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VICTOR'S PLUNDER 1941–1945

Throughout the long years of World War II, it had become clear that most German military technology far exceeded the weaponry of the Allies. It was no secret that German tanks outperformed the West's mainline tanks and, until the advent of the Soviet Stalin T-34-85 battle tank, also outfought all the Red Army's tanks. The Germans used the first turbo jet engines in the Messerschmitt Me-262 fighter in combat in 1944. This paved the way for a series of modern German aircraft rolling off production lines in defiance of the heavy Allied strategic bombing of Germany. The scarcity of trained pilots, rather than a lack of material availability, prevented much use of these new airplanes. Even more ominous for the Allies were the growing successes of the German A-4 rocket, known more commonly as the V-2, and the promised threat of the A-6 and the A-9, called the *Amerika* rockets, with ranges stretching as far as North America.¹

The use in combat of the Henschel Hs-293 glide bomb and its improved version with a radio guidance system made it the first naval cruise missile. This weapon proved devastating in the closing years of the war, causing the loss of one Allied battleship, half a dozen cruisers, and even more destroyers, as well as thousands of tons of merchant shipping. New German anti-aircraft missile systems, *Wasserfall* and *Schmetterling*, had they become operational in greater numbers in 1944 and 1945, could have been ruinous to the Allied forces' heavy bombers. In May 1945, an advance naval technical exploitation team entered the Baltic port of Kiel ahead of the allied Twenty-First Army and found completed prototype models of the new German navