agents. The number of counterintelligence personnel assigned was consistently small, 3 to 5. They arranged for the physical security of base installations and for the indoctrination of U.S. and indigenous personnel.

The indoctrination was concerned principally with the methods used by Japanese agents to penetrate and mislead allied clandestine operations and with means for isolating such agents. Counterintelligence functions in the field were the responsibility of the Area Commander or Group Leader in charge of a unit. As a general rule the commander relied mainly on his intelligence officer to ferret out enemy agents, uncover double agents, and of course determine what should be done with them. The Detachment attempted to make all personnel security- and counterintelligence-conscious for their own benefit and to avoid attracting undue attention to the clandestine activity. As a result, the security of the Detachment and its operations, despite some minor infractions, was very good. Not a single agent or operation was known to have been eliminated through enemy intelligence penetration.

Appraisal

Detachment 101's two principal intelligence consumers made attempts to weigh its intelligence contribution to the northern Burma campaign. G–2, NCAC, estimated that it provided between 80% and 90% of all of the combat intelligence utilized by that headquarters. The 10th Air Force reported that it furnished up to 70% of its usable information and designated between 90% and 95% of its air targets. In addition, the Detachment was one of the principal sources of bomb damage assessment information for the 10th Air Force and for SAC. No attempts were made to measure the intelligence contributed to other headquarters, but letters of appreciation showed that it was welcome and considerable. This intelligence was also an indispensable ingredient in the development of the Detachment's own resistance and other clandestine operations.

Units comparable to Detachment 101 collected information behind the lines in France, Italy, the Philippines, China, and other areas. In the aggregate they represented an immense intelligence capability of a type for which, if there should be another war, there would in all probability be a strong requirement. Each of these operations, however, experienced growing pains, and there was a lag time of from one to two years before they were able to produce tangible results. It would be highly desirable, therefore, that the personnel who

may be used in such operations in the future should be so oriented, trained, and organized that this critical lag could be minimized. How this is to be accomplished appears as a pressing and continuous problem for the intelligence community.

Academic studies in international relations might usefully be supplemented by a course in intelligence processes.

FOR COLLEGE COURSES IN INTELLIGENCE

The transition in the U.S. national posture accomplished during the first half of this century, from a seeking of security in isolation to recognition that our national welfare depends upon active participation in international politics, had its corollary in the academic world. Many non-government organizations, foundations, universities, and colleges have played an important role in increasing the public knowledge and administrative skills prerequisite to effective U.S. action in the international arena. A wide variety of new courses and entire schools have been devoted to foreign affairs and international relations, and additional ones still continue to be established.

The new public interest in global matters has by and large, however, not been extended to intelligence and the principles and processes by which it is prepared. At the end of World War II there was, to be sure, the debate about Allied intelligence in the Bulge, the congressional inquiry into the Pearl Harbor surprise, and a good deal of general regret for the lack of pre-war interest in intelligence, to which General Eisenhower contributed with comments in *Crusade in Europe*. But this kind of soul-searching was confined largely to official circles. In the academic world, I believe, U.S. intelligence is treated only in its strictly military aspect, in specialized ROTC courses. There have been academic studies dramatizing business espionage [1] and some pedagogical treatment of research methods applicable in intelligence, but no college training in the subject as a coordinated whole.

There are good reasons why this has been so. Intelligence traditionally and for the most part necessarily does its work behind the scenes, and its influence on the national welfare seldom strikes the public eye. Nor does this country have be-

[1] For example *Competitive Intelligence*, by students at the Graduate School of Business Administration, Harvard University, reviewed in Intelligence Articles IV 2, p. A46.

hind it the centuries of international leadership which developed the acknowledged British competence in intelligence and made the British public proud of it. Now that the United States has come to occupy the center of the international scene, the role of intelligence is well recognized among officials of the government; public interest and academic concern have yet to be awakened.

There are signs of a public awakening, however. Commentators showed concern over faltering intelligence on Chinese Communist participation in the Korean War, on the strength of the Ho Chi Minh forces in Indochina, and on the British-French-Israeli Suez venture. More recently a persistent and widespread discussion of intelligence processes has been set off by the Senate inquiry into the "missiles gap." Cartoonist Berryman's J. Q. Public, worried by the intelligence estimates controversy and saying, "I wish someone would explain it to *me*," seems to represent truly a deep interest and a legitimate requirement of the U.S. citizen. The U–2 incident and its repercussions at the summit are certain to give this interest a new impetus.

It is the thesis of this paper that the awakening public concern with intelligence offers our universities and colleges an opportunity and a challenge—the opportunity to take advantage of a rising interest and to meet a clear need, and the challenge to meet it effectively and thereby ultimately contribute to improving U.S. intelligence doctrine and competence.

It is suggested that a good beginning could be made by establishing a basic course of study in the meaning of intelligence, its significance as the foundation for policy planning and a guide for operations, how it plays those roles, and the principles and processes by which it is produced and formulated. Such a course should not be narrowed to the specialties of political or military intelligence, but develop broad principles applicable in all fields. It should highlight the concept of intelligence and intelligence processes as a critical factor in almost every form of human social endeavor—economic, scientific, and cultural, as well as military and political—being essentially a processing and use of facts and a making of judgments in a logical program for a specific purpose.

The intelligence course would apply the teachings of many academic disciplines. Specialists in economics, politics, sociology, and logic, in written, oral, and visual presentation could among others be used in the instruction. The program should be framed and guided, however, by a competent teacher with extensive and well-rounded intelligence experience, not merely a few years in some particular intelligence field. The course would need to run through two semesters at three class hours per week, and should be offered to students at the graduate or at least immediately pregraduate level. Lectures should be minimized in favor of reading, discussion, conferences, and practical exercises. It would not be proposed in this basic course to cover the history of intelligence or to go deeply into special problems involved in the guiding of the intelligence effort by its users and its application in the conduct of operations. Some of these subjects could be incorporated into existing courses in international affairs, others would be left to separate advanced courses as the program developed.

The course in intelligence fundamentals, taken by the student at point of maturity, would have the broad educational advantage of employing and expanding his earlier learning and making it meaningful within a single coordinated, purposeful program. It would be of direct value to students contemplating government service, whether in intelligence or elsewhere, and of cogent interest to the intellectually inquisitive heading for careers in most fields of private enterprise. More importantly, perhaps, since our government is one responsive to the will of informed citizens, it would provide an indispensable ingredient to those studies of the policy-making and decision-reaching process which presently loom so centrally in university courses devoted to creating an informed citizenry in the fields of public administration, foreign affairs, and international relations.

All too generally such courses treat only the policies made and the mechanisms through which they are effected. The heart of effectiveness, however, in public administration or the conduct of international affairs is the making of sound decisions, and these must be based on what in broad sense we call intelligence. In present curricula the student seldom has the opportunity to learn what kinds of raw materials are

needed or how they are collected and consolidated to give the unitary understanding essential in formulating sound plans and guiding their execution.

Even a prospective business executive should learn not only the principles of economics, commercial and industrial organization, corporate finance, and the other usual subjects, but also what kinds of facts he needs to know in applying these principles and how such facts can be collected, evaluated, and consolidated for use in planning. Study of the intelligence process can bring home to him the need to take into consideration kinds of factors of which he might otherwise not be aware. For the student in foreign relations the study of the production and use of intelligence is of more immediate application, bringing out the importance of factors such as cultural differences, economics, and religion, which present college courses rarely treat in a meaningful way. In short, such study should round out a student's understanding of his chosen field, no matter whether it lies in sociology, politics, or business, and help him to become the kind of citizen demanded by the role this country must now play on the stormy international scene.

differentiated and repugnant threat to their security, much like Soviet espionage and subversion in U.S. eyes.

SOVIET PUBLICISTS TALK ABOUT U. S. INTELLIGENCE

Peter Deriabin, in *The Secret World*,[1] recalls that an old Soviet pamphlet on the subject of U.S. intelligence treats the CIA, CIC, Naval and Air Intelligence, and even the FBI as components of a single organization. This concept is entirely in accord with the standard Soviet public attitude, which regards U.S. intelligence as a distinct service or function in which many different U.S. government and private agencies may participate at one phase or another. The Soviets most often, therefore, refer generically to "U.S. intelligence," ignoring the niceties of bureaucratic organization. When they do mention individual components of the intelligence community, they are likely to blur or confuse their operational roles. If this imprecision seems a deliberate device to permit indiscriminate name-calling or to hide what they do know about U.S. intelligence organization, one should recall that U.S. citizens, officials, and even intelligence officers are likely to discriminate poorly among the several Soviet intelligence agencies, which have nevertheless been thoroughly described in Deriabin's book and others.

Spies of the State Department

The espionage activities of U.S. intelligence are generally depicted as being carried out under the guidance and direction of the State Department by virtually every group or individual that deals in any way with foreign governments or peoples. Several Soviet sources have recently described the State Department's Bureau of Intelligence and Research as "the liaison link between striped-pants diplomats and the cloak-and-dagger personnel abroad." All U.S. embassy personnel are presumed to be involved in espionage activities directed against the Soviet Bloc. A Kozev article in *Pravda* alleged that Gen-

[1] Doubleday, 1959. Reviewed in Intelligence Articles IV 1, p. 109.

eral Bedell "Smith's guidance [of the Moscow Embassy] was notably distinguished by the fact that he forced literally every single member of the staff, down to the last clerk and regardless of the department in which he was employed, to engage in intelligence work."

The Soviets see verification of the relationship between diplomacy and espionage in such facts as General Smith's having been posted, after his tenure as Ambassador to the USSR, first to CIA and then to State, in Admiral Kirk's position in Naval Intelligence prior to his assignment as Ambassador to Moscow and his subsequent chairmanship of the American Committee for Liberation, and of course in the teaming of the Dulles brothers at the head of the twin foreign affairs agencies. Over the past eight years Soviet spokesmen have frequently quoted Annabelle Bucar's *The Truth about American Diplomats*,[2] particularly the examples she gives to show that "intelligence agents are sent to the USSR under various guises: as counsellors, second and third secretaries, attachés, and even ordinary clerks." Khrushchev's 9 May 1960 remark at the Czechoslovak Embassy exculpating Ambassador Thompson of complicity in the U–2 incident was a benign exception to the general view that there is no cleavage between U.S. diplomats and U.S. espionage.

A book by I. Nikitinsky, *The Perfidious Methods of the Subversive Activity of Imperialist Intelligence Services*,[3] comments on the excellent espionage training given U.S. diplomats. It says that the student body at Columbia University's Russian Institute is made up primarily of Foreign Service officers, cadets from West Point, and students from the Naval Academy, and that the Universities of Indiana and Pennsylvania, Yale, and the Air Force School at Syracuse University have similar spy-training programs.

The State Department is also considered the focal point for espionage against the USSR done by official and unofficial groupings as diverse as the Ford and Rockefeller foundations, MSA, ICA, IBRD, the Jehovah Witnesses, the Rand Corporation, the Vatican, the IRO, journalists, correspondents, and

[2] Republished in the Soviet Union by *Literary Gazette* in 1950.

[3] Moscow, 1954.

many others. Moscow University students have been cautioned particularly against tourists, "50 percent of which are spies connected in one way or another with American intelligence." A 4 February 1960 *Red Star* article on the "U.S. espionage octopus" pointed out to Army personnel that "American intelligence employs military attachés, diplomats, and other official and unofficial observers as spies." Such warnings were given with increasing frequency as East-West exchanges and tourism were expanded.

In general, the Soviet military press carries more material on U.S. intelligence activities than say *Pravda* or *Izvestia*, with the obvious purpose of maintaining a high state of counter-espionage alert within the Soviet military. Although U.S. military attachés are described as the main link to the intelligence organs of the armed forces, the distinction between military and other intelligence is generally presented, as by a 13 March 1959 *Red Star* article, as a purely functional breakdown: the military attachés are primarily concerned with military dispositions and technology, whereas others spy out political and economic matters.

During the past year the Soviets have taken increasing notice of U.S. intelligence collection by scientific and technological means. References to electronic devices for monitoring Soviet rocket tests and the launching of earth satellites, to the pilotless SD–3, and to project "Sentry" for using earth satellites to photograph Russian territory have been published. Discussions of scientific espionage are sometimes introduced by quoting Mr. Dulles' 15 October 1959 statement in New York, "We feel that the scientific side of intelligence collection should be emphasized to the point where radar and electronics tend to take the place of the wiles of the Mata Hari of several decades ago."

These warnings and other propaganda alerting the people to U.S. espionage activity are addressed chiefly to those who might disclose classified information unwittingly, rather than to the few "bourgeois degenerates" who would deliberately betray state secrets. A typical story is that of a young Soviet flyer on a train who got involved in a discussion of the relative merits of Soviet and foreign aircraft. Out of patriotic pride and in order to show off his knowledge, he cited Soviet

advances that were classified information and even described aircraft in the testing stage. One of the passengers on the train took little part in the conversation, but occasionally expressed doubts about the young flyer's knowledge in a way that incited him to even more revelations. This quiet man, of course, was a U.S. agent.

Cutthroats of CIA

Several Soviet publicists have recently commented at length on CIA activities, particularly in connection with H. H. Ransom's *Central Intelligence and National Security*,[4] which has obviously been carefully studied by responsible officials in the Soviet Union. An April 1959 *New Times* article by J. Yudin quotes data from the book on the new CIA building, the number of buildings currently occupied, the number of employees, an estimate of the total budget ($2 billion), and some of the functions of CIA.

Although these commentators take note of its role as coordinator of intelligence, CIA is normally presented primarily as the agency responsible for planning and carrying out subversive activities in the USSR and other Bloc countries, for the direction of psychological warfare campaigns, and for paramilitary operations related to the East-West struggle in the non-Communist world. The Soviet citizen is given the picture of a dangerous and wily adversary willing to stop at nothing to recruit agents, train them, and give them weapons, explosives, poison, money, false papers, and other equipment for organizing subversion in the Soviet camp. These operations have a dual purpose—an economic one, to disrupt the work of industrial and agricultural components, and a political one, to prepare revolts, rebellions, street riots, and general disorder. It is said that CIA subversion was a major contributing factor in the Berlin riots and in the Hungarian revolt, and that such operations are not carried out without the knowledge of the high diplomats in U.S. embassies.

CIA's clandestine activities are ascribed variously to its "Secret Operations Branch," its "Department of Dirty Tricks," or its "Department of Covert Activities." The overthrow of the Arbenz regime in Guatemala is cited as the prime

[4] Cambridge, 1958. Reviewed in Intelligence Articles II 4, p. 79.

example of such activities outside the Bloc, with the coup against Mossadegh in Iran a regular second. The Moscow broadcast of a recent *Neues Deutschland* article on CIA adds "two new examples which are fresh in our mind: Jordan, where the coup succeeded, and Syria, where it failed." The attempted assassinations of Togliatti, Duclos, and Tokuda and the murder of Julien Lahaut, however, were attributed generally to imperialist intelligence services, not to CIA.

Soviet sources refer frequently to the recruitment and use of defectors as agents against the Bloc. Since the enactment of the Mutual Security Act in October 1951, CIA is presented as having inexhaustible funds for this purpose. Propagandists constantly refer to the $100,000,000 granted by the Kersten Amendment and imply that the figure has increased since that time. It has also been alleged that large U.S. monopolies such as DuPont and General Motors spend $350,000,000 annually for subversion and that the AFL provides $100,000 every month for U.S. intelligence. Occasionally an essayist seeks to sort out the roles of U.S. private and governmental agencies in subversive work: in the February 1957 *International Affairs* K. Ivanov distinguishes among the CIA, CIC, ICA, Office of Special Warfare, and USIA, and among the several foundations, the Crusade for Freedom, the Committee for Liberation, etc., noting that they are all coordinated by the OCB.

A book by P. Yakhlakov, *Vigilance is the Tested Weapon of the Soviet People,* describes U.S. subversive activities as the work of unscrupulous people who recruit "gangsters, pimps, criminals, and bandits from the dregs of society for whom espionage and subversion are a means of livelihood and profit." Several books and newspaper articles have referred to an alleged statement in late 1951 by C. D. Jackson, then described as the leader of the fascist organization Committee for a Free Europe: "We need the support of cutthroats and hoodlums, as many as we can recruit." The procedure is typically described as follows: U.S. intelligence agents screen displaced persons who are detained by force under miserable conditions in refugee camps in West Germany. All kinds of pressure, including deceit, bribery, and blackmail, are applied against these people to compel them to carry out subversive activity

against their homeland. Selected persons are then sent to the village of Bad Wiesee near Munich where they are taught the arts of sabotage, terror, espionage and murder. When their training is completed they are given the necessary equipment and dropped by parachute from unmarked American aircraft over the Ukraine. They are instructed to get into Kiev and use whatever means are necessary, including murder, to obtain genuine Soviet documentation. Then they are to get into touch by radio with the American espionage center in West Germany for further instructions regarding espionage, sabotage, and subversion.

Soviet publicists also charge CIA with psychological warfare operations, of which the Free Europe Committee is seen as the archtype, and apparently quite dangerous. The Yudin article of April 1959 says that CIA provides about three-quarters of the funds for the Committee. Another CIA function in Soviet eyes is to oversee and subsidize the intelligence services of other Western governments, but published statements on this subject are vague and propagandistic. The West German intelligence service is most frequently cited as closely tied to CIA. The recent *Neues Deutschland* commentary on CIA had the establishment of a West German center for psychological warfare originating "in the CIA manure pile." "The espionage-sabotage service of the Hitlerite intelligence officer, Reinhard Gehlen, lives on American dollars under the guardianship of Dulles' CIA," says an article by V. Makhov in a 1957 collection, *About Those Who Are Against Peace.*

The ten-page Makhov article is probably the most detailed and comprehensive description of CIA and its works in the open Soviet literature. It expounds all the themes enumerated above, illustrating them—with characteristic organizational imprecision—from press reports of General Donovan's activities in Thailand and during the Hungarian revolution, from published U.S. allusions to Ambassador Peurifoy's and Allen Dulles' part in the Guatemalan coup, and from confessions of former members of "Dulles' full division of agents" who have been apprehended behind the iron curtain. It includes a biography of the evil genius Dulles himself, stressing his Wall Street background and his status as an agent for the monopolists in all foreign and military affairs from

insuring the domination of U.S. capital abroad to establishing naval strength ratios. It affirms, on the basis of captured Nazi Foreign Ministry documents and other evidence, that his chief wartime mission in Switzerland was to see to the preservation of German economic and military might as a bulwark against the USSR.

Analysis, Estimates, and the Shaping of Policy

The very little that is published in the USSR on the U.S. intelligence community's estimative function is cast in tones of satire and belittlement. In a recent example, an article by Leontyev in the 31 January 1960 issue of *Red Star*, entitled "The Spies Count Rockets," noted Defense Secretary Gates' statement on Soviet ICBM capabilities and said that his information was derived through the following calculations: "There are five crows sitting on one fence and three crows sitting on another fence. Now, how many rockets does the Soviet Union have?" More generally the Soviets take the line that our ability to estimate their capabilities accurately is impeded by our preconceptions and by our inability to see the world situation in realistic terms.

The Nikitinsky book cited above mentions that "sociologists, historians, economists, geographers, transportation and communication engineers, and other 'scholars' are . . . a part of the western intelligence service." These so-called scholars are said to have sold themselves to U.S. intelligence and bound themselves to carry out assignments on the demand of their masters. This and other such statements imply that academic or intellectual elements in the community merely prove what they are told to prove without any attempt to arrive at logically reasoned conclusions. The Soviets do not present the U.S. intelligence community or any part of it as an intellectual organization.

But they leave no doubt that the intelligence community, and CIA in particular, wields a critical influence in the formation of U.S. policy, for "every step a government takes is determined by the nature and the slant of the intelligence information it receives," and U.S. intelligence is an integral part of the Wall Street machinery that determines foreign policy. The Yudin article cited above says that Allen Dulles,

"though normally only an advisor to the National Security Council, has become the chief figure in all its deliberations." Several Soviet publicists have quoted a *Washington Post* article to the effect that "CIA serves as a refuge for dare-devil cutthroats. . . . Through their activities they can start the ball rolling in the field of foreign policy." The 1955 summit conference had hardly ended, Makhov says, when Allen Dulles demanded that there be no yielding to the spirit of Geneva.

This Soviet view of the effect of intelligence on policy is consonant with that of the relationship between their own policy-making and intelligence organs. There was more than just scapegoating in Soviet statements that Beria, operating in his capacity as an intelligence chief, was primarily responsible for the rupture in relations between the USSR and Yugoslavia. And Soviet spokesmen's treatment of the exposure of U.S. overflights in its effect on the summit conference epitomizes their distrust of the force that intelligence activities exert on the framing and carrying out of national policy.

INTELLIGENCE IN RECENT PUBLIC LITERATURE

INTELLIGENCE AND ECONOMIC THEORY

THE STAGES OF ECONOMIC GROWTH: A Non-Communist Manifesto. By *W. W. Rostow.* (New York: Cambridge University Press. 1960. Pp. 179. Cloth $3.75, paper $1.45. Also London: Cambridge University Press. 1960.)

This is an important book. Professor Rostow's thoughtful and imaginative study takes the masses of discrete facts that have marked the development of the many modern national economies and puts them into a single common framework. In the course of identifying and defining five progressive stages of development applicable to all the individual cases, the author presents not only a general theory of the economic growth of nations but also a synthesis of modern history. His work is more than provocative analysis of the past, however, for its concepts have also the predictive value of sound scientific theory.

The analysis is built around the proposition that the economic activity of any nation at a given time can be identified as falling within one of these stages—the inertia of the traditional society, fulfillment of the preconditions for takeoff, the takeoff, the drive to maturity, and the age of high mass consumption. The traditional society is described as one in which per capita production is limited by inability or failure to use modern technology in any systematic fashion. Traditional societies in general concentrate most of their human and capital resources on agriculture; the resultant social structure is quite rigid, and people are resigned and fatalistic about long-run prospects for improving the levels of living.

The transition to sustained economic growth is preceded by a period in which the preconditions for takeoff are met. In this second stage the ideas and institutions making for modernization gain, not necessarily the upper hand, but first toleration and then enough freedom of action to initiate and

Recent Books: Economic

sustain a process of economic transformation. Some of the more important of the complex variety of preconditions are a change in value judgments involving the acceptance of economic progress as a desirable goal, the emergence of a class of entrepreneurs, and the creation of institutions for the mobilization of savings. Probably most important is the establishment of an effective centralized national state.[1]

The third stage, the takeoff, is "the great watershed in the life of modern societies." At this point the forces making for economic progress achieve critical mass. Rapid growth occurs in a few key sectors of the economy. Investment increases from 5 to 10 percent or more of national income. New techniques power the rapidly growing manufacturing sector and penetrate the agricultural sector as well. In short, growth becomes the normal condition and is sustained by dynamic forces, irreversible as the loss of innocence.

Some 60 years after takeoff, with surprising uniformity, the modern economies have reached maturity, a stage defined as one in which they demonstrate the ability to apply advanced technology over the total range of their activities. Then follows finally the stage of high mass consumption, where the leading sectors shift toward the production of durable consumers' goods and services. The decisive element in this stage, the author notes, has historically been the quantity production of inexpensive automobiles, with its concomitant revolutionary social and economic effects.

Professor Rostow emphasizes that there is nothing preordained about a society's passage through these conceptual stages of growth: at every stage it is confronted with fundamental policy choices, and making these choices is an exercise in value judgments far outside the province of economic analysis. In the author's words:

> The stages of growth are not a set of rigid, inevitable, predetermined phases of history. The process of growth imposes for men and societies certain problems and possibilities from which they must choose, and modern history can be viewed as the consequences of choices made by various societies at various stages of growth.

The erection of an alternative rational framework into which the history since 1700 of all nations may be fitted inevitably clashes with the dogma of Communism, and the final chapter of this book is therefore devoted to a comparison between Karl Marx's construction of history and the stages-of-growth concept. Writing 120 years after Marx, Professor Rostow has an enormous advantage in the experience of the many nations which during that interval have developed their economies to the point of high mass consumption. Marx's predictions about the future evolution of industrial capitalist societies, based on the single experience of the United Kingdom's drive to maturity, have not been borne out, and the Marxist-Leninist alternative to capitalism is appraised here as follows:

> Communism is by no means the only form of effective state organization that can consolidate the preconditions in the transition of a traditional society, launch a takeoff, and drive a society to technological maturity . . . Communism takes its place . . . as one peculiarly inhumane form of political organization capable of launching and sustaining the growth process in societies where the preconditions period did not yield a substantial and enterprising commercial middle class and an adequate political consensus among the leaders of the society. It is a kind of disease which can befall a traditional society if it fails to organize effectively those elements within it which are prepared to get on with the job of modernization.

Such a disenchanted appraisal could not be expected to bring approving shouts of agreement from the Kremlin. The Rostow thesis was formally denounced in a *Pravda* article ("Snipe in the Bog," October 19, 1959), for its failure to take account of the class struggle and of social formations. This criticism of the stages-of-growth theory is simply untrue, as its author, Mr. Yuri Zhukov, head of the State Committee for Cultural Relations with Foreign Countries, undoubtedly

[1] Professor Rostow and his colleagues at the Massachusetts Institute of Technology have expanded their analysis of the preconditions period—perhaps the most crucial one in economic growth, requiring a vast array of economic and non-economic changes in the traditional society—in a study prepared for the U. S. Senate Committee on Foreign Relations, "Economic, Social and Political Change in the Underdeveloped Countries and Its Implications for U. S. Policy" (86th Congress, 2nd Session, Washington, D. C., 1960).

knows. His party-line invective may, however, reflect a genuine concern at the appearance of this new, persuasive theory of economic development. The men in the Kremlin know that many decisions fateful for the future of the world are not being made in Moscow or Washington, but in capitals like Karachi, Conakry, Djakarta, and Cairo. They are also aware, from their experience in the spread of the Communist ideology, of the truth of the late Lord Keynes' observation:

> Madmen in authority who hear voices in the air are distilling their frenzy from some academic scribbler of a few years back.[a]

The Rostow thesis has also been attacked from the opposite end of the ideological spectrum for its emphasis on the important role the state must play in economic development. See, for example, Professor David McCord Wright's criticisms in the December 1959 *Fortune*. To those who believe strongly that free enterprise provides the only true path to growth, Professor Rostow's proposition that the vital entrepreneurial spark can come from either the public or private sectors is pure heresy. Thus we find the crux of denunciation from the strange bedfellows of extreme right and left to fall on the author's conclusion that there are many institutional roads to sustained economic growth.

This bare outline of the stages-of-growth argument and the kinds of criticism levied at it gives some indication of the significance of the Rostow thesis for intelligence. First, as a scholarly challenge to the Marxist economic interpretation of history and a solid refutation of many of the key myths in Communist lore, this could be one of the most influential books of our time. For those who are actively working to see that the newly emerging, fragile nations of Asia and Africa follow a non-Communist course of development, the Rostow thesis, with its impressive historical documentation, offers a powerful weapon to combat the central challenge of our time. The book should receive the widest dissemination among the intellectual elite, in and out of government, of those countries setting out on the path of modernization.

[a] John Maynard Keynes, *The General Theory of Employment, Interest and Money* (New York, 1936) p. 383.

Secondly, for those engaged in the reporting and preparation of current intelligence and the making of estimates on nations in the Middle East, Africa, Asia, and Latin America, Professor Rostow has forged a theoretical framework for thinking logically about national economic growth. Some of his descriptive characterizations of the individual stages of growth—the preconditions stage and the takeoff, for example—are already a part of the language of economists grappling with problems of economic development.

The first publication of Professor Rostow's views came after his relevant lecture series at Cambridge in the autumn of 1958. The fact that they have stirred up a furious international debate in this short period of time is eloquent testimony not only to their stimulating content but also to their effectiveness in challenging certain aspects of conventional economic wisdom on both sides of the iron curtain.

INTELLIGENCE AND MILITARY STRATEGY

THE TURN OF THE TIDE—1939–1943. By *Arthur Bryant.* (Garden City, N. Y.: Doubleday & Co. 1957. Pp. 624. $6.95.)

TRIUMPH IN THE WEST—1943–1946. By *Arthur Bryant.* (Garden City: Doubleday. 1959. Pp. 438. $6.95.)

Field Marshal Lord Alanbrooke, Chief of the British Imperial General Staff and Chairman of the Chiefs of Staff Committee during the critical war years, made a careful and detailed entry in his diary every day. This diary forms the basis for these two volumes aggregating more than a thousand pages. British historian Arthur Bryant has indexed it, edited out superfluous material, and provided continuity as necessary.

To say that this work will be a treasure house for the historians of World War II is putting it mildly. Here are chronicled among other things the conflicts between the British and the American strategy, with the British viewpoint, of course, dominant and convincingly laid out. From the beginning there was a constant struggle over the date when the invasion of Europe should be mounted, the Americans pressing for an earlier assault. Then followed disagreement on how the German armies should be destroyed, the British urging an offensive across the north German plains. And throughout all, until the collapse of Germany, there was the issue of getting what the British considered sufficient strength in Europe in the face of U.S. pressures for devoting more resources to the Pacific.

If Montgomery's autobiography was blunt in expressing his thoughts about American inadequacies, the Alanbrooke diary is even blunter, particularly in its comments about General Eisenhower and other revered American leaders. And Alanbrooke will be taken more seriously than the flamboyant Montgomery. He was an extraordinarily able Chief of Staff for the British, one of few who could have done so well.

For the student of intelligence, there is considerable material to be found in these volumes for the searching. Alanbrooke is no great admirer of intelligence; he grumbles several times about having to labor through JIC "appreciations" and about the inadequacies of information on enemy activities and intentions. Intelligence being not an end in itself, however, the rich insights conveyed here into its end products and end uses will be important to any more detailed analyses that may be made of intelligence successes and failures in World War II, and of how intelligence was utilized by the commanders.

THE QUESTION OF NATIONAL DEFENSE. By *Oskar Morgenstern.* (New York: Random House. 1959. Pp. 306. $3.95.)

As its title implies, this book examines national defense policy in the missile age, in particular the relative vulnerabilities of fixed and mobile defenses. The author, described as a consultant to various defense groups, must be presumed to speak with more than academic authority, and his analysis is clear and well written. He makes a very strong case for mobile defenses—or perhaps one should say retaliatory forces—specifically, pending the advent of a mobile ICBM with solid fuel, for the Polaris submarine and an airborne SAC.

Professor Morgenstern devotes one chapter of about forty pages exclusively to intelligence, making a practical comparison between the problems facing U.S. intelligence in Soviet security barriers and other circumstances and the relative ease with which the Communists get information on the United States. Here his analysis lacks sophistication: Dr. Morgenstern has given too much credence to what he reads in the press or hears on the cocktail circuit without checking it against the facts. The chapter is nevertheless correct in its main thesis and should despite its inaccuracies be of help to the lay reader.

FREELY I SERVED. By *Stanislaw Sosabowski.* (London: William Kimber. 1960. Pp. 203. 25/—.)

There are two matters of intelligence interest in these contentious memoirs of the man who conceived and built up in the UK the Polish Parachute Brigade and commanded it in the lost battle of Arnhem. The first is the boldness of his suc-

cessful devices for avoiding arrest in his underground work and escape from Poland in the confusion after Warsaw's fall in 1939. The other is his opinion that the major cause of the Arnhem fiasco, more decisive even than Eisenhower's "dilatoriness" and the blunders of all the British commanders involved, was the failure of intelligence on the German strength in the area and its probable reaction to the assault on the Rhine bridges.

General Sosabowski presents a viewpoint which of course is lost in the Eisenhower, Montgomery, and other British-American accounts; but he would have done well to employ a ruthless editor to weed out personal trivia and damp the I-knew-better-but-they-wouldn't-listen and I-didn't-want-to-be-a-personnel-problem-but-I-had-to-stand-up-for-Polish-rights tone of many passages.

CLANDESTINE OPERATIONS

THE NILI SPIES. By *Anita Engle.* (London: Hogarth Press. 1959. Pp. 245. 25/—.)

From the remote past to modern times, from Rahab at the fall of Jericho to Ethel Rosenberg in World War II, women have engaged in some of history's most spectacular espionage. An analytical study might reveal that women, directly or indirectly, had more radically changed the course of history through their clandestine efforts than men. Certainly Sarah Aaronsohn, the field leader of the Nili spies, belongs to the category of strong-willed history makers from the weaker sex. She has not yet become a legendary figure only for lack of public knowledge of her deeds.

The Nili spies, who took their code name from the initial letters of the biblical phrase *Netzach Israel lo Ishikare*—"The eternity of Israel will not fail"—were a dedicated group of early Zionists engaged in haphazardly courageous endeavor to save the Yishuv, the Jewish colony in the Turkish province of Palestine, from oppression and destruction during World War I. They hoped by collecting detailed and timely intelligence on the situation in the province to catalyze the inertia of British Headquarters at Cairo into an early military action which would liberate it. Sarah and her brother Aaron believed, long before the Balfour Declaration and the concept of a Mandate Authority, that once Palestine was under British control British law, order, and humanity would eventually permit the establishment of a homeland for the Jews.

Upon the outbreak of war in 1914, Aaron Aaronsohn, a botanist who had achieved considerable fame, especially in German and American academic circles, for his rediscovery of wild wheat, founded the Nili underground espionage organization with the object of sending intelligence to General Allenby in Egypt. His sister Sarah helped him in this dangerous work; and after Aaron left Palestine to join Allenby in Cairo and Absalom Feinberg, her sister's fiancé whom she loved, had been killed trying to slip through the Turkish southern front, she bore the main burden of organizing the spy network throughout Palestine, collecting the material and sending it

to Egypt until she was captured. She escaped her torturers by a hideously executed suicide and without the consolation of knowing that her efforts, perhaps more than any other person's, had been instrumental in the successful launching of Allenby's Palestine campaign.

To the professional, Nili operations, precisely because they were amateurish, make interesting reading; they offer many examples of tactical errors whose inevitable result was the death of members of the ring. Although the network had a safe foundation in the loving and trusting devotion of one family, the Aaronsohns, and their relatives or close friends, their operational cover was inadequate protection, not, strangely enough, from the Turks, but from the Jewish community. Ideological and Zionist rivalries for control of the early colonizers, along with genuine fear of the Ottoman practice of holding an entire community responsible for the treason or even misdemeanors of individuals, made the Aaronsohns and their friends suspect and disliked. The fact that Nili became the channel through which Diaspora gold was brought to the starving Jewish community did not mollify the local leaders' attitude towards them. They issued what Sarah considered a cowardly ultimatum to cease operations, on threat of exposure, shortly before the net was rolled up by other means.

The local Turkish administration and military forces, corrupt and venal, were bought off almost weekly with Nili gold; perhaps they would never have been fully conscious of the espionage in their midst if they had not finally been alerted and goaded by German intelligence. Meanwhile Nili agents speaking fluent Turkish, Arabic, Hebrew, and several other languages managed to carry on unmolested until 1917. Their ultimate exposure, if one can rely on the accuracy of the author's details, can be attributed to three important factors—the lack of proper security precautions and compartmentation, the unstable personality of one conspirator, and very poor communications.

All of the Nili leaders and some of their agents knew one another by their true names and personal recognition, a not unnatural result of their recruitment from among friends, from whom they could not hide their identity. Many of these

agents and some couriers knew the location of Nili headquarters in Aaron's experimental station at Athlit. Too many, including Sarah's old Arab carriage driver, were aware of the clandestine beach contacts with a British naval ship from Egypt.

The British courier ship, for various reasons that are not always explained, maintained an irregular and undependable schedule which necessitated hurried and haphazard exchanges of intelligence, gold, and supplies. The failure of the ship to keep a scheduled rendezvous and the urgency of what Sarah considered vital information influenced her to send a message to Egypt by courier pigeon, a method which had already been proved unreliable. The pigeon, apparently bereft of homing instincts, flew north instead of south and was intercepted by the Turks, who, with the assistance of the Germans, began a methodical counterespionage investigation.

Even this exposure might have been unproductive for the Turks until too late if the unstable braggadocio Yosef Leshansky, who had unnecessarily antagonized the elders of the community and the Hashomair Hatzair Marxists, had not boasted of his exploits, his contacts, and his influence to untrustworthy individuals, foolishly relying on the loyalty of some of his Bedouin and Turkish friends. After his arrest he talked freely, thereby implicating almost everybody.

Reflecting the intricate patterns of human affairs in the Middle East, the book includes many interesting asides to the main story. The author almost, but not quite, succeeds in destroying the myth that Lawrence of Arabia dedicated his famous *Seven Pillars of Wisdom* to Sarah Aaronsohn.

Written more as a eulogy than a treatise on espionage, *The Nili Spies* is based primarily on the voluminous reports and diaries of Sarah and Aaron, which in turn are supported by official British documents and memorabilia of World War I. The author, who inclines towards the lyrical to the detriment of her text, adulates Aaron as the unsung hero of the Balfour Declaration and the man whose imagination and determination established the foundations upon which Chaim Weizman, Ben-Gurion, and others built the State of Israel. She nourishes a gentle animosity towards the present Israeli regime for failure to grant Sarah and Aaron the recognition they

justly deserve. It does seem strange that Israeli and Zionist circles, known for their celebration of outstanding contributions to the cause, should have remained almost silent about the accomplishments of a valorous woman whose exploits would have made her a Joan of Arc in other countries.

ORDE WINGATE. By *Christopher Sykes*. (London: Collins. 1959. Pp. 575. 35/—.)

This is a long, well-written, painstakingly researched biography of one of the most interesting leaders of World War II. Orde Wingate was a regular British Army officer, a mystic, a Zionist, an intelligence officer, and a guerrilla leader. Beginning his career in North Africa, he soon was moved to Palestine, the land that became his major interest and love. As British Army intelligence officer turned rabid Zionist, he apparently perfected a counter-guerrilla system to enable the Jewish communities to protect themselves from Arab raiders. Later in Burma he likewise made considerable effort to know the area, peoples, and languages, and as guerrilla leader there his peculiar talents were again particularly effective.

Wingate could almost be described as instinctively an intelligence officer but, because of his eccentricities and oddities, never as a great one. It is a credit to the British that they recognized his considerable virtues in spite of his aberrations. Mr. Syke's biography weaves in a wealth of material on intelligence techniques, countersubversion, and guerrilla warfare that is worth the digging out for today's intelligence operator.

ONE MAN IN HIS TIME. By *Serge Obolensky*. (London: Hutchinson & Co. 1960. Pp. 324. 25/—.)

This autobiography, perhaps an important one for socialites, qualifies as an intelligence reference because in World War II its princely author commanded two OSS paratroop operations, one in 1943 that secured the loyalty of Italian troops on the Sardinian flank of the Salerno action, and one in France in 1944, undertaken to prevent the withdrawing Germans from sabotaging a transformer station important for the Paris electric power supply.

As with other potentially interesting aspects of the book, however—his childhood and adolescent impressions of the life of the imperial Russian nobility, his description of cavalry actions in World War I, and his participation in White Russian and Tartar resistance to the Bolsheviks in the Crimea—the light he might throw on these events is buried under a bushel of trivia. Prince Obolensky has written not for history nor even for a popular audience, but for himself and his exclusive circle of celebrities, tracing their intricate family relationships to one another and to royalty and recounting in detail the things they said and did in the endless round of games and parties that was their life.

PROPAGANDA

DOCTOR GOEBBELS. By *Roger Manvell* and *Heinrich Fraenkel.* (New York: Simon & Schuster. 1960. Pp. 306. $4.50. Also London: William Heinemann. 1960. Pp. 329. 30/—. Published in France as *Goebbels: Sa Vie, Sa Mort.* Paris: Robert Laffont. 1960.)

This biography of Hitler's indefatigable propaganda chief and most staunchly loyal comrade traces a thread of continuity in the history of the Nazi movement and the Third Reich which no single other life story but Hitler's own could match, a thread unbroken from the early struggles of the mid-twenties to those charred bodies in the garden outside the Fuehrerbunker on May Day 1945. Nor is it a slender thread: Joseph Goebbels fancied himself the future historian of the great era and alone among the Nazi leaders kept a diary for posterity. Only fragments of its some thirty volumes have been found; but these, the diaries of his aides, his correspondence, and the testimony of surviving acquaintances have enabled the authors to clothe the man in flesh and blood and follow him through his career.

The story is of particular interest to propaganda analysts and propaganda strategists. Goebbels' definition of propaganda was of the broadest, and he regarded command over propaganda as virtually equivalent to command over the lives and actions of the audience. Hitler's Minister of Propaganda was thus in Goebbels' eyes his deputy in charge of the home front, the captive audience, and after July 1944 he could almost be said in fact to have run Germany while Hitler ran the war. The conquest of Europe, too, if he had been doing it, would have been undertaken not by force of arms but by the power of the spoken word over men's minds.

Goebbels' direction of the powerful Third Reich propaganda organs was meticulous and comprehensive; in spite of Ribbentrop's efforts to take over foreign propaganda and the fact that Hitler or one of the other leaders occasionally stepped out of line, essentially everything that was said in the German press and broadcasts or shown in the German films and public spectacles flowed from this one man. Thus today's propaganda strategist, on the one hand, studying the model

of the extraordinarily effective Nazi system, will find its most significant feature to be, not what Goebbels characterized as massive reiteration of simple truths and the Nazi's enemies dubbed "the big lie technique," but the integrity of unitary control and consistent one-man direction. The propaganda analyst, on the other hand, will in this same feature see fulfilled his necessary assumption that the propaganda he studies has a logical, self-consistent content aligned with the purposes of the regime. The Nazi propaganda was in fact so distressingly self-consistent that it left the Anglo-American analyst little foothold for that digging into factional differences and divergencies among the leaders' policies that has been the aim of much analysis of Communist propaganda since the war.

THE REVOLT OF THE MIND. By *Tamas Aczel* and *Tibor Meray.* (New York: Praeger. 1959. Also London: Thames and Hudson. 1960. Pp. 449. 35/—.)

The subject of this revealing book is not intelligence, but a conflict of profound interest to the many intelligence officers who wondered, all through the three middle years of the forties, at the strange things being said by the Hungarian press and radio and tried to divine their portent. Although it became clear in November 1956 to everyone that this surging of ideological unrest had reflected no mere administrative difficulties "of little consequence and likely to diminish," as some had theretofore concluded, the intellectual crisis of the time has nowhere been so perceptively and thoroughly illuminated as here by Aczel and Meray.

The authors were prominent young Party writers of sincere Stalinist persuasion, well representative of the Hungarian Communist intelligentsia. They were able by and large to contain their normal artistic passion for individual, nonconforming creativity and to maintain unwavering loyalty to the Party through the early phases of the Nagy-Rakosi struggle over the best road to socialism, although the corps of Communist writers was indeed deeply divided between the two leaders. It was the revelation late in 1954 of the contrived and groundless arrests, tortures, imprisonment, and executions in the wake of the Rajk trial—a revelation made through

the release of Janos Kadar and a score of other surviving victims—that reunited the writers and many other intellectuals in open revolt against the Rakosi leadership, almost against the very Party. Then a year of ever severer defeats for the rebels, until the twentieth Soviet Party congress and Khrushchev's "secret" speech turned the tide.

At this stage the authors' Hungarian emotions betray them into oversimplification, and they make Nagy too much the martyred hero, Rakosi too much the despicable villian, and Kadar too easily the Judas of their idol Nagy. Earlier character portraits, like that of the Hungarian Zhdanov, Jozsef Revai, had been unbiased, sympathetic, and enlightening. Yet for all this fault the book is a unique documentary on the beliefs and motivations of Communist intellectuals, on an important aspect of what makes Communism work and wherein it fails to work, and—more profoundly—on the contradictions between the individual and the social ideals of man at large.

MISCELLANY

THE DOUBLE DEALERS. Edited by *Alexander Klein.* (London: Faber & Faber. 1958. Pp. 381. 21/—.)

This anthology of grand hoaxes includes short accounts of half a dozen inteligence deceptions, one from the Civil War and the rest from World War II and after. They are the story of Emma Edmonds, whose first mission as a Union spy was executed in the guise of a negro lad; Donald Q. Coster's account of how he persuaded the Germans in North Africa to expect an American landing at Dakar; Clifton James' recollections of his appearances as General Montgomery at Gibraltar and in North Africa in order to divert German expectations of the Normandy landings; Al Newman's story of a Spanish spy for the Nazis whom the British impressed by showing the same air squadrons, fleets, and troops repeatedly moved up along his travel route; the exposure as a fake of Quentin Reynold's book on George DuPre's purported four years as a British agent with the French resistance; and the escape of five political prisoners from East German prisons engineered in 1953 by Hasso Lindemann with forged release orders and false telephone calls.

The collection also includes, curiously, one intelligence story that is not a hoax, Richard Sharpe's reconstruction from open sources of Allied foreknowledge of the V–2 weapon. Sharpe credits the discovery of the Peenemuende test area as early as 1938 to a traveling British writer-agent, the mapping of the experimental station to Polish forced laborers, and the first air photo identification of the weapon to Constance Babington-Smith. He attributes the catastrophic timing of the 17 August 1943 obliteration raid to Allen Dulles' source Gisevius and details about material and construction, capped finally by shipment of one of the missles intact, to Polish underground intelligence from the new test range at Blizna and Sarnaki.

THE MAN THEY COULDN'T KILL. By *Dennis Holman.* (London: Heinemann. 1960. Pp. 232. 16/—.)

This is the story of a thread of exceptional luck woven through the life of one man, Robert Oldfield. Behind it lies

the provocative possibility, of no small interest to intelligence, that intensive study of many Oldfields might yield a better understanding of luck's chemistry, and perhaps even a means of predicting accurately whose ventures will be blessed.

A Royal Navy stoker active in submarines during World War II, Oldfield's path took him through innumerable close brushes with death. Characteristic of his experiences was an incident in prewar Haifa in which he stepped from a truck seconds before a terrorist-planted bomb demolished the vehicle. In subsequent years deliverance by a matter of seconds or inches became almost commonplace with him. Among the perils from which he emerged relatively unscathed were an earthquake, bombings, a major naval battle, torpedo attacks, a ship-submarine collision, the sinking of the submarine *Saracen* by depth charges, a break from a POW camp, an action with Italian guerrillas, two sentences to death before firing squads, a stay in a German concentration camp, and a near electrocution. Between these more dramatic incidents there were many minor ones that did not want for lethal quality: on several occasions, for example, last-minute developments removed him from the crews of submarines destined not to return.

Although the account of Oldfield's adventures touches on POW interrogation, escape and evasion, guerrilla activity, sabotage, and other matters of intelligence interest, its brief treatment of these subjects offers nothing particularly new or significant. The keynote of the book is luck.

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An annual award of $500 is offered for the most significant contribution to the literature of intelligence submitted for publication in the *Studies*. The prize may be divided if the two or more best articles submitted are judged to be of equal merit, or it may be withheld if no article is deemed sufficiently outstanding.

Except as may be otherwise announced from year to year, articles on any subject within the range of the *Studies*' purview, as defined in its masthead, will be considered for the award. They will be judged primarily on substantive originality and soundness, secondarily on literary qualities. Members of the *Studies* editorial board and staff are of course excluded from the competition.

Awards will normally be announced in the first issue (Winter) of each volume for articles published during the preceding calendar year. The editorial board will welcome readers' nominations for awards, but reserves to itself exclusive competence in the decision.

A once sensational and mysterious intelligence betrayal is examined in the perspective of time for motivation and key circumstances.

THE DEFECTIONS OF DR. JOHN

Delmege Trimble

Rain streaked the streets of Berlin, splashed on darkened houses, glistened in the light from an East-West border checkpoint. A sedan rolled up, its tires singing on the wet pavement. A customs guard sauntered out. For a moment there was only the throb of the engine, a murmur of conversation, the rhythmic click of the windshield wipers. Then the wave of a hand, and the car rolled across the Sandkrug Bridge into the darkness of East Berlin.

A simple incident on this warm, wet night of 20 July 1954, the decennial of a more famous 20 July. Simple, but so fraught with significance for Germany and the West that Chancellor Adenauer called it "terrifying." Dr. Otto John, president of the Office for the Protection of the Constitution, had defected. He was the most important Westerner fallen into Communist hands since the two British diplomats, Guy Burgess and Donald MacLean, had vanished from London in 1951, and far more important than they in point of implications for intelligence.

The puzzle was—and to some still is—the reason why, the causes behind the eastward flight of the Federal Republic's internal security chief in the company of a trumpet-playing gynecologist, a Dr. Wolfgang Wohlgemuth. The contemporary explanations ranged the spectrum. The easiest one, that Wohlgemuth was a Soviet agent who had drugged John and abducted him, foundered on facts that gradually came to light. Some said that John, a mixed-up idealist, had been spurred across the border by a misguided concept of political morality. Some regarded him as a victim of machinations on the part of the neo-Nazis and clerical and other reactionary circles around Chancellor Adenauer. His flight was pictured by

others as that of a desperate man whose past was about to catch up with him. Yet others called him a long-time traitor and informer, even a secret Communist fanatic.

There were prejudicial grounds for some of the least pretty interpretations. John's weaknesses for alcohol and the opposite sex were well known, his favorite sport when pixilated being to snap the elastic of women's brassieres. It was persistently rumored that he was a double agent or a homosexual, and he certainly had an affinity for too many characters with one or both of these qualifications. Aside from his companion Wohlgemuth, who had connections with the East Berlin Charité Hospital and made no secret of his Communist sympathies, John was on good terms with Soviet agent Max Wonsig, blown at the Willi Kucher spy trial, and more notably with one Baron Wolfgang Gans Edler Herr von und zu Putlitz. Von und zu Putlitz had been a prewar British agent in the Nazi Foreign Office, whisked to the safety of England in 1938; subsequently he worked in the United States for OWI until he was fired and his valet had to support him by tending bar; later he returned to British employ in Germany; and in 1950 he started working for the Communists in East Berlin.

Yet the stereotype of the weak man made vulnerable by his lusts or corrupted by bad company is not one that fits the Otto John picture. And all the other theses, each arguable, strike only tangentially at the truth. Erich Ollenhauer may have come closer when he remarked, after John redefected and began to show increasing signs of a persecution and Messiah complex, "This is a case for the psychiatrists rather than the politicians." We cannot even now arrive at anything like a tidy analysis of the case, but we can achieve some understanding of it by tracing John's propensities during the Nazi and Nuremberg eras, reviewing the circumstances of his unlikely appointment and ineffectual tenure as president of the Bundesamt fuer Verfassungsschutz, and examining in detail his behavior just before and after his defection on that 1954 anniversary of the unsuccessful 20 July anti-Hitler coup.[1]

[1] Except as otherwise indicated, the authority for factual statements in the following account rests in classified documents in U.S., 25X1 [redacted] intelligence files.

Role in the Anti-Nazi Underground

Otto John was born in 1909. Two friendships from his early life remained of importance in his adult career and were to play a part in the events of July 1954. During his school days at Wiesbaden in the mid-twenties he became a close chum of Wolfgang Hoefer, son of the school principal. The intensity of German schoolboy friendships is reflected in the eventual tragedy that flowered from this early acquaintance. Hoefer, whose mother was Jewish, emigrated to the United States in the late 1930's. He changed his name to Hoffer, became a U.S. citizen and a soldier. In 1945 he was sent to Germany and renewed his friendship with Otto John. In 1954, upon John's defection, he committed suicide.

An emotionally more important relationship for Otto was that with his brother Hans, another marked for tragedy. Hans, the younger, brighter, and sturdier, was the extrovert doer, Otto the troubled dreamer. Otto felt no fraternal jealousy; he adored the younger brother who, as long as he lived, supplied the balance Otto needed. Hans was to be tortured to death in the aftermath of the abortive July 1944 coup.

Otto studied for a career in the foreign service, mastering Spanish, French, and English. But when Hitler came to power membership in the Nazi Party became a prerequisite for aspirants to the foreign service, and he shifted to international law. Never a member of any political party (though after the war he once referred to himself as a quondam Socialist), he said his convictions were a blend of monarchism, old-fashioned liberalism, and anti-Nazism. He received the doctorate in law from Frankfurt University in 1935.

By 1936 both John brothers were in Berlin. Hans was studying law at Berlin University. Otto served for two years without pay at Tempelhof Airdrome to qualify for final state law examinations in the service of Lufthansa. In 1937 he became assistant legal counsel, under Klaus Bonhoeffer, of the rapidly expanding civil airline. He was now in a position to do something positive about his anti-Nazi convictions. Through Klaus and his brother Dietrich, a Lutheran minister, he entered one of the circles that later were to band in the conspiracy against Hitler. An airline with routine flights into foreign countries was a convenient front for a conspiracy against a

totalitarian regime.[2] Klaus Bonhoeffer assigned Otto to several courier runs.

When World War II broke in September 1939 Hans John went into the Luftwaffe as a lieutenant, but Otto remained with Lufthansa. That autumn he established connections with such anti-Nazis as the Social Democrat Wilhelm Leuschner and Col. General von Beck. Prince Louis Ferdinand, grandson of the Kaiser, had quit his job in a Ford plant in the United States to work for Lufthansa, and Otto John, along with Johannes Popitz, the Prussian Finance Minister, became a chief promoter of the Prince's pretensions to the throne in Carl Goerdeler's early schemes for a Hohenzollern restoration.[3] Louis Lochner, former chief of the Berlin Bureau of the Associated Press, said that on several occasions he accompanied John to meetings in Berlin of the Goerdeler and Louis Ferdinand groups.

Death was to sluff most of Otto's co-conspirators off the stage long before his own desertion, whether through natural causes, official executions, or the goon squads rampant at Germany's last gasp. But Louis Ferdinand remained a member of the cast through the last act. John cultivated him not only because he and his wife Kira, a former Grand Duchess of Russia, were very pleasant social companions but also because John, with his royalist inclinations, was flattered at being allowed to address the Prince by his intimate family nickname, "Lulu."

Beyond these contacts with conspiracy and his flights to neutral countries, Otto's specific resistance activities during this early period are unknown. In 1941 he passed considerable classified information about the Luftwaffe to U.S. correspondent Lochner. Strained attempts have been made to link him a little later with Rote Kapelle, the Communist radio-espionage group active in Berlin in 1941–42. No evidence is available to support any such connection, although it has been taken for granted that his brother Hans had Communist affiliations.

When eyebrows were raised over the appearance of the healthy Otto in mufti, he entered the Abwehr, likely on Goerdeler's suggestion and through the good offices of General Oster, the activist conspirator under Admiral Canaris. He was assigned to Abwehrstelle Stettin but told that his primary mission was to seek better surrender terms for Germany once Hitler was removed, using his Abwehr commission simply as cover. Threads linking the various opposition groups were now being slowly knit, and John probably provided liaison among those in the Abwehr, in the Army High Command, around Leuschner and Julius Leber, Louis Ferdinand, etc., whose heretofore diffuse activity was manifest in the ineffectual half-dozen different attempts to remove Hitler between 1939 and 1943.

The year 1942 was eventful for him. He was using business trips to Madrid and Lisbon, ostensibly for the purpose of acquiring more Lufthansa runways, to re-establish resistance contacts with the British and try to activate the acquaintance between Prince Louis Ferdinand and President Roosevelt, who had once put the Prince up at Blair House. During this year he was turned in to the Gestapo by an aging and jealous prewar mistress, Frau Ameliess Pabst, and was rescued by his Abwehr connections. Also in 1942 Hans returned from the Russian front badly wounded and was taken to the famous surgeon Dr. Sauerbruch, who numbered among his assistants at the Charité Hospital the fateful Wolfgang Wohlgemuth. Otto soon learned to know the comrade of his future eastward flight by his pet name, Wowo.

John's peace feelers were received with considerable suspicion by the Allies, especially since he was unwilling at this time to name any conspirators. On 20 February 1943 the British intelligence service issued from London a statement to the effect that the Abwehr or the Gestapo was possibly inspiring his activities as a deception. He persisted, however, using as intermediary Juan Terraza, one of the principal diplomatic secretaries in the Spanish Foreign Office and a close friend of Louis Ferdinand. His attentions were directed

[2] Many clandestine interests capitalized on the advantages of this airline's international flights: Admiral Wilhelm Canaris' Abwehr faction, carrying on its own intrigues against the Nazis, had planted agents in it; Himmler's SS and the Gestapo had both infiltrated it; and the Soviets are believed to have recruited a pilot on the Berlin-Moscow run, a man named Radunsk.

[3] Gerhard Ritter, *The German Resistance*, pp. 191–2.

SECRET

toward Graham of the British Embassy in Lisbon and Willard L. Beaulac of the American Embassy in Madrid. Beaulac, on instructions from Assistant Secretary of State Acheson, saw John at his home but made no commitments. He, too, was dubious of his sincerity.

John's sincerity as a representative of the military element of the resistance, a role he was soon to assume, is in fact questionable. He was a dissenter among dissenters, thoroughly disliking the generals and never believing they would act against Hitler. He considered the military component of the 20 July group very weak and continually warned against it.

As 1943 wore along, his approaches became more definite. In December he told his British contact in Madrid that he represented an internal opposition group consisting of industrialists, trade union leaders, churchmen, and generals, all strongly anti-Nazi and anti-USSR. He ticked off names and disclosed details of another plot to murder Hitler.[4] In February 1944 he again came to Madrid ostensibly on Abwehr business. This time he said he was remaining in Spain as a representative of the anti-Nazi generals. As cover he assumed the directorship of the sister Lufthansa company there.

He later told the British that he performed no Abwehr missions on his trips to Spain. In early June 1944, however, the British ascertained that he had transmitted information concerning Allied military intentions to Berlin. The nature of this information is not known; it was probably innocuous. In any case the British and American embassies in Madrid, for their part, got valuable data from him—on the results of Allied bombings of Berlin, the German V-bomb and its launching bases, and the experimental station at Peenemuende.

The current of events leading to the ill-fated Generals' Coup was now quickening. Shortly after the Allied invasion of Normandy in June, John consulted in Madrid with Col. Georg Hansen, who as Canaris' successor at the head of the Abwehr was prospectively a chief negotiator with the Allies, specifically General Eisenhower at SHAEF, once the revolt had succeeded. In early July he made arrangements that any message from the conspirators would be passed immediately from the American Embassy in Madrid to General Eisenhower. At the same time he learned, to the dismay of the conspirators, that the Western Allies would not consider negotiating a separate peace, and that the British and Americans would probably make no effort to get to Berlin ahead of the Russians.[5]

There is conflicting evidence about his activities at the time of the attempted coup itself. According to his own story, he was called to Berlin to confirm in person his bad news of the unresponsiveness of the Western Allies, and arrived at Tempelhof Airdrome on 19 July. He was at OKW Headquarters in the Bendlerstrasse on the afternoon of 20 July when Col. Klaus von Stauffenberg arrived from East Prussia to report that the bomb had gone off and Hitler could be assumed dead. He worked with the conspirators there until 9:30 that evening, when it became evident that this attempt on Hitler's life had also failed, pro-Nazi officers were regaining control, and conspirators were being summarily executed in the courtyard. The next morning, according to his account, Johannes Popitz' daughter told him of her father's arrest, and he went into hiding. He escaped to Madrid on 24 July by signing on as a mechanic on a Lufthansa manifest.[6]

John's story, however, is contradicted by the lists of applicants for Spanish visas and travel manifests from Aerodrome del Prat del Llobregat. They show him arriving in Barcelona from Madrid via Lufthansa on 18 July and not departing for Berlin until 22 July. Allied intelligence regarded the variant embellishments of his account as probable fabrications and was inclined to suspect that Otto credited himself with activi-

[4] At about this time the report that John was a British agent being handled by Major F. Landsdale and Cmdr. A. Fuller of the British Embassy in Lisbon was conveyed from the Portuguese General Staff to a German Lt. Col. von Auenrode (alias Karschof), who in turn informed Admiral Canaris. Canaris, of course, took no action.

[5] Ritter, *op. cit.*, p. 282. The ultimate source is John himself.

[6] That John was one of the pathetically few rebels to escape has been cited to support a theory that he was a Gestapo agent infiltrated into the conspiracy. We have noted that he was out of sympathy with the generals, and he seems not to have been intimately associated with any resistance circle except Louis Ferdinand's; but the Gestapo theory is untenable. He would hardly have betrayed his beloved brother Hans. Moreover, two SS aids of Walter Schellenberg later testified that the Gestapo had partially penetrated the 20 July group, but not through Otto John.

ties rightly belonging to Hans. One MI-6 interrogator remarked that John seemed to change the story to keep from boring himself.

At any rate he turned up in late July or early August in Madrid, where he lived in a hotel some three weeks. 25X1

On 25 August they smuggled him to Lisbon and hid him at a safehouse, the Boa Vista, which was also used by Spanish Communists. On 23 October the Portuguese police raided this house and arrested John, the housekeeper Romero, and seven of the Spanish Communists.[7]

John was jailed for several days at Caxias. Then the Portuguese General Staff overruled the police and turned him over to the British. He was flown to the UK on 3 November, accompanied by Cmdr. Fuller, his contact at the British Embassy in Lisbon.

In the British Victor's Service

On John's arrival in the UK there was a wartime snafu as to his identity, and he was interned as a high-ranking Nazi. According to his own story, Churchill at this time called him in for a consultation that lasted half the night. He was released from internment and transferred to the Political Intelligence Department of the Political Warfare Executive on 11 December. He was turned over to Sefton Delmer, a top reporter for the London *Daily Express* and later for the *Times*, who was wartime director of the Morale Branch of PID. According to Delmer, John lived with him for 10 months. Delmer is another person who will reappear before this drama is acted out.

In 1945 and 1946 John worked for the British in various capacities—with PID on intelligence matters, on the POW reorientation program at Wilton Park, and on research for 25X1

[7] There are diverse accounts of this episode. One intelligence version has it that John was arrested because of his friendship for Professor Egaz Morriz, frequently referred to in Portugal as the unofficial Soviet ambassador. *Der Spiegel*, ten years later, said that he was arrested as a homosexual. Another section of the German press insisted that he was arrested at a fiesta when he got into a brawl over a woman.

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A tally of John's fellow-Germans Dr. Honigmann, Eberhard Koebel, Karl von Schnitzler, and Putlitz, the agent-baron discharged by the OWI—is intriguing: all of them, like John, were later to decamp to the East Zone of Germany.

After the surrender in May 1945, John did not return to Germany with the bulk of the political exiles. He was working for the British War and Foreign Offices, interrogating German generals in the Kensington cage, and helping prepare legal documents for the approaching Nuremberg trials. At Nuremberg he worked as an adviser to the UK prosecution staff, a fact omitted in his own curriculum vitae.

Up to this time he could lay valid claim to being a German patriot. The cause which met catastrophe on 20 July had been a worthy one, that of revolt against the Nazis, not treason to the German nation. Its watchword was, "Against Hitler, for Germany." But when he returned for the Nuremberg trials, it was in effect as a German in British battle dress. He revisited with the wrath of a prosecutor the country which he had fled as a political persecutee. He kept aloof from other Germans working at the trials, attempted to conceal his identity and purpose, and spent his free time with his British colleagues, trying unsuccessfully to pose as an Englishman doing historical research in the documents of the Tribunal. The spirit of the trials themselves, in which righteous indignation at the Nazi horrors was not untainted by thirst for political vengeance, may have contributed further to the warping of John's character.

He was already showing psychoneurotic tendencies. In 1946 in London he attended a private War Office showing of a film on the Belzen concentration camp. Shortly after the movie, he told an intelligence officer five years later, the lower part of his face began to discharge a pus-like fluid and he suffered a species of nervous breakdown. His explanation was that the movie brought home to him the terrible failure of the 20 July revolt and all it stood for; he had been condemned to virtual inactivity since his flight to the UK and the accumulated frustration was simply too much for him. John clearly identified himself closely with the failure of the anti-Hitler

resistance and had a strong guilt complex deriving probably from his brother's painful death. This reinforced his obsession with the July affair and his inability to compromise with anything remotely identifiable with Nazis, right-wing politicians, or German military traditions. His excessive drinking and other manifestations of emotional instability would be symptomatic of such a state of mind.

He may have had woman-trouble, too. In 1949, after practicing law in London for a year, he married Frau Lucy-Marleen Mankiewitz, the *mother* of the girl he had been expected to wed. His new wife, a German Jewess whose father was an old friend and adviser of Dr. Theodor Heuss, taught Wagnerian singing at Hampstead. She has been described as making up in charm and intellect for the greater beauty of her jilted daughter Gisela, with whom John had worked in a wartime British operation.

John's mistress, Frau Elsa Mueller Rudolph in Wiesbaden, the widow of a German pilot killed in action in 1943, was another who stood to be offended by this marriage. John wrote in explanation that he was marrying an older woman because of his need for balance, and moreover his bride had important political connections in the new Germany through her family. He hoped that he and Elsa could remain friends. They did. It was Elsa who, as nearly as can be ascertained, enlarged
25X1 Otto's circle of acquaintances to include Ian Eland,
25X1 who was later helpful in exposing and eliminating one of John's rivals for the presidency of the Verfassungsschutzamt.

In the fall of 1949, no longer trying to conceal his services to the UK, John became openly the chief German assistant to the British prosecution at the trial of General von Manstein in Hamburg. This time he apparently associated with the German lawyers defending Von Manstein. But he irked the defense, it is said, by deliberately twisting facts and evidence to the advantage of the prosecutors, many of whom relied heavily on him because of their unfamiliarity with the German language and with the organization and practices of the Nazi Reich. Several friends implored him at this time to get out of the business of delivering his countrymen to the Allied hangman, and their warning that he was alienating

himself from his fatherland must have increased his emotional stresses.

John was not doing awfully well financially in the UK. He was employed by the London solicitors James Brodie & Company on reparation and restitution cases, but he could not base a career on claims arising out of a past era. He suffered from the lack of the British citizenship that had been extended to Putlitz and certain other Germans. (At times he claimed that he had declined a proferred citizenship.) Germany, on the other hand, was getting back on her feet economically.

During 1949 and 1950 he made several trips to Germany to see friends in the Bonn government about a job. Jakob Kaiser, whom he had known as a leader of the Catholic trade union resistance, offered him one in his Ministry of All-German Affairs, but John declined on the ground that he deserved a higher rank than Ministerialrat. Foreign Affairs had no place for him because, he suspected, of his "anti-German" activities in the UK and his role at the trials. He also tried unsuccessfully for an appointment on the German delegation to the International Ruhr Authority.

The Protector of the Constitution

In 1950 West Germany was passing through the interim stage on the road from occupation to sovereignty, and an important question was that of preserving ideological rectitude in the new state. The French did not want it to have any political police. The British favored an adaptation of Scotland Yard. The United States came up with an emasculated FBI plan. The Germans wanted to return to the pre-Hitler scheme, incorporating the political police as Branch 1A into the national police. The eventual compromise was the watery conception of an Office for the Protection of the Constitution, a police force with no power to arrest. It was supposed to be a silent security service keeping tabs on the lunatic fringes to the right and left.

How was it that Otto John, a man who already showed signs of needing watching himself, almost an expatriate, whom Chancellor Adenauer is said to have disliked from first sight, was named head of the sensitive Bundesamt fuer Verfassungsschutz? Or, as the Germans put it in their rough peasant

proverb, "Who put the goat in charge of the garden?" As assets he had an influential friend in Jakob Kaiser, his connections by marriage with President Heuss, and most importantly the gratitude of the British for his work for them during the war and in the Nazi trials.

And it was not an easy job to fill, with its international political implications. The German proposal to appoint a nonpolitical civil servant was vetoed by the Allied High Commissioners. The United States suggested an excellent man in Fabian von Schlabrendorff, but he refused on grounds of ill health. The French nominated Colonel Friedrich Wilhelm Heinz, information chief in the embryo defense ministry, but John disposed of this rival by having Ian Eland, his mistress' agent friend, put the finger on Heinz as the source of his espionage reports [redacted] Finally, after 15 months, 12 rejected nominees, and 10 wrangling sessions of the High Commission, the British quietly sponsored Otto John, for bad luck the thirteenth man.

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The German lawyers who had defended Von Manstein and the Nuremberg accused were shocked. They complained to Minister of the Interior Heinemann that John was unscrupulous and altogether a bad choice. Heinemann replied that the British trusted John, and anyway the job was unimportant: Germany was in no position to keep secrets from the occupation powers.

U.S. approval was another Gordian knot. On 22 November 1950 High Commissioner McCloy cabled the Department of State from Frankfurt that the Federal Republic had requested HICOG to approve John's candidacy with all possible urgency, and that only the results of the Department's name check were needed to clear the way. A week later, at 1800 Washingon time, 29 November, a cable over Dean Acheson's signature informed Frankfurt that conflicting information regarding Otto John "necessitates thorough investigation by Army G–2 of other sources. Results follow soonest." But on 1 December, at 0909, McCloy wired back:

> On basis of excellent data available here and in absence of any derogatory information and in view of urgency of making a decision and after approval by British and French, we approved appointment of Otto John on 29 November, prior to receipt of your telegram of 29 November.

The newly installed BfV president was again the center of discussions by the Allied Directorate when, on 7 March 1951, they took up the appointment of Vera Schwart, formerly a secretary of Admiral Canaris, as John's secretary. The United States and the UK raised no objections. But the French did, on the grounds that Vera, arrested by the Soviets in 1946, had turned informer for them the following year. The glandular dislike of French intelligence for John had been reflected in the comment of a Sureté chief on his appointment: he had exclaimed, in chorus with a Turkish colleague, "C'est impossible!"

Just how impossible a choice John was became increasingly apparent. Aside from his instability and his emotional political outlook, he was a poor administrator and lacked balanced judgment. U.S. intelligence saw him muddling through without the energy, imagination, or administrative ability to put the BfV on its feet. He had no patience with the painstaking detail necessary to effective intelligence operations. He was intrigued by special missions and fanciful projects which usually wound up putting the Office and the government in embarrassing, not to say ridiculous, positions.

One of the score of projects John laid on was Operation Maerchenwald. The good fairy of this Fabulous Wood was a buxom widow named Frau Baumann from Ansbach in Bavaria, confessed guardian of a vast Nazi treasure trove from which she was supposed to make monthly withdrawals to support indigent Nazi leaders in Switzerland and South America. The cache was somewhere in the Bavarian Alps, sometimes at the bottom of a lake, a very deep lake, the Frau said. John, taking her at her word, dispatched six green-jacketed BfV men to escort her to the treasure. She took them up into the Tyrolean mountains, where, according to an official report, she found the right blazed tree and the secret path of white pebbles, but was unable to find the stone slab covering the lever that opened the way to the cache.

While John was waiting in his Cologne command post for his men to report the find, U.S. operatives came to see him and showed him documents proving that his good fairy was a swindler, blackmail artist, public nuisance, and congenital liar, once inmate of an insane asylum. Nevertheless John

summoned Frau Baumann to Cologne to reveal more details. Somewhat drunk, he had a two-hour seance with her.

By mid-1952 Bonn was rocking with gossip about his antics. Report after report reaching Adenauer's desk indicated that in his hatred of the Nazis John was not alert to the Communist danger, that he maintained relations with Communist sympathizers, that he was given to fits of melancholy brooding, and that he was increasingly taking to drink. But the Chancellor had no intention of lowering the boom on him until Germany achieved her sovereignty.

The BfV's serious operations were apparently in the hands of its de facto director, former General Staff officer Albert Radke. He was a close associate of General Reinhard Gehlen, who had headed the wartime General Staff's section for evaluating Eastern intelligence and in postwar Germany bossed a high-powered unofficial offensive espionage group. Gehlen distrusted John because of his record of defection to the British.

John's four years in office were extremely unpleasant. He was resented by senior police officials and other German civil servants as an outsider, as a stooge of his British sponsors, and as one who had deserted Germany in her hour of need. Rumors were growing that his days in the BfV were numbered, that his office would be replaced by Gehlen's organization. He may have brooded most over this prospect of being supplanted by Gehlen, whom he regarded as one of the military group responsible for the failure of the 1944 coup and so for Hans' death by torture.

In May and June of 1954 he enjoyed the pleasant interlude of a trip to the United States. He was brought to Washington and shown the courtesies normally accorded the head of a foreign intelligence service. CIA officials dined him, and on 7 June he was briefed on general intelligence matters.

Details in a Defection

John returned to the Federal Republic in fine fettle. Dr. Wohlgemuth, however, who visited him in Cologne on 9 July, insisted he appeared run down and prescribed pills. John, rather than argue about it, took them without visible effect, though later he tried to use this incident in his defense. On 8 and again on 12 July he was visited by Michael Winch, a

discredited British-Soviet double agent. The subject of their conversations is not known. Frau John, who happened to be in Cologne, objected to Winch, probably because he was cadging meals and money.

John's twelve-year-old relationship with Wohlgemuth had been a matter of concern for some time. [redacted] is reported to have warned him twice about friend Wowo, first in March 1953 and again in July 1954. After the first warning John is said to have detailed a BfV man, Von Berge, to watch him for a while, and on the second occasion to have given an "embarrassed" and conflicting account of his contacts with him. Before John's visit to the United States, a Berlin shopkeeper, Frau Anneliese Schroeder, showed police notes of a conversation with one Helmut Salewski, a close friend of Wohlgemuth's. Salewski told her Wowo kept a tape recorder hidden in his room and persuaded John to talk about secret matters when he visited him for evenings of women and drinking.

On 15 July the Johns flew to West Berlin for the services commemorating the decennial of the 20 July revolt. Beginning with a reception given by Oberburgmeister Reuter on the evening of 18 July, families and friends of the participants in the plot against the Nazi regime met for the purpose of unveiling a monument to the victims in the courtyard of the former OKW in the Bendlerstrasse. John and his wife took advantage of this opportunity to dine twice with his old school friend of Wiesbaden days, Wolfgang Hoffer, now a captain in the American CIC. Hoffer said that the Americans regarded John as a British agent, and that he himself couldn't stand the CIC any longer and wanted John to help him locate a job in Germany. He wanted nothing more to do with intelligence services.

An intelligence officer who spent considerable time with John during this convocation said he "lamented several times about the bad things people were saying about him and about attacks against him coming from Minister Robert Lehr and Herr Sauer. Shortly before he left Bonn to attend the Berlin festivities, he was called into [State Secretary] Ritter von Lex's office and was told they had just received a complaint from the Federal Chancellery accusing him of secretly join-

ing the SPD. John said he was sick and tired of these rumors, and if a good opportunity presents itself he would seriously consider rejoining the Deutsche Lufthansa when it starts functioning again." [8]

In this mood he came upon a newspaper account of how Minister of the Interior Schroeder, his superior, planned drastic changes in the BfV as soon as West Germany obtained its sovereignty. He was reported to appear visibly shaken. At the commemorative exercises he made an exhibition of himself, sobbing loudly and denouncing two other mourners as Gestapo agents. Although the memories evoked of Hans' death ten years earlier were undoubtedly depressing, he had always been jovial and friendly at the memorial services of previous years.

Immediately after the ceremonies John declined to dine with his old friend Prince Louis Ferdinand, saying that he was meeting with some East Zone people.

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When Louis Ferdinand then suggested that Otto drop by his hotel afterwards for a nightcap, he gave a curt "No." This was about 1600 on 20 July.

John kept an engagement, however, with an elderly German couple, in-laws of an American acquaintance, at his hotel. In this interval between the memorial exercises in the Bendlerstrasse and his appointment with Wohlgemuth, he also saw Bonde-Henriksen, correspondent for the Danish paper *Berlingske Tidende*, the man who after eighteen months was to help him return from East Germany, and apparently expected to have a drink with him later in the evening.

A perhaps equivocal indication of his intention to come back that night was the fact that when he changed clothes he left papers and notes from his pockets in his hotel room. But he also had reservations for a return flight from Berlin, and his desk calendar in Cologne showed a future schedule of normal activities. Driving from his hotel, he stopped in at the Maison de France, a restaurant near Wohlgemuth's downtown office, in order, according to Erich Ollenhauer, to pick up there an answer to a proposal he had made Mendes-France that the

[8] Lufthansa would not have taken him.

Federal Republic's remilitarization plans be exposed to debate at the forthcoming Geneva Conference. The answer was not there.

For John's meeting and movements with Wohlgemuth the evidence consisted until recently mainly of his own account given after redefection, which begins by omitting these known preliminary activities, emphasizes a suspicious cup of coffee served him at the Wohlgemuth apartment, and ends in a theatrical invented scene wherein he awakens from a drugged sleep in an abandoned house and is threatened by Communists speaking with a Russian accent. But there were three important facts from other sources. Item one, Wohlgemuth telephoned the Charité Hospital in East Berlin that evening and said, "I shall come now with my good friend." Item two, he apparently intended, like John, to come back: he left in West Berlin his 10 suits of clothes, four apartments, five mistresses, and third wife. Later we shall look at other evidence of Wohlgemuth's intent made public in 1958 by the release of testimony given at John's treason trial. Item three, the customs officer on duty at the Sandkrug Bridge that night, Ernst Richard Hanke, who halted Wohlgemuth's sedan at the border, peered inside and saw that both occupants were awake and alert. When Hanke pointed out that the vehicle was about to enter the Soviet sector, a man of John's description replied, "Aber dort wollen wir doch hin—Well, that's where we want to go."

The Bonn Government insisted that John must have been abducted. They offered a reward of DM500,000 for conclusive information. A special Bundestag committee was established to investigate the affair. A variant on the abduction explanation was given by a U.S. intelligence cable:

> John was a damned fool caught in a well-baited trap. . . . He very likely overestimated his own position to the extent of believing that the Soviets would not dare harm him. He took and miscalculated a risk in pursuit of bait set by persons who evaluated correctly his psychology and his desire to score a major personal coup following heavy attacks on his office in recent Bundestag debates.

The suicide on 23 July of Otto's friend Hoffer, who had believed that the German secret police supposedly guarding John had actually been holding him under arrest, made the

mystery a double one. John claimed, in a statement broadcast from East Berlin, that his friend had been driven to desperation by the CIC's insistence that he spy on him. Part of the German press said that Hoffer killed himself rather than face an inevitable investigation. The U.S. Army officially denied that he had been detailed to check up on John or on Wohlgemuth. U.S. intelligence had him feeling that the defection of his life-long friend shattered his whole intelligence career.

The British, publicly at any rate, stood by John. They denied on 5 August that any British official had been the source of an Associated Press story to the effect that they had dropped John ten months earlier; they considered such a report to be "skillful sabotage." John continued to have a surprisingly good British press.

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At the other extreme were those who believed, on the grounds of John's vulnerability and associations, that he might have long since become a Soviet agent; and these included

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25X1 At least there were reports pointing to possible Communist pressures and preparation. Baron Wolfgang von und zu Putlitz, who first boasted and then denied having engineered the defection of Burgess and MacLean and who urged John on 16 March 1953 that he at least confer with a Soviet officer about saving Germany from being caught in an East-West conflict, visited Bonn in the spring of 1954 and again in July, and on at least one of these occasions he met with John. Informed circles in East Berlin were reported in August to consider John's defection and that of the Bundestag deputy Karl Franz Schmidt-Wittmack to have been masterminded by Soviet General Ivan A. Serov and run from KGB headquarters in Karlshorst.[9] And a refugee who had worked

[9] Peter Deriabin says that at the time of his own defection in September 1953 Soviet State Security was building up a file on John's dealings with the Nazis, and he suggests John was blackmailed into defecting by the Soviet threat to expose his pro-Nazi activities! (*The Secret World*, p. 197.)

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for the East German Security Service claimed later to have heard Colonel Beater of the Service remark that two of his agents, Axel and Peter (the Rittwagens) were preparing in West Berlin for the defection or, if necessary, the abduction of Otto John, and that Beater had met at least once with Wohlgemuth and with Wolfgang Hoffer of the CIC.

Except to doggedly suspicious minds the baited-trap, drug-abduction, long-time-agent, and fleeing-wrongdoer theories were disproved and the main mysteries of the case cleared up by John's public appearance and a private conversation on 11 August. At a conference attended by 400 Western and Communist reporters in the East Berlin press building on Friedrichstrasse, he said that the West German government had become a mere instrument of American European policy, which was using Chancellor Adenauer to renazify and remilitarize Germany as a spearhead against the USSR, that there were secret clauses in the EDC treaty in this connection, that Adenauer and the militarists regarded the EDC as an interim device for restoring German military hegemony in Europe, that the Gehlen organization had stepped up its activities in France to this end, and that the Americans, in their hysterical fear of Communism, were preparing a new Hitler Crusade against the East that would leave Germany a mass of atomic ashes.

These standard theses of the Communist propaganda line were probably consonant with John's own anti-Nazi and anti-military obsession, reinforced in recent months by his growing feeling of being not appreciated in West Germany and not wanted in the government, even deliberately persecuted under the influence of the neo-Nazis. And if he felt guilt over his earlier desertion to the British, he could now choose the anti-Nazi East and still remain on German soil rather than "flee for a second time," as he later told the Danish correspondent Henrik Bonde-Henriksen.

After the press conference John had a 45-minute talk over glasses of beer with Gaston Coblentz of the New York *Herald Tribune* and two London paper correspondents, Karl Robson of the *News Chronicle* and his one-time boss and benefactor Sefton Delmer of the *Daily Express*. They were joined at the table in a private dining room of the press building by four

Communist members of the Council for German Unity, but these made no attempt to control the conversation. They did not need to, the three Western correspondents agreed: John was saying of his own volition what they would have sought to have him say. The three gave him many opportunities to indicate by some sign that he was being held against his will, but although the talk around the table was going in several directions and it would have been easy, he did not do so.

John reiterated that he had crossed over voluntarily because of his long-smoldering unhappiness about renazification in West Germany. In reply to a question about Dr. Wohlgemuth's role, he said it was relatively unimportant—"he only established my contact with the Communist regime." John substantiated the theory that he had not intended to remain in the Soviet Zone when he drove across the Sandkrug Bridge with Wowo. Asked whether he had decided in advance to stay, he replied: "No. My decision was made only after my talks with the Communist authorities. I came over to confirm that I would be able to stay on my terms. I was able to do so. I would have been free to return if I had wanted to."

John's motives do at this point seem understandable, and the main course of events clear. But as late as November 1958, perhaps because the picture was again confused by redefection, a senior U.S. intelligence officer in Germany was of the opinion that, "barring an unforeseeable stroke of good fortune, we doubt that we shall ever know the true circumstances which prompted Otto John's appearance in East Berlin."

The Way Back

Shortly after his arrival in East Germany, John was reported to have made contact with Dr. Erich Correns, head of the National Front, and to have prepared for the Ministry of Interior a list of some 50 West German government officials possibly susceptible to defection inducements. On 14 August the West Berlin *Telegraf* reported his suggesting that former Field Marshal Friedrich von Paulus, who surrendered the German Sixth Army at Stalingrad, head a committee to "unveil the aggressive machinations of the National Socialist circles in West Germany."

A few weeks later, the East German government announced plans for a Ministry for German Unity to be headed by John. Its proposed purpose was to establish contact with persons in West German public life who were opposed to the Bonn government and thus encourage their opposition or provide them with an incentive to defect. The ministry never materialized, although John wrote to a number of prominent West German politicians urging them to take a stand against the U.S.-Adenauer policies.

On 19 September 1954 John was reported to be working on the All-German Committee of the East Zone government and also on the German Committee sponsored by the GDR Press and Information Office. It was learned later that he spent several weeks that fall in the USSR. Reports received in December 1954 indicated that he was planning to establish permanent residence in Leipzig, that he was working with the new East German Lufthansa, and that he was making preparations for a propaganda offensive to re-establish a constitutional monarchy in Germany and would soon make overtures to Prince Louis Ferdinand.

In March 1955 it was learned that he had been appointed permanent adviser to the National Council of the National Front and was touring the Soviet zone in official capacity, attending conferences of regional committees and issuing special directives for conducting anti-West propaganda. Late in October he was reported to be editor of a new publication, the *Berliner Politische Korrespondenz*, directed against the policies of the Bonn government and intended mainly for dissemination in West Berlin and the Federal Republic. He was also reported to be writing memoires.

But there had already been indications that John, disappointed with East Germany and with having been given only the position of "itinerant preacher for reunification," as he wrote his wife, was toying with the idea of returning to the West. This was the implication of a statement he made to Bonde-Henriksen in June 1955 that he was free to leave at any moment but hesitated because of fear of being arrested in West Germany. In a three-hour interview with the Danish correspondent, John said he would not have stayed on in East Germany if he thought the USSR desired war. Henrik-

sen remarked, "It is a question of whether you would have been permitted to say 'Goodbye and thanks,'" and John replied, "I guess I would have known ways and means . . ." He concluded the interview by saying: "I am a human being with the shortcomings and virtues of a human being. I can be accused of many things, but I have not failed the ideals of my youth. You may call me naive. Nevertheless, I am realistic and developments will prove me right."

In less than six months, however, perhaps particularly moved by a message from Prince Louis to the effect that if John really believed the things he was saying he could no longer be his friend, John arranged with Bonde-Henriksen to be picked up on Unter den Linden in front of the University at 1650 hours on 12 December 1955. At about 1635 he entered the University from Dorotheenstrasse, telling his two guards to wait at the gate since he had an appointment there. The guards let him go in alone. He walked through the buildings to where Henriksen was parked, waiting. Partially disguised in a muffler and dark glasses, he drove with Henriksen in the car bearing the Danish coat of arms through the Brandenburg Gate to the Victory Column and then to Tempelhof Air-

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Bonde-Henriksen and Wiechmann from the regional BfV office flew with him to Wahn. From there he was driven to Bonn.

Post Mortem

His fears of being arrested after his redefection were soon confirmed. He was charged on 18 January 1956 with treasonable conspiracy and high treason for his East Zone activities. His defense was that he thought it less damaging to West Germany, once he found himself in Communist hands through the drug-abduction routine, if he pretended to cooperate; if he refused, he would be brainwashed and forced to reveal state secrets of importance. He contended that he had had no chance to speak freely with Sefton Delmer and the other Western correspondents at his 11 August press conference or to convey any hint to anyone during the entire eighteen months that he was acting under compulsion.

The court was unimpressed. After a painstaking review of all the circumstances he was found guilty on two counts of treasonable conspiracy for his services to Eastern propaganda organizations. He was acquitted of betraying state secrets, but judged guilty of treasonable falsifications that would have been secret if true—his allegation of secret clauses in the EDC treaty and of activities of the Gehlen organization aimed at European hegemony. Sentenced to four years' imprisonment, he was released in July 1958 under an amnesty granted by President Heuss.

Wohlgemuth was brought to trial on treason charges but acquitted on 14 December 1958 by the West German Supreme Court. The court proceedings in the Wohlgemuth case have not yet been released, but the publication in 1958 of the official *Urteil* from the trial of Otto John [10] confirms the general outline of both men's motivations and actions drawn above and fills in some details.

The testimony of witnesses established that by the spring of 1954 John had become so apprehensive about attacks on him and his Office that he secured the promise of a legal position with an industrial firm against eventualities. It was clear to the court also that he had been genuinely, if unjustifiably, troubled by the idea that National Socialism might regain political power in Bonn. His political thinking, if somewhat vague, was certainly oriented toward the West and away from totalitarian forms of government. He distrusted military men, opposed remilitarization, and was shocked by the very thought of another war.

Witnesses pictured him as almost pathologically disturbed during his July visit to Berlin. He was convinced that the newspaper story of changes planned by the Interior Minister was aimed at him. At a lunch on 17 July, when someone remarked that only a war could resolve the current tension, he "shot up out of his chair." At the BfV Berlin office that afternoon he went to pieces, complaining with half-drunken vehemence about the lack of confidence in him. On 19 July

[10] *Hochverrat und Staatsgefaerdung,* Band II (Karlsruhe: C. F. Mueller, 1958), pp. 77–150. The *Urteil* includes an exhaustive and impartial summary of the evidence and arguments of both prosecution and defense.

at lunch he bemoaned the "growing influence of the Nazis" and went into a long reminiscence of the Third Reich and his own misunderstood role at Nuremberg. The memorial service on 20 July had an extraordinarily shattering effect on him.

With respect to any premeditation of his 20 July defection it was testified that he had booked a return flight to Cologne for 22 July, that he had refused his secretary's request for use of the official car on 21 July on the grounds that he would need it himself, that he told his chauffeur after dinner on 20 July that he was through with the car for the day but would call for it in the morning, and that as he left the hotel for the last time, although a clerk told him his wife was in the lobby, he did not say goodbye to her. His frequent letters to her from the East Zone referred again and again to his "sudden" decision and entreated her for understanding.

There was evidence also that the East German security service was unprepared for John's appearance in the East Zone and uncertain about his motives: a West German woman journalist whom it had imprisoned two years earlier on espionage charges and whom it supposed knew a good deal about John was brought before one of its officers in Halle just after 20 July and questioned as to whether she thought John's defection bona fide. Another West German journalist was told by John himself, in complete privacy on 13 May 1955, that the "number two Russian" in Karlshorst to whom he had offered his collaboration on 20 July was surprised, but made a kind of gentleman's agreement not to demand any secrets from him and to let him move about freely.

The testimony did not touch on the Hoffer mystery except to show that John had been inflating a jest of Hoffer's when he claimed the CIC had made him spy on him. From the bits of evidence available here it appears likely that Hoffer was disillusioned with intelligence intrigues, had made some indiscreet contacts in East Germany, and was afraid that his friend's defection would bring on an interrogation and exposure. John's attempt to blame his suicide on the CIC probably reflected a feeling of guilt for it on his own part.

Wohlgemuth, who did not make himself available as a witness, was pictured in the testimony as politically far to the

left, announcing to all and sundry his conviction that Communism would come to power in western Europe within a few years. Nevertheless he had apparently not engaged in any legally actionable activities. With respect to his intentions in driving John across the Sandkrug Bridge, it was testified that when the two men left the office-apartment after the end of the Doctor's office hours that night, he was still wearing his white trousers and carrying only a trench coat, and that in the wee hours of 21 July he came back, alone, very much upset, and dashed to and fro through the house hastily packing a trunk.

He told the night nurse that John, whom he had introduced to some people in the East Zone, had unexpectedly decided to remain there, and that he himself might be suspected of wrongdoing and was therefore going back to stay at the Charité until things quieted down. He left a note for the day nurse to the same effect, and told her to take care of the office and apartment. Between 4 and 5 a.m. he telephoned his attorney, gave him the same excited account, and asked him to take full powers over his property. Then he went to his mistress' house in Lietzenburger street, where he maintained a one-room apartment, and called her down to the street. Telling her what had happened, he suggested that his apartment might be searched and asked her to remove his camera, photographs, films, and books. At about five o'clock he stopped at the Uhland garage for gasoline, where the attendant noticed that he seemed to be in "even a bigger hurry than usual."

None of these people informed the police or Frau John, however, who first got from intelligence sources the news of John's probable defection, confirmed on 23 July by his own announcement over the East German radio:

> . . . I have taken a resolute step and made contact with the East Germans. I have been deprived of any basis for political activity in the Federal Republic. After I had been continually heckled in my office by the Nazis again rampant everywhere in political and even in public life, the Federal Minister of the Interior has now made any further work in my official position impossible for me by declaring to the press that with the coming of sovereignty he would have a free hand and be able "to entrust the protection of the constitution to persons who are truly above suspicion." . . . German policy has run into a

> blind alley . . . yet there is still a possibility of reunification. . . . I shall soon present my ideas and plans for German reunification to the German public.

Some students of the case are still convinced, in spite of the apparent adequacy of John's personal motivation, that he must nevertheless have defected under Soviet or more likely British control. To them the case can but remain a mystery; for although acquaintances like Winch, Putlitz, and Wohlgemuth may well have encouraged John's own obsessions, no evidence has come to light on how a supposed definitive control was exercised, and it is difficult to arrive even at a persuasive theoretical reconstruction of British or Soviet purposes consistent with the facts.

It seemed evident to the court, as it does to a reader of the intelligence files, that John's decision to approach the Communist authorities in the East Zone, made in a state of heightened neurotic tension and perhaps alcoholic befuddlement, derived from his frustration in what he considered his mission to stem the renazification of Germany and was precipitated by the imminent likelihood of his losing what position and influence he still had in the Federal Republic. When his initial Soviet contacts in Karlshorst led him, it seems probable, to believe he would be free of duress in the East and might be able to accomplish there what he could not in the West, he forthwith made his marriage of convenience with the Communists, in which any real position and influence yet escaped him and from which he eventually opted to return to his Western wife and friends.

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An unsolved problem analyzed in depth and some approaches recommended to solution.

A FRESH LOOK AT COLLECTION REQUIREMENTS

Clyde R. Heffter

In the immediate post-war period, the word "requirement" was seldom heard in intelligence circles, and what we now know as collection requirements were managed in a very offhand way. Today this subject is well to the fore, its importance acknowledged by everyone. Looking back, it is possible to see certain steps by which this reversal of things came about.

First there was a time when many people, both collectors and consumers, saw no need for requirements at all—when information was believed to be there for the plucking, and the field intelligence officer was considered to need no help in deciding what to pluck. This period overlapped and merged quickly into a second one in which requirements were recognized as desirable but were not thought to present any special problem. Perhaps the man in the field did, after all, need some guidance; if so, the expert in Washington had only to jot down a list of questions and all would be well.

A third phase began when it was recognized that requirements were an integral and necessary part of the intelligence process and that they needed to be fostered and systematized. Committees were set up, priorities authorized, channels established, forms devised, control numbers assigned. Thus by the early 1950's the formal requirements machinery of today was mostly in place.

The fourth and most interesting phase, which is still with us, might be called the phase of specialized methodologies. The harsh difficulties of intelligence collection against the Sino-Soviet Bloc have driven home the realization that the way a requirement is conceived and drawn, the way it gets to its ultimate objective, the details it includes, the alternatives it provides, the discretion it permits, and a dozen other features may largely predetermine its chances of fulfilment.

Specialists in many fields, intent on solving immediate, concrete problems, have created new types of requirements peculiarly adapted to their own aims and circumstances. One requirement may take its shape from an analytical technique,

25X1 [redacted] Another may be cast in the mold of a collection method—photography, ELINT, exploitation of legal travel. Subjects, areas, sources, access, communications—all have put their mark on the writing of requirements.

If we turn from the past and speculate on the future, we can hardly doubt that it will be one of intensified effort. For it is more and more evident that the answers we get are intimately conditioned by the questions we ask, and that asking the right questions—the business of requirements—is no spare-time job. But what direction should this intensified effort take?

Undoubtedly the healthy specialization and experimentalism of the present should and will continue. But by itself this is not an adequate program. The problems of requirements are not all special problems. Some of them are central to the very nature of the requirements process. One cannot help feeling that too little of the best thinking of the community has gone into these central problems—into the development, in a word, of an adequate theory of requirements.

It would be untrue to imply that nobody has been concerning himself with the broad questions. Much expert thought has gone into the revisions of guidance papers for the community at large or for major segments of it. But there is often a conspicuous hiatus between these high-level documents and the requirements produced on the working level. Dealing with general matters has itself become a specialty. We lack a vigorous exchange of views between generalists and specialists, requirements officers and administrators, members of all agencies, analysts in all intelligence fields, practitioners of all collection methods, which might lead at least to a clarification of ideas and at best to a solution of some common problems.

It is the aim of this paper to incite, if possible, such an exchange of views. It offers as candidate for the title of Number One Requirements Problem the problem of *priorities*. More exactly, it is the problem of how to formulate needs and priorities in such a way as to facilitate the satisfaction of

needs in a degree roughly proportionate to their priorities, through the most effective use of the collection means available.

This problem is one which deserves and will probably reward the most searching study that can be given it. The present paper cannot claim to be such a study. Among its limitations is the fact that the writer's personal experience is confined to the clandestine collection field. It seeks, however, to demonstrate that there *is* such a general problem; that it is amenable to general analysis; that it must be examined not merely as a problem in administration but as one in analytical method; and finally that it is one with which the individual intelligence officer can effectively concern himself. The few specific proposals in the following pages are incidental to these general aims.

We may begin with a provisional definition of a collection requirement as simply "a statement of information to be collected." Our next step is to examine the most important varieties of such statements.

Kinds of Requirement

In the management of collection requirements there are certain persistent tendencies that reflect the divergent interests of the participants. There is the tendency of the analyst to publish a list of all his needs in the hope that somebody will satisfy them. There is the tendency of the theorist and the administrator to want a closely knit system whereby all requirements can be fed into a single machine, integrated, ranged by priorities, and allocated as directives to all parts of the collection apparatus. And there is the tendency of the collector to demand specific, well-defined requests for information, keyed to his special capabilities.

These tendencies are capable of complementing each other usefully if brought into reasonable balance, but their coexistence has more often been marked with friction.

It will be useful at this point to take a look at the word "requirement" in ordinary English usage. For the divergent tendencies just mentioned have a remarkable parallel in certain divergent but thoroughly ingrained connotations of the

word itself. It is highly likely that these connotations, jumbled together loosely in the backs of our minds, help to create our notions of what a requirement "really ought to be." Though not mutually exclusive, they are sufficiently different that as one or the other predominates, the character of the resultant concept varies appreciably.

The first connotation is that of *need*. A requirement is something needed, or a statement of that need. This meaning does not necessarily involve the idea of authority. The need is objective; it is determined by the facts of the case. Thus food, water, and oxygen are requirements of the human organism. And thus information on various subjects is a requirement of the analyst, the intelligence organization, and the Government itself. When we think of the intelligence requirements of the Government, we are thinking not merely of what has been authoritatively determined to be needed, but of what actually *is* needed. This way of regarding requirements, which is basic and which we all share to some extent, adds dignity to our conception of our work. To the analyst, who thinks in terms of what he needs in order to do his job, it is the dominant connotation, and in fact the only one he cares about until experience forces him to look farther.

The second connotation for most people is that of *compulsion* or command, stemming from authority. As children we are "required" to go to school. In college we must take certain "required" courses. In intelligence, many of us regard a requirement as essentially a directive from a higher echelon to a lower one. In this view, the key question is not whether the information is objectively needed but whether its procurement has been directed by competent authority. It is a view which commends itself to the administrator, who would, of course, contend that certification by competent authority provides the best assurance that a valid need exists. This connotation, like the first, exists in varying degrees for everyone. Where it dominates, it leads to an emphasis on machinery, systems, channels, committees.

Finally, there is the connotation of *request*. Though "request" is no longer an active meaning of "require," both come from the same root, along with "inquire," "question," and "query." In intelligence this meaning has again come into its

own. Under this interpretation, one equal (the "customer") makes a request or puts a question to another (the collector), who fulfills or answers it as best he can. There is a sort of honor system on both sides—with a dash of mutual suspicion. The requester vouches for the validity of the requirement, though the collector is free to reject it. If he accepts it, the collector gives an implied assurance that he will do his best on it, and this the requester is free to doubt. In any event the relationship is a mutual one, and in its pure form is free from compulsion. The use of direct requests appeals particularly to the collector, who finds that it provides him with more viable, collectible requirements than any other method. It sometimes appeals also to the requester-analyst, who if he finds a receptive collector is able by this means to get more requirements accepted than would be possible otherwise. Again, it is sometimes disillusioning to both, if the collector comes to feel overburdened or the analyst to feel neglected.

These three connotations of need, compulsion, and request are embodied in three kinds of collection requirement, to which we shall arbitrarily give names—the inventory of needs, addressed to the community at large and to nobody in particular; the directive, addressed by a higher to a lower echelon; and the request, addressed by a customer to a collector.

The Requirement as Inventory of Needs

An example of the *inventory of needs* is the series of Periodic Requirements (recently relabeled *Reporting*) Lists issued by the CIA Office of Current Intelligence. No collector is directed ("required") to collect against these lists; the lists are not addressed to any single collector. Some responsible individuals in clandestine collection (branch chiefs and station chiefs) have refused to handle the PRL's on the grounds that they are "not really requirements," *i.e.*, they are not requests to the clandestine collector for information which only he can provide. In most cases, however, the PRL's are selectively utilized for guidance despite their character as inventories. There are several reasons for this. Revised three times a year, they are the most up-to-date of requirements. Their main subject, current affairs of chiefly political significance, is one which engages the interest and competence of nearly all collectors and which presents opportunities to nearly all. Many such opportuni-

ties are sudden and gratuitous; they divert no effort from other requirements, hence raise no issue of priorities.

Generally speaking, however, the inventory of needs does not appeal to the busy collector. When he accepts it, it is a sign that adequate requirements addressed to his particular capabilities are lacking. But the collector's viewpoint is not the only pertinent one. The inventory of needs can have great value as an instrument of analysis within the intelligence production office that originates it. The one thing it can not do is to contribute significantly to the resolution of the priorities problem.

The Requirement as Directive

The most broadly controlling document in the field of requirements is the list of Priority National Intelligence Objectives issued annually as a Director of Central Intelligence Directive to which attention is given in the NSC itself. Technically not requirements, and certainly not collection requirements, the PNIO's establish general guidelines for both collection and research. They are ranged in three priorities and contained in four pages. They are comprehensive, authoritative, and community-wide in their application. But because of their extreme generality, the PNIO's provide no practical guidance in settling issues of specific collection priorities. They form a constitution which requires both laws and courts to interpret it. To only a limited extent do present collection directives provide such "laws" or the USIB committee structure such "courts." It is still common practice for individual customer requirements (chiefly of the "request" variety) to claim a priority derived directly from the master document. If conscientiously applied, this practice is sound as a discipline to the requester. But it has no more value in judging the relative urgency of two specific collection requests than citation of the U.S. Constitution would have in settling a suburban zoning dispute.

On the level of collection requirements proper, the *directive* occurs in several situations. The clearest example is where there is a command channel, as between a collection organization's headquarters and its field representatives. Any requirement sent through such a channel is a directive if the higher echelon chooses to make it one. (Paradoxically, by

euphemism, the fact that command authority is being exercised will often be indicated by the word "request.")

For purposes of this discussion, the most significant type of directive is that which emanates directly or indirectly from the authority of the DCI, or is issued in consequence of agreements between two or more agencies. Typically, such requirements originate outside the collection organization—often through the mechanism of an inter-agency committee—and represent the coordinated interests of major customers. Where requirements of this kind are traditionally and without question accepted by the collection organization and issued with command force to its components, it is reasonable to classify them as directives without looking into the precise authority of the committee concerned.

Directives are most practicable in the following circumstances: (a) where a command relationship exists; (b) where there is only one customer, or where one customer is incomparably more important than the others; (c) where a single method of collection is involved, and where this method has very precise, limited, and knowable capabilities. The last of these circumstances is most likely to occur in collection by technical methods. In such collection, especially on the Sino-Soviet Bloc, directives have been relatively successful. For when it is perfectly clear, as it often is in technical subjects, that it is possible to have this *or* that but not both, it becomes both feasible and necessary to reach a binding decision. In these circumstances, priorities have real meaning.

The situation is very different in some other fields where the need for priorities and hence for directives is felt equally keenly. One such field is the broad area of clandestine collection. Clandestine collection, though distinguished by its methodology, is not a single method but a congeries of diverse methods. Its capabilities are limited, but for the most part are neither precise nor knowable. The demands on it are fantastic. It serves as many customers as there are members of the intelligence community, but is under the command of no customer office. In short, it combines a maximum need for direction with a minimum of the characteristics that make direction practicable. In these circumstances the Interagency Clandestine Collection Priorities Committee, which is charged

with determining priority requirements for collection by the Clandestine Services of CIA, has an unenviable mission. The lists of requirements and targets (IPC Lists) issued by this body of USIB representatives since 1951 form a fascinating record of attacks on the requirements problem, from the highly selective, 18-target USSR list of 1952 to the encyclopedic, 379-target list of 1956, the subsequent selective excerpts from that list, and the worldwide list now in preparation.

The IPC Lists have served various important purposes: they have established goals, provided a basis for planning, and recorded in small compass many of the most critical information needs of the USIB agencies. The IPC has also addressed itself continuously to the problem of priorities. Its primary method has been to relate its requirements for clandestine collection to the objectives set forth in the PNIO's, and to assign each requirement the priority carried by the corresponding objective. This method, and the variations on it, will be discussed at a later point in this paper. It cannot be said to have helped much in solving the concrete problem of deciding what items, among all items that are probably collectible, are most worth collecting at the expense of something else.

The Requirement as Request

Examples of the requirement as *request* can be found everywhere. Most requirements fall in this category, including a large majority of those bearing *RD* numbers in the community-wide numbering system administered by the CIA Office of Central Reference. The fact that RD stands for *Requirement Directive* is historically interesting but not currently significant.

A request may range from a twenty-word question to a fifty-page questionnaire. It may ask for a single fact or a thousand related facts. Its essence is not in its form or content but in the relationship between requester and collector.

An important variant on the request is the *solicited requirement*. Here the request is itself requested, by the collector. The collector, possessing a capability on an existing *general* requirement (of any of the types discussed), informs the appropriate customer of the capability and asks for *specific* requirements "tailored" to it. The resulting requirement is

drawn up with an eye to the nature of the particular sources to be used, rather than merely to the presumed over-all capacities of the collecting organization. Through this interaction of consumer and collector, requirements of great precision and immediate practical value are developed.

In clandestine collection the solicited requirement is regularly used for legal travelers, for defectors and returnees, and for other sources whose capability or knowledgeability can be exploited only through detailed guidance or questioning. It is the cornerstone of the requirements system managed by the Interagency Defector Committee.

The solicited requirement blends into the *jointly developed requirement*. Here collector and consumer work out the requirement jointly, usually on a subject of broad scope and usually on the initiative of the collector. This too is a practical device of often considerable merit.

The possible variations on the request are innumerable. The unsolicited or "spontaneous" request is the basic requirements tool of the community, the means by which all can seek help from those they think able to help them. The solicited request is a precision tool for relating needs and capabilities. If capabilities were ample enough to fulfill all needs, no other form of collection requirement would be necessary. But needs are infinite, capabilities limited, priorities therefore essential, and some form of directive indispensable.

The Study of Priority

If this description of the *kinds* of requirement is valid, it is evident that each of the three kinds answers a deep-felt need, has a life of its own, and plays a role of its own in the total complex of intelligence guidance. Since the focus of this paper is on the problem of priorities, it must concern itself chiefly with the directive. But while the directive is the only practical vehicle for priorities, requests are also very much in the picture since priorities must govern their fulfilment.

In approaching the priorities question, it is natural to think first in terms of administration and system. Adequate administrative arrangements are in fact essential, and will be

discussed in some fullness. In themselves, however, they are powerless to do more than make the wheels go round. If the wheels are also to mesh, the question must be studied further as a problem in intellectual discipline, involving analytical method and an appropriate language. Finally, it must be viewed in relation to the training and responsibilities of the individual intelligence officer. Each of these approaches will be examined in turn.

System and Administration

There exists no single, general requirements system. What might be called the requirements *situation* has previously been well described in this journal,[1] but a brief recapitulation will be useful here.

A department or agency which engages in collection primarily to satisfy its own requirements generally maintains an independent requirements system for internal use, with its own terminology, categories, and priorities, and with a single requirements office to direct its collection elements on behalf of its consumer elements. This pattern is characteristic of the military departments. The same requirements office that performs these internal functions (or perhaps a separate branch of it) represents both the collector and the consumer elements in dealing with other agencies.

Where, as in CIA, the consumer components are dependent on many collectors and the collection components are in the service of consumers throughout the community, no such one-to-one system is possible. Each major component (collector or consumer) has its own requirements office. There may also be requirements officers at division and branch levels, as in the Clandestine Services.

Requirements offices differ in many respects, but in all cases they are the official channels for the movement of requirements between agencies. Their personnel are middlemen, and must have some understanding of the problems not only of

[1] By William P. Bundy in "The Guiding of Intelligence Collection," in the Winter 1959 issue (III 1), and, in the narrower context of clandestine collection, by Lowell M. Dunleigh in "Spy at Your Service, Sir," in the Spring 1959 issue (III 2).

those whom they represent but of those whom they deal with on the outside. The consumer requirements officer must find the best collection bargain he can for his analyst client; the collector requirements officer must find the best possible use for the resources he represents, while protecting them from unreasonable demands; each must restrain his own side from ill-advised intransigence.

Between agencies (or between major components of CIA) the typical requirement moves officially from analyst to consumer requirements office to the CIA Office of Central Reference to collector requirements office to collector. (Even this is a simplified statement.) OCR's community-wide system whereby such requirements are numbered and recorded makes for convenient reference. In some cases OCR also performs other functions normally performed by requirements offices, such as checking to make sure that readily available sources have been canvassed before levying a requirement on an expensive collection system.

Although the vast majority of requirements move officially through the channel just described, many of these movements are merely in confirmation of advance copies which have previously passed directly between the two requirements offices concerned. Matters of substance are regularly discussed by one requirements officer with another. And beyond this there are many instances where one or both of the requirements offices are unaware that a requirement has been agreed upon between analyst and individual collector until a confirmation copy comes through channels.

From the standpoint of the "free market," of bringing analyst and collector together, this way of doing things works well. Where the collection situation is such that effort on a low-priority target does not actually detract from the effort that can be made on a high-priority target, little harm can be done. Or where analyst and collector are both highly knowledgeable and responsible, the results can be excellent. The former condition still prevails in some areas outside the Iron Curtain; the latter has been attained in certain components. But neither analyst nor collector nor yet requirements officer is competent to set priorities.

Hitherto we have spoken of requests and directives as clear-cut categories. But it is necessary to take account of a special variety, the *request-cum-persuasion,* and its still more vigorous relative, the *request-cum-pressure.* The intense efforts which are often made informally to induce individuals in the collection offices to give special emphasis to particular requirements are a clear sign that there is a felt need for priorities. But priorities are slippery. Let us see how a typical collection priority is handled on the working level.

The OCR form used for RD's has a place for the requester to check "degree of need" as "standard," "great," or "urgent." If the analyst checks this in a way that is grossly out of line, his own requirements office will probably catch him up; if it does not, the collector's requirements office will balk. But although it may be assumed that the requesting requirements office would not approve an "urgent" rating unless the requirement deserved it in relation to other requirements placed by that office on the same collection organization, no such assumption can be made as to its priority relative to requirements from other consumers. And it would be a very self-confident collector who would try to settle the question unaided.

If the collector should show no interest in a requirement marked "urgent," the requester may try proof, persuasion, or pressure. He may indeed, in anticipation of resistance, have originally indicated a relationship between his requirement and one of the Priority National Intelligence Objectives. He is almost certainly right that a relationship exists, but there may be question of its cogency. It is possible to tie a very small requirement to a very big objective. Early warning is important, but not everything described as early warning is equally important. The collector may still be unimpressed. There is no impartial arbiter, short of the USIB itself, for the requester to appeal to.

Oddly enough, in requests addressed to the Clandestine Services it is unusual for a requester to cite an IPC List. Yet in theory there should be many such citations. The Lists are designed to contain all the highest priority requirements for clandestine collection. They carry priorities derived authoritatively from the PNIO's. Moreover, taken together they

are more than a hundred times longer than the PNIO's and are crammed with specifics. It would be much easier to *prove* that a request is significantly related to an IPC item than that it is significantly related to a PNIO—provided it actually is.

The chief reason for the paucity of citations seems to be that only a small proportion of requirements received as requests are actually on subjects specifically covered in the IPC Lists. The Lists are not cited for the simple reason that they contain nothing suitable to cite. On non-Bloc areas this is not surprising, since the IPC Lists have scarcely begun to touch them. But on Bloc areas it is astonishing, all the more since the Lists are composed of requirements and targets originally submitted by the very analysts who now make these requests for information. Is it possible that the preparation of IPC Lists is regarded by some analysts as a formal, academic exercise unrelated to the real expression of their keenest interests? Or do the Lists contain only items of such rarity and difficulty that on ordinary workdays nobody really hopes to get them? Or is it that the day-to-day requirements deal with matters so current that the IPC Lists have not caught up with them? Or with matters too unimportant to merit inclusion in the Lists?

Be the answer what it may, the fact is that the analyst in our hypothetical situation would probably appeal to a different source of authority in his effort to show the collector the importance of his requirement. The chances are good that, if he had a case capable of being pressed at all, he would draw support from positions taken by one of the substantive USIB committees that concern themselves with requirements. Among these committees are the Economic Intelligence Committee, the Scientific Intelligence Committee, the Joint Atomic Energy Intelligence Committee, and the Guided Missile and Astronautics Intelligence Committee. Each of them is authorized, among its other duties, "to recommend . . . intelligence objectives within the over-all national intelligence objectives, establish relative priorities on substantive needs, review the scope and effectiveness of collection and production efforts to meet these objectives, and make the necessary substantive

recommendations to the departments and agencies concerned." Each is also authorized "to determine the deficiencies" in its own category of intelligence, "to take appropriate remedial actions, and to recommend to the Intelligence Board remedial actions" beyond its own cognizance. Such recommendations have from time to time been made and approved, with the result that priorities on very specific matters have been established by the USIB. Priorities so established have, of course, the force of directives. And such priorities have frequently been cited effectively in the levying of requirements, although the exact applicability of the priority in the context of a given collector's responsibilities has not always been clear beyond doubt.

It is the intent of this paper to illustrate rather than to exhaust the questions it raises. The requirements situation has many other significant systems and phenomena: the special, closed requirements systems governing technical methods of collection; the Watch Committee with its General Indicator List; and, to name but one more, the Critical Collection Problems Committee, whose recommendations on specified critical collection questions carry great weight with the Intelligence Board. But enough has been said to give a sense of the administrative question.

It would seem to involve at least the following aspects: (a) a vast number of requests with no consistently effective way of relating them to established directives and hence to priorities; (b) directives all of which emanate directly or indirectly from the USIB, but through different channels and without sufficient coordination, so that their impact is often disconcerting.

One sometimes encounters the view that all requirements should be fed into a single mechanism, where the marginal ones would be eliminated and the others properly related, subordinated, formulated, and allocated. The appeal of this dream is that such a procedure would, at least theoretically, deal head-on with the problems of priorities and capabilities, and would ensure that all relevant considerations and interests were taken into account simultaneously by a single responsible authority.

There are a dozen reasons why such a scheme is impractical. The group charged with this function would have to be delegated an unprecedented amount of the authority of the USIB. It would be unwieldy in size. Its staff would have to consist mainly of substantive experts and experts on capabilities, yet neither of these could be extensively spared from regular analytical or collection duties, and if away from such duties long would lose their expertise. Such a group could not keep abreast of current developments, and much of its output would be stillborn. It is inconceivable that it should take over direction of the self-contained collection systems, or that it could do so successfully. If charged with processing all requirements, its machinery would whir meaninglessly over the many that present no problem and find it difficult to pause for those that do. The priority system would probably be too standardized to help with the really hard and painful decisions. There would be a strong tendency to ratify the obvious and sidestep the prickly.

To encounter these faults and dangers, to be sure, it is not necessary to create this gigantic requirements mechanism. We face most of them already; they are the hazards of all centralized systems, whether large-scale or small-scale. But since we have still so much to learn about how to make priorities work, it would seem sensible to do our experimentation on a scale where the strains are tolerable.

One such experiment might confine itself to requirements for clandestine collection by CIA. These might be divided into directives and requests. The directives would be issued—possibly by a strengthened IPC—under new procedures to be established by the USIB. The issuing body would take advantage of the specialized competence of the substantive intelligence committees, and the latter would coordinate with the issuing body any recommendations to the USIB affecting clandestine collection priorities. All directives and priorities presented to the Clandestine Services (except those received directly from the DCI) would reach them through a single channel and would constitute a single, interrelated body of guidance. Frequency of revision would be essential. Special emergency priorities established through command channels would be possible as they are today. As for requirements of the

request type, they would be served in much the present manner except that on challenge they would have to be justified by a demonstrable relationship with a directive.

Discipline: Method and Language

The more one reflects on it, the more one sees that the setting of priorities is a singularly subtle and elusive task. Useful priorities simply cannot be caught in the coarse nets of authority, information, channels, and the division of labor. These things are needed, but so also are a disciplined intellectual approach to the subject, comprising a delicate analytical method and, perhaps most important, an adequate language.

To illustrate problems in method, we may draw once more on the experience of the IPC. That committee, as was noted earlier, derives its priority system from the PNIO's. The system consists of three priorities, based on the degree to which the United States could be benefited by the achievement of an objective or harmed by the failure to achieve it. All IPC requirements and targets (the latter being institutions or installations on which information is needed) bear the same priority as the PNIO to which they are related. Since the PNIO's on the Sino-Soviet Bloc are all of First or Second Priority, the IPC requirements on those areas are too. The result is that a list of 300 Bloc targets may have 100 of First Priority and 200 of Second Priority.

There are several difficulties here. One, which the IPC has for some time recognized and tried to overcome, is that two priorities simply do not provide enough span. By various devices—arranging certain related targets in an internal order of importance; describing certain targets as substitutes for others; treating targets as subordinate to "basic requirements" which are sometimes expanded into several paragraphs—the IPC manages to convey a somewhat more discriminating sense of priority.

A second difficulty is that a requirement related to a First Priority objective is really not necessarily more important in itself than another requirement related only to a Second Priority objective. Everything depends on *how significantly* each requirement is related to its objective—how far its fulfilment would go towards achieving the objective. It is illogical to

suppose that every item of information (or every target) has an importance strictly proportionate to the importance of the objective on which it bears, however minutely. Here again the IPC has recognized the difficulty and has tried to compensate for it to the extent compatible with its system. Where a requirement or target bears on both a First and a Second Priority objective, it is ranged under the objective to which it would contribute more significantly. This still leaves a tremendous unevenness in the importance of targets assigned the same priority.

Still a third difficulty is that a requirement meriting a given priority in the context of total U.S. security interests does not necessarily merit the same priority in the context of a particular collection method. The economic stability of a certain friendly country may be of great importance (Second Priority in the PNIO's), yet may not require clandestine collection at all. This difficulty also has been recognized, and where it is agreed that a requirement can be satisfied by other methods it is omitted from the List.

Unquestionably the difficulties of the priority-allocating process could be illustrated equally well from the experience of other bodies, though perhaps none faces so baffling a task. And the difficulties cited are only a few among many. These are the kinds of matters which appear much simpler before studying them than afterwards. The fact that they are nowhere near solution is one reason for keeping our experiments in priority administration on a medium scale, rather than magnify the problem by creating more grandiose structures.

In order to clarify and refine our method we need a better language. Here the most pressing need is for a common vocabulary in which such indispensable words as *objective, requirement, target,* and *request* can be relied on to mean at least approximately the same thing to everybody. This happy state can not be attained by promulgating official glossaries, but only through continued, careful discussion of common problems by persons from all parts of the community.

As we probe the more subtle aspects of requirements theory, we may find that language itself is putting blinders on us in our search for method. For instance, in the parlance of intelligence direction specific requirements are said to be "derived"

from general ones which in turn are "derived" from the PNIO's or a similar authority. Is it possible that this concept of "derivation" is really no more than a convenient but misleading fiction; that the specifics are actually thought up independently and, at best, are then *matched* with the generalities? The same process is often described as "translating" requirements or as "breaking them down." It is not suggested that we discard such expressions but that we analyze their implications and limitations. Nobody literally believes that a PNIO of fifty words somehow contains within itself the hundreds of thousands of specific questions that will be asked somewhere, sometime, in the effort to fulfill it. We know that many of those specific questions are not inevitable. Others could be substituted for them, perhaps advantageously. There is indeed a relationship between the fifty-word PNIO and the innumerable small questions, one which admittedly can never be fully charted; but has it been adequately explored? In looking into this particular matter—and here we are momentarily returning from the question of language to the question of method—it would be useful to consider the history of the recently suspended specialized annexes to the PNIO's as well as of a stillborn experiment several years ago by the Office of Current Intelligence in the articulation of a body of intelligence requirements at a middle level of abstraction between the PNIO's and collection requirements.

The final aspect of the language question, and perhaps the most important, is the skill with which requirements themselves are expressed. What is needed here is not different words from those now used, but surer ways of communicating the essence of a matter from one mind (or set of minds) to another. There is no formula for this but a trained alertness to the perils of misunderstanding.

Training and Personal Responsibility

In the last analysis every action is performed by an individual; and in intelligence it is clear that the individual cannot expect to be helped more than half way by systems and methods. This is true in the field of requirements as elsewhere. To adapt a hoary but still valid epigram, requirements are far too important to be left to the requirements officers. In types of collection requiring individual initiative and judgment.

these qualities must be applied to ends no less than to means. It is pertinent, therefore, to add a word about the role of the intelligence officer through whom requirements are finally put to work.

In the training of new case officers—the second lieutenants of clandestine collection—substantial attention must continue to be given to the interpreting, tailoring, questioning, soliciting, and developing of requirements suited to their sources, as well as to the training, briefing, debriefing, directing and redirecting of sources in response to requirements. The case officer must learn to study carefully the requirement which comes from far-away Washington, to grasp its purpose as well as its letter, to flesh it out with all the knowledge he has or can get, to cable for clarification when necessary, to adapt it to the understanding and the access of his sources. He must also learn to study the reporting as it comes in from the source, and from it to develop his own immediate feedback of further questions without waiting for the customer's reaction.

To illustrate the case officer's strategic position at the crossroads of outflowing direction and inflowing product, the usual image of the intelligence cycle might be twisted into a figure 8, the upper part representing all the paraphernalia of higher echelons, the lower the collection situation for which the case officer is responsible. He himself appears, not on the outer periphery of a vast, impersonal, revolving wheel, but where he feels himself to be—at the center, receiving and giving direction downward, receiving and submitting reports upward, himself deriving and feeding back direction from the reports he receives.

The symbolic crossroads of the figure 8 is equally applicable to the analyst in a consumer office. He too is at the center; he too must communicate upwards and downwards; he too is no cog in a machine, but a mind at work. When the systems and doctrines have been perfected, the job will still have to be done by these two.

8

Intelligence negotiates for the services of an obtrusive, demanding, but enormously competent mechanical slave.

THE COMPUTER—CAPABILITIES, PROSPECTS, AND IMPLICATIONS

Joseph Becker

Computers and auxiliary machines for the electronic processing of data are emerging as potentially revolutionary intelligence tools to extend and multiply the human skills of the community. The intelligence agencies have already committed huge sums of money for research and development and the design of advanced systems. Eventually this action is certain to produce radical changes in the ways intelligence information is collected, transmitted, stored, and utilized.

There are two main classes of computers, digital and analog. The analog computer, given measurements of a continuum, notably time, direction, distance, or velocity, processes them mathematically as desired and displays the results in some measurable form. An automobile speedometer is a mechanical form of very simple analog computer; it measures the rotation of a car's wheels and continuously translates this into a miles-per-hour reading on the dashboard. For electronic computation the input measurements may be represented by the voltages of electrical signals and processed by addition and subtraction of these voltages. One fruitful application of the analog computer is in a missile guidance system. It converts measurements of wind and missile velocity, launching angle, position, time, etc., into a chain of output signals for adjusting the valves and control surfaces of the missile. Through a feedback loop to the missile these make instantaneous correction of abnormal trajectory variations. They may also be used to drive a data-plotter on the ground for charting the trajectory or displaying it on a TV screen.

Because they work with measurements, which can never be infinitely precise, the analog computers are less accurate than digital computers, which process discrete numbers. And since

numbers may be used to represent the letters of the alphabet or verbal symbols, the digital computer is the machine that has the major promise for handling the verbal data of intelligence. It is possible, however, to pass the signal voltages of the analog computer's output through a converter which turns them into discrete numerical quantities in digital codes that can be processed by a digital computer.

The Digital Computer

The abacus is a simple digital computer, using beads to represent numerical quantities and providing a place to add and subtract these and one to store results. With practice a person can do arithmetic on an abacus much faster than on paper. Electronic computers like Remington Rand's UNIVAC or IBM's 700 series provide essentially the same facilities; but they process numbers at speeds measured in millionths of a second, have an immense storage space or "memory," function precisely and accurately, and can process letters of the alphabet when these are numerically coded, treating them internally as if they were numbers.

The really unique feature of a digital computer is what is called its "logic," its ability to choose for itself one of a number of alternative procedures according to the outcome of previous computations. This feature is the one mainly responsible for the notion that digital computers are endowed with near-human or even superhuman qualities. The fancy is encouraged in the vocabulary used by the computer people: you "instruct" and "query" the machine in its own "language"; it "accepts," "differentiates," "searches its memory," "analyzes," even "evaluates." A seasoned computer operator will argue on occasion that the machine has a personality of its own, and his emotional involvement with the machine is such that research is being done in man-machine relationships to arrive at the right mix of human factors for happy and efficient work with a machine as colleague or subordinate. Nevertheless, although it is true that man can evolve ways to make a digital computer perform operations that closely resemble human thought, and although the machine can digest more information than a man and process it faster and more accurately, the parallel with human skills should not be carried past the point of fanciful analogy. The machine does

not "think"; it is driven through a predetermined set of operations.

Digital computers are used for solving complex mathematical equations, for engineering calculations, for statistical analysis, for experiments in machine translation and information retrieval, and for other precise processing of numbers or letters as in business accounting and banking systems. They also make it possible to run a wide range of tests on sophisticated system simulations called mathematical models. Such a model is a set of mathematical equations governing a system, say an economic system. If the equations used are valid, it is possible, by subjecting the synthetic model to variable data representing impingements on the economy, to determine and analyze the effects of these, and thus to predict what is likely to occur in a real situation. Whereas hand calculations to simulate all phases of economic interaction would not be feasible because of their sheer bulk, the job can be done on a computer in a matter of minutes.[1]

Major weapons systems can be and are similarly reduced to mathematical models in order to help determine their strategic implications. The models, incorporated into computer programs, are put through mathematical war games which test variant opposing strategies, weapons, tactics, logistics, etc., and make possible a rapid evaluation of war plans on a scientific and realistic basis. This is the only comprehensive peacetime test of the effectiveness of military forces, equipment, and resources and of the way they are employed.[2]

The language of a digital computer is usually a binary number system, which substitutes the base 2 for the customary 10 of our decimal system. Instead of running from 0 to 9 before carrying over to a second digit, it goes only from 0 to 1 and then back to zero as it registers in the next position. Instead of 1, 2, 3, 4, 5, it counts 1, 10, 11, 100, 101, etc. It is used in digital computers because their circuits, switches, tubes, transistors, and other electronic components are most efficiently designed to have only two alternate states—on/off,

[1] Cf. "Developments in Air Targeting: The Military Resources Model" by Robert W. Leavitt, *Studies* II 1, p. 51ff.

[2] See "Developments in Air Targeting: The Air Battle Model" by Robert H. Adams, *Studies* II 2, p. 13ff.

transmitting/non-transmitting, magnetized/unmagnetized, etc. There is a simple formula for converting from the decimal system to the binary, but the computer user does not need it: decimal and alphabetical data coded on input media such as punched cards and perforated paper tape are automatically converted to binary numbers on the way into the machine.

Electronic Data Processing

A complete EDP system based on a computer generally has the following components:

Input equipment—devices such as key punch machines and flexowriters for putting the data into acceptable form; machines that convert punched card and paper tape code to binary numbers; and equipment, usually magnetic tape units, to take data into the main storage area of the computer.

The computer, performing all arithmetic and logical operations. Its flexible ability to accept, store, select, and compare data, to calculate, follow logical rules, and release results makes it the heart of the EDP system.

A storage area, containing not only the data to be processed but also the set of instructions—program—governing the entire operation of the system and a place to hold intermediate results for later use.

A control mechanism that electronically supervises and synchronizes the operations of the several machines and provides for manual interruption of the program from the operator's console.

Output devices, those carrying the final results. They may produce punched cards or perforated paper tape, magnetic tape, printouts on paper or microfilm, or TV displays.

Most present-day EDP systems use magnetic tape for input and output. But storage on magnetic tape would entail scanning a reel of it from the beginning to find any particular stored item, and several EDP systems therefore use a different storage medium, say a magnetic disk, in order to provide random access to individual items. Every item on the disk has its own electronic pigeonhole or "machine address," and when the machine is given that address it can proceed directly to the item without scanning any other data in the file.

The conditioning of an EDP system to solve a particular kind of problem or render a particular kind of processing is the job of a programmer. He analyzes the problem, makes certain it is well defined, redefines it if necessary, and attempts to preconceive all eventualities. Then, step by step, he meticulously prepares the machine's instructions, using a special set of symbolic notations furnished by the manufacturer along with the list of operations the system will perform. The program thus prepared contains not only the instructions for the computer but directions for moving the data from machine to machine or place to place within the system.

Automatic programming, a recent innovation designed to make programming simpler for the user, is illustrated in IBM's FORTRAN. It supplies a small and rigid natural-language vocabulary—FORTRAN contains only 38 statements and some simple rules of usage—in which the user writes his program. A prepackaged program called a compiler enables the computer to convert these to machine language as its own instructions.

The concept of automatic programming is being taken a step farther by a committee of the Department of Defense. This group is engaged in producing a compiler that can automatically convert a program set up for one manufacturer's equipment to the right form for another's. Each manufacturer of EDP equipment also sponsors a users' organization aimed at pooling the experience and the programs of all for mutual benefit. SHARE, for example, the organization of IBM's 709 customers, maintains a library of programs written by individual members but available for use by any one. This kind of cooperation conserves costly programming manpower and saves time.

Even though computer applications and programming have only begun to scratch the surface of potential capability, hardware technology continues to forge ahead. The main trend is to design faster and smaller computers, an aim that ultimately involves the use of cryogenic techniques—operating temperatures near absolute zero—and microminiaturization of circuitry. The very low temperatures increase the

computer's switching speeds to a point where the circuits operate with almost no electrical resistance. Microminiaturization is achieved by reducing circuits optically or electronically to their smallest reliable size and depositing an image of the network on the surface of a wafer-thin foil. Very complex circuitry can thus be built into a cube of stacked wafers the size of a lump of sugar.

Looking ahead, designers foresee the day when refrigerated computers the size of a portable TV set will operate on wall socket power. It is symptomatic that one of the serious design problems facing computer engineers is that of minimizing the length of connecting wires, which becomes more and more critical as components get smaller and signal speeds approach the speed of light.

Intelligence Applications

It is clear that these machine capabilities can be applied at a number of points in the intelligence process to improve and accelerate it. Not that computers and other EDP machines constitute any kind of panacea for our ills; they are not glamorous Aladdin's lamps to do our bidding while we recline at ease. Properly applied, they merely provide extensions of human skills, and the calibre of intellectual effort that goes into these applications will determine the net value of the changes now certain to be thus wrought over the next few years in intelligence methods and procedures.

We cannot yet begin to catalog the future points of application, much less describe in just what way machines are going to be used, but we can speculate about some of the intelligence processes likely to be affected by them.

Reporting Media. EDP's first logical prerequisite is likely to be felt in the reporting of collected information. If we are to do any kind of large-scale electronic processing of intelligence information, the natural-language cables and documents that convey it to Washington must be converted to digital form. This could theoretically be done in Washington by manual copying onto punched cards or perforated paper tape or by an automatic optical scanning machine; but retyping is too monumental a task to be considered, and character-recognition conversion machines have not yet been

made practical. The realistic and efficient thing to do is to capture a suitably coded version of reports as a by-product of their original typing in the field.

Teletype equipment produces such a version on perforated paper tape, and standard-keyboard typewriters can be modified to produce one; the best known tape-producing typewriter is the Flexowriter, in use in many parts of the intelligence community. Its tape can be used to drive automatic equipment for duplicating itself, for producing hard copy, or for telecommunications; and it can be used as input to an electronic data processing system. If such tape were the regular by-product of report typing in the field, it could serve as the medium for electric or physical transmittal to Washington, as the means for automatic reproduction of hard copy for dissemination, and, converted to magnetic tape, as input to an EDP system for automatic indexing, abstracting, and analysis in a central document repository. Experiments are already being conducted in the intelligence community to develop procedures based on getting machine-usable versions of reports directly from the field for immediate headquarters processing.[3]

Dissemination. The fact that a machine program can be designed to compare the words in the text of an article with words in a table in the computer's memory suggests its potential use with an intelligence analyst's "watch list." NSA is experimenting with this notion and developing analyst "profiles" consisting of select words and phrases. These are compared by machine with incoming information, and the matches therein are flagged for the analyst's attention. The Air Force has also developed an automatic disseminator which scans incoming information against analyst requirements in essentially the same way.[4]

Document Recovery. The intelligence officer depends on a central library to supply him with documents he cannot keep in his own files and with lists of documents bearing on any

[3] For the description of such an experiment see "Design for Jet-Age Reporting" by William Earling, *Studies* IV 2, p. 7ff.

[4] See "Developments in Air Targeting: Progress and Future Prospects" by Kenneth T. Johnson, *Studies* III 3, p. 53ff.

subject he may have under study. The provision of this service is no mean task, with documents being acquired at the rate of about 1500 per day to be indexed, stored as compactly as possible, and made susceptible of rapid recovery in some form suitable for use. Machines are a potential aid in all these three phases of the library problem. The semi-mechanized CIA Intellofax files are now being examined with a view to conversion to a magnetic tape and photographic system, and the Minicard installation in AFOIN uses advanced equipment designed to meet a similar Air Force filing problem.[5] It is hoped that successful machine development will reduce the need for individuals to keep their own files by providing better central service.

Specialized Files. A critical problem with the general document files of a central library, one aggravated as size and complexity require the use of machine methods, is the semantic and projective difficulties in providing precise and comprehensive indexing by subject matter. These difficulties do not occur in some specialized intelligence files, like those for air target data and for name checks, which can be indexed according to unambiguous features like names, nationalities, and locations; and these are the logical ones on which to try the first EDP applications. Air Targets is already using EDP,[5] and for CIA's millions of biographical records used in name checks a special-purpose machine complex with random-access storage and very large capacity is being built in prototype under the code-name WALNUT. Smaller specialized files can be processed with general-purpose EDP equipment currently on the market, some of it accompanied by manufacturer's generalized programs which need be supplemented only by a few punched cards defining the data sought, how it should be sorted, merged, or matched, and in what form the answers should print out.

In these and other applications to alphabetical data one should still not lose sight of the arithmetic capability of the machines. On demand the computer can supply significant statistical data for management planning and action—predicting a file's rate of growth, detecting gaps which warrant increased collection effort, revealing patterns of user interest, etc. The answers can be rendered in a variety of formats ranging from numbers on paper to graphs on a TV screen. The complex reports accounting necessary in the management of some collection systems may be particularly amenable to such a dual attack by machine.

Abstracting. Beyond their evident applicability to the handling of large files, machines have a less obvious potential for performing a number of operations which now burden the human analyst. One of these is the abstracting done as a library service or by individual analysts for their own needs. Computer programs have been written to do word frequency counts of the text of an article, separate common words from those of graded substantive significance—"notion words"—and after some statistical analysis print out the four or five sentences ranking highest in notion words. When perfected such programs will produce automatic abstracts from texts in any language. The Army's Project ACSIMATIC, among others, is experimenting with machine abstracts of ACSI Information Reports.

Translation. There has been a good deal of publicity for the progress toward a machine solution of the bulk translation problem, particularly of Soviet scientific literature. Somewhat sensational newspaper reports have described "breakthroughs" and demonstrations leaving the impression that all machine translation problems have been solved. It is true that an ability to do a bulk output job intelligible to the reader has been achieved. Smooth-prose translation by machine is not yet a reality, however, and may not be for many years to come. Considerable language research remains to be done, and there are still serious questions concerning an output quality adequate for intelligence needs. But progress is being made toward the day when large-scale machine translation coupled with high-speed printing equipment will give wide and rapid dissemination of foreign texts to researchers. The process could also be reversed and used to convert English to other languages for propaganda and other objectives.

[5] See "Developments in Air Targeting: Data Handling Techniques," by Outten J. Clinnard, *Studies* III 2, p. 95ff.

Statistical Analysis. Wherever there is a need to correlate large samples of data involving many variables, statistical inference techniques can be applied with good results, and computers can be used to make the bulk manageable or to speed and improve the work. The economic researcher, for example, who may be loath to apply statistical methods to much of the data he has because it is such a tedious and time-consuming job, will find computers more and more useful in the future, aiding him to reorganize his data quickly into different forms for analytic review. Eventually he may even make a regular practice of devising mathematical models of economic situations and using machines to help him forecast the effects of anticipated changes in conditions.

Photo interpretation is a natural for machine handling because the interpreter usually begins by solving certain complex mathematical equations used in photogrammetry. He needs computations to obtain the precise geographic orientation of his photo and then to get accurate measurement of objects on the ground. It is feasible to store programs in a computer to solve any number of these equations and yield rapid, exact results when given the parameters of the particular problem. Hand calculations may be economical and fast enough while photo-intelligence ground coverage remains limited, but the prospect of tremendous increases in coverage through satellite reconnaissance programs suggests that machines are likely to play a dominant role in the PI process in the future.

The several experimental applications of EDP thus far tried show that the powerful tools of mathematics and statistics can advantageously be used on verbal information through machine processing, which guarantees not only speed but unprecedented uniformity of product by ensuring that prescribed rules are followed consistently and precisely. In time, particularly if incoming intelligence information begins to arrive in digital form, there is good reason to believe that more complex analytic tasks can be undertaken by the machine through the making and matching of logical combinations of words and phrases. Machine correlations may give rise to new hypotheses not suggested by the uncorrelated data. And farther ahead lies the possibility of using machines to perform elementary types of problem-solving.

Warning Systems

For the past several years the Defense Department has been developing tactical and strategic command control systems. The most widely publicized of these is SAGE (Semi-Automatic Ground Environment), an air defense system. Items received by a machine and dealt with in some way in the SAGE system include such things as aircraft availability, weapons availability, base capability, weather, and radar sightings. When hostile aircraft have been detected a manual calculation of the best distribution of weapons and interceptors to meet the particular threat is almost impossible because of time constraints. The computer, however, can calculate distances, compute intercept times, assess the number and kind of bogey aircraft present, and make a weapons assignment within tolerable time limits. In the present system, while the computer handles most of the routine data processing, it is monitored and assisted by personnel who also make the more important decisions on threat evaluation and tactical action.

As in SAGE, other command control systems of the future are being planned so that an array of the information, including intelligence information, necessary for action can be displayed in readily usable form at command centers. EDP machines will be an integral part of such systems because the volume of data with which a commander must deal is enormous and its interrelations so complex that it can no longer be correlated reliably and rapidly enough by manual means. Vast collection programs will back up these new systems, providing intelligence data for their input from radar, ELINT, and other reconnaissance programs, most of it reduced to analog or digital form beforehand.

It seems reasonable to assume that data may some day also be included from non-technical intelligence products such as estimates, broadcast intercepts, communications activity assessments, agent reports, etc.; but these would presumably first have to be computerized to be compatible with the other data displayed for the commander's evaluation. Otherwise this intelligence contribution would be likely to follow rather than precede action decisions. Ideally, the indications intelligence channel should feed information directly and continuously into the command control system to form an integral

part of the display pattern presented to the commander and provide him with a reliable index of the enemy's immediate intent to attack. Although it does not necessarily follow that today's indications intelligence process should be fully automated to mesh smoothly with command control systems, there is sufficient justification for serious exploration of the possibilities. Since it is already evident that EDP machines are destined ultimately to play the major role in command control, plans for an automatic intelligence relationship need to be laid early in order to ensure smooth parallel development.[6]

Impact on the Community

If we profit by the experience of industry during the past few years we should be prepared for some radical changes in organizational structure as a result of the introduction of machines. The literature is filled with reports of business organizations being turned upside down getting ready to use automatic equipment. There are problems of conversion, parallel processing, work rearrangement, staffing, space, etc. From a data-processing viewpoint, the objective is to achieve a balanced flow of information through the whole organization, and this invariably cuts across departmental lines. It is possible to prepare against problems of this kind in the intelligence organization if it is examined as a total, integrated, functional system. An examination of the necessary scope and the implementation of a coordinated plan will require a time of from five to seven years, an investment that may run into tens of millions of dollars, and the probability of outside contractual assistance.

Another kind of impact is that of machines on personnel. People are wary of the prospect of the machine "taking over," and they set up defenses to prevent it. Perhaps they can be reassured by the fact that the introduction of computers in business, while speeding up information and improving management's control, has neither reduced personnel in number nor replaced individuals: with no experienced pool to draw on for EDP staffing, the pattern has been to do a great deal

[6] For a description of the indications intelligence process see "The Monitoring of War Indicators" by Thomas J. Patton, *Studies* III 1, p. 55ff.

of internal training of the old staff. But training takes time, and intelligence should be planning an enlightened training program chronologically coordinated with the rest of the change-over effort.

The next five or ten years will be the period for planning and experimenting with machine processing of intelligence data that will ultimately make magnetic tapes as common a form of dissemination as paper. It will be a period of careful and deliberate systems analysis, simulation, and testing. The problem of organizing and manipulating information in intelligence is far more complex than in business or scientific activity. It stands in a class by itself and challenges solution.

COMMUNICATION TO THE EDITORS

On Interrogation

Dear Sirs:

I believe that your recent and useful article by Stanley B. Farndon, "The Interrogation of Defectors,"[1] is marred by some oversimplifications, questionable principles, and psychological anachronisms which should be brought to the attention of the unwary reader.

I am sure that many experienced interrogators would find too sweeping Mr. Farndon's assertion (page 10) that the interrogator can best accomplish his purpose "by achieving a harmonious atmosphere and creating a close personal rapport with the subject . . ." Certainly the methods of "unfriendly" interrogation he describes (pages 26–27) are not designed to build rapport. He seems unacquainted with recent scientific research on the psychology of interrogation, in which evidence is accumulating for the hypothesis that the essential prerequisite for interrogation (as distinct from the debriefing of cooperative sources) is the deliberate, controlled regression of the interrogatee. The suitable method for inducing regression varies from subject to subject; but no matter how the effect is achieved or what depth is required to induce submission and dependency, it is this state, not rapport, which the successful interrogator of resistant sources needs to create.

With respect to these "unfriendly" methods Mr. Farndon also fails to make clear how CIA interrogators, at least, are to employ them without violating the provision of the National Security Act which stipulates that "the Agency shall have no police, subpoena, law-enforcement powers, or internal-security functions . . ." If, as seems probable, he is describing an interrogation undertaken jointly with a liaison service empowered with executive authority, another layer of complexity is added which should be explained if readers are to benefit from the article. This oversimplification is evident also in his statement (page 11), "The fact that a defector is dependent on the

[1] *Studies* IV 3, pp. 9–30.

West's good will for his future well-being is a lever which the interrogator can utilize to control him . . ." If the interrogation is such a joint one the person being interrogated may be partly dependent on Western benevolence. But if CIA is interrogating, and if the interrogatee is a hostile agent, he will probably have been briefed by the adversary service about the limitations on Agency powers. Adversary services are known to have told penetration agents not infrequently that they have only to resist—in other words, that they are not dependent on the good will of the U.S. service.

The article draws a dangerously clean line between defectors that have and have not been administratively stamped "bona fide." Thus it says (page 20) that it "takes from one to four weeks to establish the bona fides of a legitimate defector," whereupon (page 23) a positive interrogator "picks up where the CI interrogator left off, and his task is made much simpler by his being able to approach the source without suspicion." The fact is that the bona fides of a defector may remain in doubt indefinitely. "One to four weeks" is an administrative concept, not an intelligence concept, and although interrogators eliciting positive intelligence commonly work without *displaying* suspicion, they no more approach sources without it than any other intelligence officer does. It is a truism that scepticism is the handmaiden of intelligence. "Phase I—suspect; Phase II—clean" would be a foolish postulate. Pursuing this unwisdom, the PI interrogator is admonished (page 24)to be sure that each topic is "thoroughly explored and completed before going off into another area." Methodical, step-by-step debriefing is a joy to the provocation agent who has entered "Phase II." The chances are that he learned his whole cover story in exactly the same fashion. No interrogator, whatever his label, should proceed so mechanically that in effect he merely provides the agent with a refresher course in his own legend.

Mr. Farndon's doctrine on the polygraph is one not universally accepted. He says (page 23), "The polygraph should not be used, however, until the interrogator is certain that he has obtained all pertinent information or has reached an impasse." In frequent practice, on the contrary, it is used as soon as one or two interrogation sessions have provided the

information needed for the purpose. The lie-detector is basically an interrogator's short-cut anyway, and its use soon after the defector's arrival is calculated to increase its reliability. The purposes of substantiation can be served by a second test at or near the end of the interrogation.

Finally, one wonders about the classification of Slavs into "rational, vital, emotional, and tense" personalities that Mr. Farndon adopts (pages 13–17) from the 707 ECIC's *Guide for Intelligence Interrogators*. Are these concepts based upon scientific and controlled inquiry into the Slavic personality? Or are the four labels the 20th-century reflection of far earlier philosophical speculation?

Keith M. Takerer

Articles and book reviews on the following pages are unclassified and may for convenience be detached from the classified body of the *Studies* if their origin therein is protected. The authors of articles are identified in the table of contents preceding page 1.

The editors gratefully acknowledge the assistance of Mr. Walter Pforzheimer, Curator of the CIA Historical Intelligence Collection, in scanning current public literature for intelligence materials, and of the many intelligence officers who prepared book reviews for this issue of the *Studies*. Most noteworthy in this respect are those in the following categories:

German intelligence and policy ..... LYMAN B. KIRKPATRICK

Evasion and escape ....

Sketch of a rational plan for language and area studies in intelligence.

THE ARTICULATION OF BABEL

The diversity of opinions expressed in almost any discussion of intelligence work about the extent to which operational officers and analysts need to receive foreign language training reflects, it seems to me, an immaturity in our thinking. Our concept of language training seems not to have kept pace with the maturing of our contemporary American intelligence service, which now has a twenty-year history of global operation.

It is true we have *done* things about spreading language skills. An observer is dazzled by the wide variety of language-area programs set up by the defense agencies since World War II. Viewed quantitatively, the proliferation is impressive; but examined as to whether they promise to satisfy our long-term, world-wide needs for communication with other peoples, these many-sided efforts inspire serious doubts. The very variety of the programs suggests that we have continued the brushfire approach taken during World War II, when our desperate need for linguists dictated makeshift emergency measures like those of the Army Specialized Training Program. At least it shows that we have arrived at no overall answer to the challenge but rather a multiplicity of answers, conditioned by the immediate needs of particular components and by the training philosophy—or lack of it—of different administrators in the various echelons. Each answer can be seen to have its own individual merits, but one searches vainly for any underlying philosophy lending general purpose and direction to the aggregation.

To compound the confusion, particularly in the last two years or so, an affliction that might be called the oriental syndrome has attacked many Americans, symptomized in their belief that our language problem can be solved merely by enrolling as many people as possible in oriental language courses. The application of this theory leads to a demonstration of a

sort of linguistic Parkinson's law, in which ever diminishing returns are reached by an increasing number of persons who study complex oriental tongues for an ever briefer time. Although we do have a tremendous need for skill in languages outside the conventional West European groups, this need will never be filled by having vast numbers of students dribble away their time in short-term programs without ever reaching functional proficiency in writing, speaking, or reading.

Planning is the answer to the language problem of the intelligence service, planning based on a long-range view of predictable requirements. No group of planners, to be sure, can have the clairvoyance to predict, for example, exactly which of the 800 languages of Black Africa will emerge from obscurity to significance by the year 1980. The plan must therefore have elements providing for flexibility with the changing geopolitical picture, as well as for emergencies. The main features such a plan should ideally have are sketched below.

Concentration on Specialists

We assume at the outset that, although language teaching in the American school system is now improving, thanks in part to the National Defense Education Act, we are still far from the day when we can recruit staff personnel in any numbers with prior real working knowledge of a second tongue. This means that we must be prepared to impart linguistic skills as necessary, but it does not mean that we must furnish equal opportunity for linguistic education to all. For the overwhelming majority of intelligence officers, while a moderate amount of language knowledge may be desirable, even that is not really essential. It is a minority group, the regional experts, for whom language-area training in depth is an absolute necessity. Language may be "good for everybody," but that doctrine as a principle of the training program leads to our frittering away of time and money. Twenty years of experience have demonstrated that the way *not* to build up our linguistic firepower is to put anyone to studying Bulgarian, Vietnamese, or Swahili merely because he "feels like it."

Let's begin our planning, then, with a two-way division of our personnel, separating the area specialists from generalists and others who have no particular geographical concentration. These latter our ideal Language Academy could be prepared to furnish an intermediate-level working knowledge of one of the major Western languages—German, French, Spanish, Italian, or possibly Portuguese. The regional specialist, on the other hand, whether analyst or operational officer, would be given all-out training, mainly in languages and cultures outside Western Europe, to match and complement his mastery as an analyst of one of the social or natural sciences or his expertise in tradecraft as an operational officer.

The strength in which languages would be covered would be determined through priority lists drawn up and periodically reviewed by a committee administering the plan, which would call in all the interagency and academic support it needed. Among the highest priority languages at present would be listed Chinese, Japanese, Thai, Vietnamese, Burmese, Indonesian, Hindustani, Arabic, and Swahili, along with the no longer "exotic" Russian. At lower priority would be listed Hebrew, Pashto, Persian, Afrikaans, Hausa, and others. Staff personnel would be given every opportunity to express their preferences in language study, but service needs would be the determining consideration; the individual might end up with his second or third or even fourth choice of tongues. Any principle short of this would create a surplus of skills in the popular languages and a deficit in those which lack appeal. Our present overly permissive practices in this respect tend also to encourage a dilettante rather than a professional approach to language.

This clear differentiation between specialist and non-specialist would effect a redistribution of the language-learning effort. We would no longer, for example, conduct a one-year Chinese class for four generalists and two specialists, in which the combined work of the six does not add up to one usable skill. Instead we would have two or three specialists in an all-out language-area program of five to six years' duration, part of it full time. Long before these specialists had completed the full program, they would have enough knowledge and insight to be useful at their desks in Washington or out in the field. At the same time the generalist without prior language equipment could get his innings too, basic training in a key Western tongue. Neither would the concentration on specialists preclude ad hoc linguistic aids and training for

survival for personnel liable to find themselves stranded in some obscure corner of the world.

From Linguistics to Cultural Command

The language instruction prescribed for the specialist would be conducted according to advanced principles of scientific linguistics, making use of the latest electronic equipment. Oral-aural phases of communication would generally be stressed at the beginning, wherein native or bilingual instructors for spoken drill would be indispensable. Reading and then writing would follow. The area specialist should emerge from this training with an advanced command, short of native proficiency, of the spoken and written idiom.

His study in depth of the language itself would be vigorously backed by intensive and semi-intensive sociological study at the intelligence school, at academic centers in the United States, and when possible in the country where the language is spoken. He would learn to know not only the geography, history, politics, economics, literature, and social institutions of the country but also the informal beliefs, traditions, and ideals which make up the psyche of the society. With this profound exposure he should in time acquire the sort of empathy which makes possible a maximum yield from dealings with a people. He should come to penetrate their culture, an objective unattainable via the mechanistic approach to language exemplified in the tourist manuals, which teach you to parrot such phrases as "Where is the railway station?" or "I feel quite ill. Please call a doctor."

As an example of how this knowledge in depth might be applied, let's take a graduate in Russian from our Academy. A specialist in Soviet economics, he has an appointment to see Comrade Serge Gosplanov, Vice Consul in Paris, on some routine matter. Will he plan to concentrate the conversation, after the official amenities, on coal production statistics in the Donets Basin? Decidedly not. He expects the Russian, if he is true to his culture, to be hospitable rather than brusque, opening the way for the establishment of some sort of personal rapport. Our man will be prepared to chat about how the Dinamo Soccer team is doing and discuss the current chess match in Leningrad. He may compare a recent political development in Western Europe with a similar phenomenon

during Russia's sixteenth-century Time of Troubles. As opportunities arise he can throw in a few Russian proverbs, so dear to Russian hearts, or illustrate a point with lines from the revered poet Pushkin. Gosplanov, amazed and pleased by the American's feeling for things Russian, is likely to become expansive and may even indulge in confidences about Soviet policies from which he would ordinarily refrain. This kind of communication across cultures can be brought about despite opposing ideologies and national enmities.

Input of Effort

Our planned program will founder in the launching unless there is general appreciation and acceptance of the amount of time and effort a person must put into learning a language. Our experience now enables us to state with some precision how many months of study at a given intensity should on the average be allowed for attaining a given proficiency in any particular language. The romance and Germanic languages of Western Europe are the easiest; they can be learned comprehensively (speaking, reading, writing) in half the time it takes for the Slavic, Semitic, Finno-Ugric, African and other alphabetically written languages, and in a third of that required for those of the Far East that use ideographs.

Out generalist can probably become moderately proficient in German, say, in five months' time if he devotes all his working hours and three or four hours a night at home to it. Or he can stretch it out over 15 months at about three hours of class and study per working day. He will be able to understand most ordinary conversations, make himself understood while living or traveling among Germans, read fairly difficult texts with copious help from the dictionary, and write acceptable personal letters. The *specialist* in one of the easy languages, however, whom we wish to make as skilled as possible short of the virtually unattainable native proficiency, would need seven or eight months of full-time study or almost two years at part time, plus several months' residence in a country of that language. The specialist in Russian needs twice as long, and the specialist learning Chinese at a part-time speed would take about seven years, the last one spent in China.

That is not all. We shall need a considerable number of specialists who in addition to their primary language can also handle a cognate secondary language or one otherwise closely related. Once the specialist is well advanced in his major tongue the dean of our Academy ought to encourage him to undertake the study of a minor. If he is a Russian specialist, he might take Polish, Czech, Serbo-Croatian, or Bulgarian—or even wander from the Slavic family into Hungarian or Rumanian—to broaden his usefulness in dealing with the Soviet orbit. If he is a Mandarin expert, he might go into Cantonese, Wu, or one of the major Chinese dialects, or elect to do Japanese, Indonesian, or Laotian. The Arabist might choose Hebrew or another Middle Eastern language—Persian, Turkish, Pashto, Kurdish, or Azerbaijani. The Hindustani major could either take one of the other important Indic tongues like Bengali or cross linguistic family lines into the Dravidian Telugu or Tamil.

The aims of the minor could be quite modest, probably limited to an intermediate reading knowledge for analysts or an elementary speaking knowledge for operators, skills they could acquire with six months to two years of part-time work. To this should be added some mild exposure to the culture of the people, in the form of a general survey of its history or literature. This minor program would help solve the problem of providing expertise on secondary yet strategic lands such as Tibet, Ceylon, Turkey, Hungary, Korea, Afghanistan, and even Benelux. For young intelligence officers planning their careers it would not require investing great blocks of time in exclusive study of a minor country which might lose its strategic importance as a result of international political vagaries.

How shall we find qualified and enthusiastic applicants for our ideal Language Academy? Are there stout-hearted men and women willing to volunteer for a rigorous, exacting, and time-consuming program which is certain to interfere with relaxed and pleasant living? Experience shows that just as the armed services usually have a surplus of personnel volunteering for paratroop and other hazardous assignments, intelligence agencies do not lack language-minded persons eager to specialize in regional studies. Motivation for language study is a many-sided and often imponderable thing. Some

volunteers happen to feel an affinity for a certain language and people; some are moved by ethnic origin or social or marital attachments; some simply want to throw themselves into an off-beat specialty.

Applications for language training should be open to all, regardless of assignment; but selection from them should be rigorous. There should be a leisurely yet searching examination, partly through informal meetings, into the officer's long-term career potential for his organization. Through a battery of psychological and linguistic tests along with personal interviews it should be determined that he has the aptitude and particularly the drive and motivation required. Time and again the utter futility or at least the poor returns from compulsory programs in which certain individuals are *ordered* to study such and such a language are brought home to training officers. While the conscientious person, realizing the value of language to his job assignment, may rally bravely to the challenge, his performance is rarely a superior one when brought about by fiat. Top results are most likely when compulsion from outside gives way to motivation from within, and the student adds that elusive third dimension of devotion which makes for excellence.

Follow-Through

When we have carefully selected well-qualified candidates and schooled them to the required proficiency, our work is still not done. All too often the thousands of dollars spent by a government agency on the training of a man in a much-needed tongue like Russian or Arabic go down the drain for lack of follow-up instruction or any opportunity to utilize the knowledge gained. Although it must be realistically admitted that it is not always possible to send a man to an area where his linguistic training will be useful, it is poor management not to provide at least enough refresher instruction to maintain his proficiency as part of the nation's reservoir of strategic language-area skills. Here our Academy could well borrow from a practice of the armed forces, which insist upon refresher training, at specified intervals, in most military specialties.

No matter how splendid the training and how dedicated the trainee, our linguistic master plan will still not work unless it is backed by an enlightened personnel management. For one thing, the trainee must have an assurance that he will not be penalized for making the gigantic effort which language-area work entails, that he will not be passed over in promotions because he is a "narrow specialist." This would of course require changing the practice, widespread in government, of reserving the higher grades for generalists with a supervisory knack. Every effort should also be made to create a flexibility of assignment, to minimize the specialist's risk of getting stuck in one geographical rut. In concrete terms, this means that our Chinese specialist should not be doomed to shuttle eternally between Washington and Taipei, but should have opportunities to serve also in Buenos Aires, Rio de Janeiro, London, Delhi, and other capitals where large colonies of Chinese make his abilities fruitful for intelligence purposes.

As a corollary of this principle, the rotation planned for the specialist should be aimed at breaking down rather than perpetuating the distinction between analyst and operator. The language-area expertise of our ideally trained operational officer should make him useful also, for example, in the Office of National Estimates or in area analysis in any of the community's research components. At its best the system could produce some number of ambidextrous intelligence officers equally at home in Washington writing a report on the manpower problems of Szechwan province or handling a network of agents from Taipei.

There is a partial historical precedent for the type of program we are describing. In the twenties and thirties the government agencies and the armed services followed the practice of selecting a limited number of "language officers" to be dispatched abroad to study where the language in question was spoken. General Joe Stilwell became in this way a Chinese specialist for the Army. The Department of State sent Charles Bohlen and George Kennan to Paris to study Russian at the Écoles de Langues Vivantes and to rub shoulders with the large Russian colony there. Dozens of other men were assigned to foreign capitals, mostly in the Orient, for language-area training in depth. It is significant that during the

forties and fifties these men were able to use their expertise in important substantive assignments and take a hand in the making of national policy.

Without some such systematic training plan as herein suggested we run the risk of finding ourselves short of first-rate hands to cope with areas of emerging importance—Southeast Asia, South Asia, the Middle East, Africa south of the Sahara. During World War II and afterwards we were able to depend on refugees and displaced persons to handle many if not most of our language needs. This source has just about run dry, and at the same time the sweep of contemporary nationalism is creating new nations to be dealt with at the rate of a dozen or so a year. Language planning has become a Herculean task, but a necessary one: the spirit of "make do" and faith in our ability to improvise cannot be accepted as a substitute for a well-conceived training blueprint that allows sufficient lead time for the development of multiple language-area skills.

Lessons for U.S. intelligence in non-government programs to prepare Americans for selfless or self-seeking missions overseas.

TRAINING FOR OVERSEAS EFFECTIVENESS: A SURVEY

A ground-swell of public interest in giving greater efficacy to American efforts overseas, an interest backed by leading authorities in government, business, religion, and the academic world, has resulted in an outcropping of courses and centers devoted to training for overseas service. More than 30 non-government organizations now sponsor enterprises of this sort. A review of their activities may serve to provide background, both in theoretical approach and in practical methodology, for current attempts to solve the U.S. Government's and in particular the intelligence community's own problem of making its personnel effective while living and working in foreign societies.[1]

Efforts to do something about increasing Americans' professional as well as personal effectiveness abroad are being undertaken with varying degrees of urgency by different kinds of private groups. The missionary group, with its long-standing need to train for proselyting all over the world, remains in the forefront, and some of its old programs are taking on a new look. Business groups are beginning to show an interest in overseas training, although with some exceptions (notably Aramco in Saudi Arabia and the Creole Oil Company in Venezuela) their efforts are still in the exploratory stage. The philanthropic foundations, with sizable groups of Americans going abroad constantly, are of course much concerned with the problem, and each of them has set up its own program. In addition, a number of academic centers and private institutions are coming up with new courses tailored to the specific needs of some of these groups and of government agen-

[1] This problem was pointed up by a confidential OCB report of July 1959 entitled *United States Personnel Overseas.*

cies. In all this activity there is a veritable ferment of effort to concoct formulas for rapid and effective training.[2]

These efforts are in diverse stages of development. Some are merely plans on paper, for example a project to turn Ellis Island into an amalgamated overseas training school for all interested groups.[3] Others, like the National Training Laboratories at Bethel, Maine, under Dr. Leland P. Bradford, have been running for years. But all the newer programs in "overseasmanship" are a departure from the older courses taught in academic centers for international affairs, which are designed to produce the fully educated man and therefore take years to complete. The new ones simply seek to implant in a matter of weeks, by orientation techniques, a viewpoint or perspective conducive to effective action. While the two are not necessarily in competition, proponents of each often criticize the other, and the "old guard" in each of the sponsoring groups tends to look askance at the new method. Some of the academic centers (Syracuse University, University of Pittsburgh, American University) have recently added new-type overseas training sections to their traditional offerings in recognition of the importance of both.

[2] Although this survey concentrates on training of Americans conducted in the United States, it should be pointed out that the phenomenon of cross-cultural training is not restricted to stateside programs or to Americans. There is a growing interest in reorienting Americans already resident in foreign societies and in training foreign nationals for work in other countries, including the United States. Indiana University has a training program for incoming foreign students and special visitors from abroad. The Washington International Center of the American Council on Education puts out a *Handbook for Travelers to the U.S.A.* and gives some orientation to foreign visitors. The Instituto Mexicano de Administración de Negocios gives a twelve-week orientation on Mexican life for American businessmen in Mexico City. The British Council of Churches and the Conference of the British Missionary Societies present a one-week course at Moor Park College in England. In Germany there is an Institut für Selbsthilfe at Köln-Lindenthal which trains students for work in foreign areas. Many of the peoples of the world are thus becoming increasingly aware of the problems entailed in functioning in cultures and societies other than their own.

[3] Sponsored by the Committee for an International Institute, headed by William Brennan.

The purposes of the various individual projects are basically similar: all are concerned with producing effective Americans for dealing with other-culture persons and societies. Within this general purpose each group has its special emphasis—the business group on training a profit-maker, religious organizations on creating an effective Christian, and so forth; but all focus their attention on concepts, skills, or methods that may make for better interpersonal relations abroad. It must be noted that the underlying image of the ideal "overseasman" in all of these programs is suspiciously like the successful person in our own society as portrayed for example by Dale Carnegie—a generally aggressive person with empathic understanding and a hard core of know-how in the manipulation of other persons. This concept, unidealistic as it is, is certainly well received by the American trainee, who can readily refer its role-image to his own experience in American society.

Philosophies of Approach

While the goals of the various programs are thus similar, their ways of arriving at the desired ends differ considerably. Four philosophies of approach, overlapping more or less, are distinguishable, each emphasizing the viewpoint of a particular behavioral-science discipline or combination of disciplines. The viewpoint (and discipline) is usually that of the leader of the program, which in turn reflects the interests of the group it serves.

One such approach is built upon concepts derived from public administration theory, aided by formulae from the behavioral sciences generally. It seeks to answer the question, "What kind of enterprise management is suitable for foreign cultures, or a given foreign culture, and how does one go about setting it up?" The International Operations Institute sponsored by DACOR (Diplomatic and Consular Officers, Retired), the pioneer Maxwell Institute of American Overseas Operations under the direction of Dean Harlan Cleveland at Syracuse University, the Johns Hopkins Institute on Development Programming for mid-career ICA officers, and a program for developing overseas executives at the University of Pittsburgh's Graduate School of Public and International Affairs are guided by this *institution-building* approach.

A more directly "people-to-people" approach stresses the development of an individual's skills in interpersonal relations, largely a matter of *communication.* The missionary programs and the work of Dr. Edward R. Hall [4] with the Government Affairs Institute in Washington, D.C., take the communications approach, and the Bethel National Training Laboratories program, which seeks to produce the "effective innovator" in various types and sizes of *American* groups, is a variation on it. The Bethel program uses the concepts and methods of education, sociology, and psychology to train for effectiveness in our own society; the missionary and other groups preparing personnel for work in foreign societies lean to the concepts of anthropology and anthropological linguistics. The one stresses psychological universals in human behavior; the other points up cultural relativism and area patterns of behavior. Each has something to learn from the other.

Here a word should be said about language training programs, which although not covered in this survey are an obvious aspect of the communications approach. Most language programs to date have been devoted too nearly exclusively to training in verbal communication, ignoring other media of interaction between persons. But some are beginning to interject value and behavioral concepts, embracing the broader training objective of proficiency in the whole culture of the foreign society in which one is to operate.

A somewhat different perspective from these two is offered by a *value-premises* approach, which concentrates on the basic differences in the attitudes and values that underlie the behavior patterns of Americans and those of persons in other cultures. Anthropology, social psychology, and sociology provide its conceptual materials, which include "cultural relativism" and "modal personality," sometimes called "national character." Professor John Fayerweather of the Columbia University Graduate School of Business considers this to be the approach of his program in training business executives for work in Latin America.[5] He argues that foreign institutions may be similar in structure to American ones but differ greatly in the attitudes and values which lie behind the structural facade. Dr. Benjamin Paul at the Harvard School of Public Health, whose Social Science Division trains public health workers for community projects in the United States and abroad, reasons that the directives for training in person-to-person communications and institution building follow from an understanding of the value systems involved. Most functionalist anthropologists, including Bronislaw Malinowski (*The Dynamics of Culture Change*), Clyde Kluckhohn (*Mirror for Man*), Cora DuBois (*People of Alor*), and Ruth Benedict (*The Chrysanthemum and the Sword*), make value premises fundamental in their analyses.

From a psychiatric point of view, making oneself effective in a foreign society can be approached as a *personal adjustment* problem. A booklet published by the Group for the Advancement of Psychiatry, *Working Abroad: A Discussion of Psychological Attitudes and Adaptation in New Situations,*[6] typifies this viewpoint. Dr. Lawrence Hinkle's group studying human ecology at the Cornell Medical Center is similarly concerned with individual adjustment problems, especially their pathological aspects. Both contribute a useful biological orientation by showing the importance of physical factors—nerves, muscles, viscera—and relate the adjustment problem overseas, the "culture shock," to that at home, the "nervous breakdown."

Other differences among the training programs result from differences in the needs of the organizations supporting them. The foundations usually have personnel overseas for one tour only, and a short one. Their preparation therefore consists of brief orientations to acquaint the trainee with a specific country. Business, on the other hand, usually places its personnel in one foreign area for a protracted period of time. On-the-job training in the field is most important here, and this is what Aramco and the Creole Oil Co. emphasize. Missionaries, however, like government workers, are often shifted from one area to another after a few years, and hence have in common with them the problem of training to become a "universal man" skillful at adjusting to any environment on

[4] See his book *The Silent Language,* reviewed in Intelligence Articles III 3.

[5] See his book *The Executive Overseas,* reviewed in Intelligence Articles IV 2.

[6] Report No. 41, New York, Dec. 1958.

short notice (not so incidentally a favorite American self-image).

Variations in Methodology

The training programs differ greatly in method as a result of these differences of approach. As to duration, for example, the Ford Foundation orients in a few days; the Hopkins ICA Institute takes 21 weeks. The interdenominational Meadville Missionary Training Conference at Allegheny College devotes half of its six-week summer course to applied linguistics, on which the Hopkins Institute gives one lecture during its 21 weeks. The missionary programs are strong in emphasizing the other-culture viewpoint, the typically anthropological approach which has been weak or lacking in most of the others. Most programs, however, are now attempting with varying degrees of emphasis and of success to incorporate this "cultural relativity" view.

Some programs, for example the United Presbyterian Church's Institute on Overseas Churchmanship at Stony Point, N.Y., and most business groups' courses, rely entirely on lectures by specialists and supplementary discussions. Others are primarily "laboratory" courses: the Bethel National Training Laboratories organize students into "T-groups" for practical exercises, skillfully blended with lectures. If the lecture courses are presented by academicians (and they often are because of the importance of the behavioral sciences in this training field) they can be successful only to the extent that the academic lecturers are able to apply their scientific theories to the practical field of the supporting organization. Often they have difficulty doing this, lacking knowledge of the practical field. This is no problem, of course, if the specialist is also a member of the practicing profession, as Dr. Eugene Nida and Dr. William Smalley of the Meadville missionary training center are also missionaries, and Dr. John Fayerweather at Columbia is a business professor in addition to being an overseasmanship specialist.

Most of the program directors recognize the embryonic state of overseas training and approach their problems experimentally. The Bethel National Training Laboratories, who have had most experience in the interpersonal relations method, are constantly seeking to improve their programs by a system of staff critiques and by using their classes as research laboratories in teaching methods.

However divergent in approach and method, the programs are based in common on the faith that it is possible to inculcate a new, effective perspective in the minds of the trainees, and this new frame of mind which will enable the trainee to analyze his past experience and better interpret his future experience abroad is regarded as their most important product. This gaining of insight, like religious conversions, can be achieved in a relatively short time, and in fairness to the quickie system it must be said that much of traditional pedagogy of the best sort has relied on sudden flashes of wisdom rather than the laborious accumulation of knowledge, although ideally the two go together and "knowledge increaseth wisdom."

The directors, queried as to what factors are most important in developing the new perspective, collectively emphasize three principal ones. First, the personalities of the teaching staff are regarded as of prime importance in firing the minds of the trainees, communicating the desired image to them. Second, the duration of the course seems to them less important than having the concentration of full-time training for whatever period in an environment segregated from the work-a-day American world. Third, methods for inducing the students to grasp actively the new perspective should go beyond mere participation in discussions to include role-playing and other devices for emotional involvement. The critical elements thus appear to be forceful personalities like Dr. Eugene Nida of the Meadville program, special training areas such as the United Presbyterians' center at Stony Point or the Cheyenne Village used in a Montana University program for ICA personnel, and involvement techniques such as those of the T-group at the Bethel workshop. It seems that a course of training overseas in the foreign society, bringing all of these elements together, would be the best of all.

Overseas Follow-Up

Many of the programs viewed their pre-departure orientation as the major or only step in producing the effective American, who then should be tossed into the maelstrom of the foreign society to sink or swim as he had learned his lesson well or

ill. Several, however, see the training as including at least some instruction after arrival overseas. The post-arrival orientation efforts of the International Educational Exchange Service (the Fulbrighters) with the help of local nationals point the way toward development of continued guidance in the field. Emulating the language and area schools conducted by the State Department overseas, for example in Beirut and Tokyo, the University of Syracuse is also currently setting up a training school in Italy.

A glance at the quarter-century history of the Arabian-American Oil Company's training of personnel for working and living in Saudi Arabia shows changes that may take place in overseas programs as they mature. At first, when Aramco was recruiting many employees who had no area knowledge, it gave them their initial training in an "Arab village" erected for the purpose on Long Island. This school was later removed to Saidon, Lebanon, and then to Dahran, where on-the-job orientation is now given in Arabic language and culture. At present, however, with recruiting at a relatively low level, staff vacancies can often be filled by persons with a prior knowledge of the Middle East. The current emphasis is therefore on an intensive postgraduate course given at Hofof, Saudi Arabia, where students selected from the elite of the company's staff speak only Arabic and live entirely in an Arab culture for ten hours a day over a 14-week period. The classrooms here are real-life laboratories of cultural orientation—the market place where the student learns to buy and sell Arab-style, the tent where he becomes familiar with the elaborate code of Arab hospitality, and the council gathering which shows him the traditional local patterns of decision-making. He also studies written Arabic and does research papers on aspects of the Saudi Arabian social and political scene.

Popularity and Effectiveness

A comparison among the courses as to number of students shows the missionary programs with large enrollments but most of the business and academic ones poorly attended. Two programs scheduled for the summer of 1959 for business personnel were postponed for lack of students. The key reason for this contrast seems to be that the missionary programs

form an integral part of their students' career development: both interdenominational Meadville and Presbyterian Stony Point are screening centers as well as training areas. At Stony Point the students remain only candidates for overseas positions pending satisfactory completion of the course. The Johns Hopkins Institute also has a potential effect on the careers of its ICA students in that it sends the ICA personnel office reports on their capabilities to adjust to the foreign situation.

The most effective program from the standpoint of student interest and large enrollment is not a missionary one, however, but the Bethel workshop of the National Training Laboratories. It is well organized, and we have noted its balance of conceptual material in lectures integrated with the device for emotional involvement and case role training represented by its T-groups. A major factor in its popularity is that the students are required to study a fascinating subject—themselves—in interpersonal relations. According to Dr. Bradford, the Bethel plan has laboratories in ten universities, Standard Oil of New Jersey is putting a million dollars into the method for the next 10 years of training, and other organizations like General Electric and Red Cross are working with it. The present program is *not* useful content-wide for overseas training—it would train persons going to foreign societies for effectiveness in America—but its methods could be used in a foreign area frame of reference. The T-group also promises to be useful as a device for conducting research on small group interactions in any society.

None of the programs has data on record to validate the efficacy of its methods. Even the Bethel laboratory, with a dozen years of experience, has only anecdotal material to offer in support of its system. Many of the groups are beginning to take interest in getting feedback from the field and are instituting systems for continued contact with their trainees abroad, but none has approached the problem of evaluation scientifically, devising controlled studies of overseas Americans. More generally, there is a decided lack of scientific data anywhere on the overseas American and on the possibilities of training for effectiveness in another culture. A research organization will probably have to be set up eventually to study

what happens to the American in new environments and to keep abreast of changing foreign patterns of culture.

Although we are properly concerned here only with training, some mention should be made of the parallel problem of *screening* for effectiveness abroad. It is recognized that certain American personality types, with traits often stemming from ethnic group and area background, as well as the personal experience of the individual, are better fitted for work in one foreign area (say the Middle East) than in another (say Southeast Asia); and it may be more efficient to utilize the talents and capabilities an individual has acquired over the years than to try to remake him in a period of a few weeks. The screening systems of the missionary programs and especially of the Hopkins ICA Institute are quite rudimentary, and their effectiveness is a matter of conjecture at this stage in the development of overseas training. Ideally, screening for effectiveness should precede assignment to an area, and training should follow.

Implications for Intelligence Training

Although intelligence training can profit from continued contact with these private programs, their diversity in theoretical approach and methodology, reflecting differences in the needs of their sponsoring organizations, suggests that intelligence should not rely on outside organizations, but continue to develop its own overseas effectiveness training. The Foreign Service of the State Department, the ICA, the USIA, and the MAAG administration have similarly instituted intensive courses in overseas effectiveness. The area courses and training centers established overseas, however, whether by non-government groups or by government agencies, are a most important asset in which we could profitably become interested.

The intelligence program, like these others, will continue for some time to be an experimental one, and it should maintain an open-minded flexibility in training methods. It should borrow useful concepts from all the various philosophical viewpoints, the institutional approach of the public administration groups, the communications and value-premises theories of the anthropologists, and the personal adjustment bias of the psychiatrists, rather than confine itself to the terms of any single

academic discipline. Beginning with introductory courses and pre-departure orientation, it should aim at a follow-through in the field and additional training upon return from field duty.

A number of techniques used with success in other programs might be adopted in the intelligence courses—the emotional involvement of students through self-analysis in action situations, as in the Bethel T-groups; a problem-game technique used by DACOR's International Operations Institute and the Hopkins ICA workshop; Meadville's use of foreign nationals for research and class demonstrations, but broadened to include not only language but all communications as in the advanced Aramco course; the special training environment and full-time concentration provided in most programs; and an evaluation of individual capabilities and problems in a screening function. As we have seen, the successful programs with high enrollment and enthusiastic support are those that make this training obligatory for personnel assigned to overseas duty. Putting the intelligence program on such a basis would be a step toward ensuring its success.

Finally, although the need for research into the nature of the overseas effectiveness problem may be filled in part by the activities of other organizations, the intelligence program requires a concomitant research and validation activity of its own. Methodical study in depth will demand close cooperation between the field and the conductors of the training program, and a great deal of scientific data-collecting will be necessary before we are on firm ground. This doesn't mean that training programs should wait until the data is in, but rather that research should go hand in hand with teaching.

The Japanese successfully play back a radio agent from down under.

A SMALL SOUTH POLE

The history of hasty Allied blunders that made the obscure and innocuous Portuguese colony of eastern Timor a victim of World War II [1] has an appropriately dismal sequel in the hitherto untold story of an intelligence operation attempted by the Allies after their invasion of the neutral zone had led to Japanese occupation. Apparently none of the participants has ever set down his recollections of the ensuing Japanese counterintelligence coup and its exploitation for almost two years, but an account of the main events can be pieced together from official records.

In mid-1942 the Japanese were in control of the Timorese capital, Dili, and the coasts; but westward, toward the border with Dutch Timor, remnants of the Australian and Dutch invading forces were still holding out with guerrilla operations. To work with these and to provide intelligence on the occupation forces, a party code-named LIZARD was introduced on 17 July by the Inter-Allied Services Department, a reconnaissance group which had been formed the preceding March and had just come under MacArthur's control as part of the Allied Intelligence Bureau, created on 6 July.[2] By February 1943, however, what remained of the Dutch troops had surrendered, and the last of the Australians, along with LIZARD, were evacuated by submarine. In April the ISD was liquidated. A new body called first Special Operations Australia and then Services Reconnaissance Department was formed.

Birth of Lagarto

Among those evacuated on 10 February 1943 by the U.S. submarine *Gudgeon* were a sergeant of the 2/4 Australian Independent Company (commandos), A. J. Ellwood, and a Por-

[1] See Thomas F. Conlon's "Portuguese Timor: An Estimative Failure" in Intelligence Articles IV 1, p. 91ff.

[2] See Allison Ind's *Allied Intelligence Bureau*, reviewed in Intelligence Articles III 1, p. 135.

tuguese army pilot who had been the administrator of a large Timorese province, Lt. M. de J. Pires. Early the following summer Lt. Pires was placed in charge of a four-man team under the auspices of the SRD to go back to Timor with the mission of arranging the evacuation of a group of 100-odd refugees, of maintaining morale among the Timorese and the Portuguese not evacuated, of establishing an informant net to cover enemy movements, and of reporting by radio on all enemy activities. As radio operator he had a civilian who had run the Dili radio station before the war, Patricio Luz. The other two members of his team were Portuguese NCO's.

Code-named LAGARTO, Pires' team was landed by American submarine on 1 July 1943, with the assistance of some of the refugees awaiting evacuation, at the mouth of the Luca River. A heavy sea was running, and three radio sets were lost; but on the following day Luz nevertheless established the contact with SRD in Melbourne that was regularly maintained thereafter. In about a month LAGARTO's first mission, the evacuation, had been arranged, and 87 Portuguese, Timorese, and Cantonese men, women, and children were taken out. The rest joined the espionage team.

At this time Sgt. Ellwood also joined the team as a sort of Australian liaison officer. A communications man, he had his own ciphers to communicate independently with the SRD, and Lt. Pires was directed to consult him on all matters and to clear all messages with him. Pires, anxious to minimize Australian participation in his proud services to Portugal and resentful of the authority given a sergeant, ignored this directive. SRD initiated a commission for Ellwood, but his lieutenancy came through too late to be of any use, when he and Pires had long since been separated. It was only by striking up a friendship with Luz that Ellwood could keep track of Pires' messages to Melbourne.

The natives in the area turned out to be unfriendly and assisted the Japanese, so from the very beginning LAGARTO was continually harassed and forced to keep on the move. Moreover, Ellwood reported, the team had grown to the unwieldy size of 34, including Pires' mistress and the pregnant comrade-in-arms of another Portuguese. Melbourne repeatedly asked Pires to cut the party down, but it was not until

late September, when the team had gradually lost all its rations and spare arms and ammunition, that he got it down to eight, still including his mistress. When things became critical he requested an evacuation, but too late; the Japanese were now closing in.

On 29 September 1943 natives completely surrounded the party and stood guard until the Japanese came up. Ellwood, without dry matches, couldn't burn his cipher and other papers, but he scooped out a hole in the sand and buried them. Luz and two others managed to get away, the latter for only a few days, Luz for the duration; SRD heard from him through Portuguese consular channels in December 1945. The rest were loaded into a truck and taken to Dili to a military jail. There Ellwood, kept tied and handcuffed, could hear the cries and screams of the others, but he never saw any of them again. He himself was alternately questioned and beaten by four Japanese.

Nippon Takes Over

The Japanese first got hold of Pires' emergency cipher. On 6 October they sent a message to SRD saying Luz had run away from LAGARTO. The same day, however, having found Ellwood's buried papers, they beat him into agreeing to operate his set. He was in such bad shape that a Japanese operator had to guide his hand to the transmitting key. His message gave a plausible position for LAGARTO and said they had been without food for three days. Melbourne replied with arrangements for a food drop and asked whether it was true that Luz had disappeared and who was operating. On 7 October Ellwood confirmed that Luz had run away and said that he was operating for Pires, who had also lost his cipher book.

SRD, all innocent of suspicion, thus began a series of supply drops that was to go on for 22 months. The Japanese would take Sgt. Ellwood to the drop zone and have him aim the signal lamp while they operated it from cover close by. For his cooperation Ellwood was finally allowed two sets of clothing, his mail, and one magazine per month from the drops.

The flow of messages from LAGARTO from this time on gave the impression that it was gradually getting on a friendly basis with the natives and establishing itself in the country.

It reported the team moving about for a time and then finally settling some 20 miles east of Dili, where it remained ostensibly unmolested until July 1945. A careful study of these purported early movements might have raised an eyebrow in Melbourne: the team was said to have retraced its steps into the very area where it had previously reported the natives most unfriendly and unwilling to help in any way. But SRD never even inquired how LAGARTO had managed to get itself out of the crisis it had reported just before capture.

Cobra Entrapped

With LAGARTO apparently well established, SRD used it to protect the insertion of additional teams. Arrangements were made for the first of these, code-named COBRA, to be sent in on 29 January 1944. The Japanese took Ellwood with them to the entry point. Having obtained dry matches and materials to make a flash lamp, he intended to escape and warn the new team before it landed. He made a break, but his guard shouted to attract the attention of the other Japanese and he was soon recaptured, being ill with beri-beri. After a severe beating he was blindfolded, gagged and bound, and left without food or drink in the open for forty-eight hours. Then he was returned to Dili and put on a starvation diet that brought back his malaria and dysentery. He learned that the incoming team had been captured within an hour.

Melbourne, asking LAGARTO what happened to COBRA, gave it the code word COBRA was to use if it was in difficulty and the authenticator that would indicate it was safe and free of enemy control. With the help of this information the Japanese got the use of COBRA's communications and in a few days began sending messages over that channel also. A third team, sent in ten months after LAGARTO's advice about the entry point was asked, was apprehended within a few hours.

The Play Ends

At the end of 1944 control of the teams passed to a Group D in SRD, established in Darwin at the Lugger Maintenance Station. The turnover was accompanied by no word or hint that anything might be wrong. A full counterintelligence review by Group D would not have been possible anyway: the message files of LAGARTO and COBRA were incomplete with respect to the early months of both. Melbourne, although asked to supply copies of the full files, would not or could not do so.

In April 1945, however, intercept intelligence reported that a copy of an AIB questionnaire dropped to both teams in January and February was in Japanese hands on Timor. A plan for relief of LAGARTO, which it was now suspected might also be known to the Japanese, was changed without informing the team, and the relief team leader was parachuted into the area two days before a scheduled supply drop. When the drop was made he observed from concealment that Ellwood was under guard at the drop zone. But it was now July, and by the time he made his way back to Australia the war was over.

On 21 August Ellwood was removed from his solitary confinement and taken to another prison, where he was housed with the leader of ill-fated COBRA, a Lt. Cashman. On 1 September 1945 all the surviving SRD prisoners were moved to Flores, Soembawa, Java, and Bali, where they were picked up by aircraft of the RAAF and flown to Singapore on 2 October.

The last messages had been sent over the COBRA and LAGARTO links on 12 August 1945. They read respectively:

> FOR ACB FROM NIPPON. THANKS FOR YOUR INFORMATION THIS LONG WHILE. NIPPON ARMY.
>
> NIPPON FOR LMS. THANKS YOUR ASSISTANCE FOR THIS LONG WHILE. HOPE TO SEE YOU AGAIN. UNTIL THEN WISH YOU GOOD HEALTH. NIPPON ARMY.

This operation carried out so successfully by the Japanese was on a much smaller scale than the similar North Pole deception achieved by the Germans at the other end of the world.[3] There is no evidence available that any information passed to the Australians by the Japanese over the compromised circuits did any lasting harm. Nevertheless, it meant the total cancellation of effective reconnaissance in this particular area and the fruitless expenditure of considerable equipment and personnel tied up in supporting the teams.

[3] See Herman J. Giskes' *London Calling North Pole* (New York, 1953).

INTELLIGENCE IN RECENT PUBLIC LITERATURE

GERMAN INTELLIGENCE AND POLICY IN WORLD WAR II

THE HOUSE BUILT ON SAND: The Conflicts of German Policy in Russia 1939–1945. By *Gerald Reitlinger*. (New York: The Viking Press. 1960. Pp. 459. $6.95.)

Mr. Reitlinger might more accurately have made his subtitle The *Lack* of a German Policy in Russia, for his book documents in detail the want of any Nazi master-plan for the conquered areas and peoples of the Soviet Union. Hitler had some vague thought of germanizing European Russia with colonists and moving most of the heterogenous nationality groups to Siberia. Goering, in his capacity of economic and manpower czar, sought from occupied Russia only tremendous exports of food and the exploitation of skilled labor. Himmler's SS was devoted to the task of executing all Soviet officials as well as exterminating the Jews, and its Einsatz Kommandos did both with appalling ruthlessness. Rosenberg's impotent Ministry for Occupied Territories had no particular policy and was constantly at odds with both the civilian and the military administrators. The Wehrmacht was mainly interested only in getting on with the war; few of its senior officers opposed the inhuman treatment of the conquered peoples. And lastly, the intelligence components of the Wehrmacht, Abwehr, and SS played a considerable role. The result of the combined activities of all of these agencies and factions: chaos.

Reitlinger devotes the major part of his work to what he calls the "colonialism" with which the occupied territory was administered, and what seems an excessive proportion of this is concerned with the feud between Rosenberg and Erich Koch, Commissar for the Ukraine. Partisan and anti-partisan activities are mentioned throughout, but there is a disappointingly brief section devoted exclusively to the partisans. The last quarter of the book deals with the "political crusade"—the formation of national legions, the recruitment of eastern troops for the German army, and the institution of the Vlasov Army.

A good research job, Reitlinger's study will be a valuable secondary source on German efforts in political warfare, guerrilla warfare, and intelligence operations in the USSR from 1941 to 1944. It presents cogent object lessons illustrating the fact that unconventional warfare of all types must be closely aligned to a national policy and consistent objectives if it is to have any chance of success. Although Germany, even if it had sought to make the Russian people its allies from the start, did not have the military or industrial strength or the leadership needed to defeat the Communist regime, the record of its performance here forms a magnificent case history showing how not to govern occupied areas and revealing a national mis-estimate of the Soviet Union. Reitlinger's extensive footnotes will assist those who desire to delve deeper.

LIFE AND DEATH OF THE LUFTWAFFE. By *Werner Baumbach,* General of the Bombers. Translated by Frederick Holt. (New York: Coward-McCann, Inc. 1960. Pp. 224. $4.50.)

Werner Baumbach was one of the Luftwaffe's original bomber pilots who lived to become General of the Bombers when there were very few bombers left. He survived not only the hazards of air action but also those entailed in the many sharp criticisms of the Luftwaffe's high command which he apparently did not hesitate to make as the tide of the air war turned against Germany. He was a close friend of Ernst Udet, World War I pilot and Air Quartermaster General in World War II, of Jeschonnek, Luftwaffe Chief of Staff, and late in the war of Production Minister Albert Speer. After the war he emigrated to Argentina, where he was killed in a plane crash in 1952.

This book, a posthumous combination of history, autobiography, and philosophy unskilled in all three fields, is less than the Luftwaffe deserves. The factual quotations from the author's diary are mingled with others that range from flowery philosophizing to comment on Goering's decadent entourage. Yet quite a few items of interest to the intelligence officer can with diligence be found in these haphazard reminiscences.

Chapter II, "Pre-War Strength of the Air Powers," purports to be a German General Staff analysis of the air strength

Recent Books: Germany in World War II

of the United States and the European powers. Among the interesting historical footnotes in the book is the revelation that when Hitler returned to the Rhineland in 1936, Germany had a single unarmed squadron of biplane fighters! The mass production of planes soon began, but as early as 1940, by Goering's own decision, experimental work in new aircraft was practically stopped, reduced to such a level that in 1945 the German fighters were outclassed by those of the Allies.

In Chapter XVI, "Where Were Our Fighters?" there is a brief report on the debate whether Germany should emphasize the production of jet fighters such as the Me 262. Fortunately for the Allies, Hitler's insistence that production concentrate on bombers, even after it was obvious that fighters were needed to defend Germany, resulted in a lack of any decision and a dissipation of aircraft production. Udet in 1941 warned that if the fighter arm was not strengthened the war would be lost. But "the heads of the armed forces regarded the air arm as an auxiliary weapon in the land and sea war," and "it was widely believed that the protection of the home country could be left to the anti-aircraft guns in conjunction with a few fighter wings." Hitler was so obsessed with the idea of an offensive war that he ignored the threat of the allied strategic bomber offensive.

But these poor estimates with respect to defense were not compensated in offensive strength. The air war against England failed, says Baumbach, because British fighters were superior to German bombers, because the German fighters could not provide cover, and because the aircraft, bombsights, and armament were inadequate for the job. "German air-sea warfare," moreover, "was a system of expedients, expedients imposed by the enemy." In the production of the guided missile, "the wildest confusion prevailed. . . . We had a fully developed weapon but could not produce it in quantity and employ it."

Baumbach implies that after a visit to the Soviet Union in 1940 he made the statement that Russia could not be conquered on land; he is imprecise as to whether that was really part of his report or a post-war afterthought. He goes on to say that the Air Staff always rejected or minimized intelligence reports on Soviet air strength. Radar in the Luftwaffe was also "the affair of intelligence," but Goering's deputy

Milch did not like General Martini, the head of intelligence, and neither of them paid attention to the development of radar; the Allies left them far behind.

It remains for some scholarly historian to shape this and other material into a real "life and death of the Luftwaffe." But here is enough to warn any nation of the fate invited by a divided command, dispersed authority, the personality cult, and the ignoring of intelligence.

BLACK SATURDAY: THE DEATH OF THE ROYAL OAK. By *Alexander McKee.* (New York: Holt, Rinehart and Winston. 1960. Pp. 211. $3.95.)

On October 14, 1939, less than six weeks after the outbreak of World War II, the British battleship *Royal Oak* was sunk with the loss of 833 men while at anchor in the supposedly impregnable naval base of Scapa Flow in the Orkneys. Although it was of the ancient *Royal Sovereign* class built in 1913–1914, the loss of the *Royal Oak* was a severe one to the British Home Fleet, hard pressed as it was to contain the efforts of the German commerce-raiders both above and below the surface. Almost immediately after the sinking the Germans announced that it had been the U–47, commanded by Gunther Prien, that had penetrated Scapa Flow and done the job, and shortly after the war a story appeared describing how the feat had been made possible by a German agent in the Orkneys who informed Berlin of weaknesses in the submarine defenses of the naval base.

Mr. McKee's book is an attempt to discredit this generally accepted version of the sinking and show that there was no German submarine and no agent, that the *Royal Oak* sank as a result of internal explosions. He bases his case on interviews with a number of the survivors and an analysis of German naval records, including Prien's exaggerated report. He did not gain access to British Admiralty reports and presumes that these files are still kept secret in order to conceal the sabotage or accidental explosions.

His arguments are unconvincing. His sources, interviewed when many years have blurred their memories of what must have been at best a bewildering experience, are largely rather low-rank survivors; the ranking officers who lived apparently

either didn't know much or weren't talking. The firmest pertinent evidence on the case is first, that the submarine defenses were in fact weak—another blockship was en route to fill a known gap—and second, that the greatest fear was an air raid. The base had been subjected to German aerial observation, and on October 17 it was actually raided.

Until the Admiralty opens its files there may be some mystery about this event. But Winston Churchill, who has a fair reputation as a historian, says on page 489 of *The Gathering Storm,* "A German U-boat . . . sank the battleship Royal Oak as she lay at anchor."

BRITISH WARTIME OPERATIONS

THE GREATEST RAID OF ALL. By *C. E. Lucas Phillips.* (Boston: Little, Brown and Company. 1960. Pp. 270. $4.95.)

On the night of March 27-28, 1942, British commandos and naval elements raided the port of St. Nazaire, which was heavily fortified and guarded by German ground, air, and naval forces. At a loss of 169 killed, the raiding party—611 men in small, virtually unarmed vessels—succeeded in putting out of action for the duration of the war (in fact for a full ten years) the giant "Normandie" dry dock, the only repair facility on the Atlantic coast that could handle the German battleship *Tirpitz*. This action, as had been planned, forced the recall of the *Tirpitz* to northern waters, where she was eventually caught and sunk. The exploit was called by Lord Louis Mountbatten the war's finest and most profitable combined operation, by Winston Churchill "a deed of glory intimately involved in high strategy."

Mr. Phillips' account of the St. Nazaire raid is an excellent study in intelligence and paramilitary action. He describes at length the meticulous care with which it was planned on the basis of sound intelligence. It encountered only a few unexpected gun emplacements. A fine example of the combat use of good basic intelligence, pertinent current intelligence, and—perhaps most important of all—a sound estimate of enemy reactions, the audacious gamble succeeded because of this kind of preparation and planning, because the security precautions were excellent, because of good provisions for cover and deception, and of course because it was carried out with magnificent aggressiveness and courage—five Victoria Crosses!

Although not written for the instruction of combat intelligence and paramilitary officers, *The Greatest Raid* should be required reading for them.

PIN-STRIPE SABOTEUR. By *C. Wighton.* (London: Odham's Press Ltd. 1959. Pp. 256. 18/—.)

This the story of "Robin," an important British agent in France and Switzerland from 1940 until 1944. Although the author does not tell all, his book still contributes significantly to the history of covert intelligence and intelligence-related operations during the war. Robin's activities ranged the clandestine keyboard from intelligence collection in the early years to major sabotage and paramilitary operations toward the end. Although all of his important cohorts were eventually captured, Robin himself was never taken by the Germans. A good case could be made for the view that this remarkable "luck" was a product of his mental brilliance, flinty courage, and well-developed sixth sense rather than any fortuitous gift apart from these qualities. Most of his activities were well organized, reflecting his wise devotion to the principle of economy of force. His major accomplishments included important breakthroughs in the collection of intelligence linking the German long-range rockets to Peenemunde and the procurement of secret timetables for military trains on the critical railroads of northern France.

EVASION AND ESCAPE

THEY CALLED ME ALFRED. By *Friedrich Wetzel.* (London: George Ronald. 1959. Pp. 237. 15/—.)

The author was a German who in the early 1930's participated in the formation and activities of an anti-Hitler underground movement in and around Stettin. As the Nazis made their drive for power the opposition was relatively strong in numbers but weak in unity, leadership, and purpose, all too prone to adopt a "let George stop Hitler" attitude. Wetzel was among those who realized that it would not do to wait for leadership and believed that a grass-roots movement of millions of determined people could stop Hitler. Those who shared these views were too few and too late, unfortunately. Captured by the Gestapo and tortured, he escaped and made his way to freedom, narrowly missing recapture when the Germans took over Czechoslovakia in 1938. His book includes a good description of his covert cross-country march from central Czechoslovakia over the Beskids to Poland, a route that led ultimately to London and a new life.

FROM CAPRI INTO OBLIVION. By *Adrian Gallegos.* (London: Hodder and Stoughton. 1959. Pp. 256. 16/—.)

This well-written World War II book is the story of a British Naval Reserve officer, Chief of the Advanced Naval Section of Special Force No. 1, who was captured by the Germans in Italy and regained his freedom after spending some 13 months behind enemy lines. The account of his evasion in Italy treads book-saturated ground, but other parts of the story are unique, for not many men escaped from Germany via Austria and Italy. More important than any other factor in the author's successful escape was his command of foreign languages. This skill also enabled him while serving in North Africa to capture three escaped German POW's by detecting their slightly foreign French accent. His own escape enabled him to bring back much valuable intelligence on German war plants, military installations, partisan movements, etc. He could have brought back more if he had been briefed: he notes that he did not realize how many aspects of life in enemy territory were of intelligence interest.

SEQUEL TO BOLDNESS. By *Richard Pape.* (London: Odham's Press Ltd. 1959. Pp. 256. 18/—.)

This rambling, disjointed, sometimes moving book follows up the author's earlier account [1] of his World War II escape and evasion experiences in Europe. Although it contains a good deal of data in the escape and evasion category and on clandestine activities in general, much of the material is merely a warmover from his original account or has been covered in greater detail in other works. The author's purpose in *Sequel* is to trace the fortunes and misfortunes of those who aided his evasion and in several cases paid dearly for their kindness. "Can I and should I forgive and forget?" is the question around which the story follows an erratic orbit. Slowly and painfully, after talking to many who forgave and forgot with little reason for doing so, Pape finds the answer to be "yes."

OFFICIAL SECRET. By *Clayton Hutton.* (London: Max Parrish. 1960. Pp. 195. $3.75.)

The subject of this book is the development and production of evasion and escape aids for British military personnel during World War II. More precisely, it recites the author's role in this program.

Useful as many of these items were at the time, there is no longer anything novel about maps printed on silk, miniature compasses, condensed rations, flexible saws, and the like. As the author admits, even the methods used to conceal these items have long since been revealed and thereby compromised for future use.

Containing nothing of value to present-day intelligence, the book is also a tiresome one: the author's main purpose seems to be the establishment of his bona fides as a 24-hour-a-day, seven-day-a-week genius. You don't have to take his unblushing word for this; he also supplies testimonials.

The title "Official Secret" is intended to be ironical. The author devotes the last 36 pages to describing his frustrations in getting official clearances to tell his story. We agree with him that no security is breached in the telling.

[1] *Boldness Be My Friend.* Boston: Houghton Mifflin Co., 1954.

MISCELLANY

CONSPIRACY OF SILENCE. By *P. Eaton* and *J. Leasor*. (London: Angus and Robertson Ltd. 1960. Pp. 239. 18/—.)

An interesting rundown on two of the great misplaced treasures of World War II, one consisting of Yugoslav bullion from the vaults of a Zagreb bank and the other, the so-called "Rommel treasure," comprising gold and jewelry collected by German forces in North Africa. If the facts assembled by the authors are approximately correct, the movements of the two weave fantastic patterns of misfortune, coincidence, treachery, and puzzling silence. The Rommel treasure moving northward and the Yugoslav generally westward, they seem incredibly to have been lost at approximately the same place along the east coast of Corsica, although no one intended this place as a destination for either hoard. Many people who could supply missing pieces of the puzzle are now dead, but the mystery is far from dead; further searches will be made and more lives lost and more books written ere it is laid to rest.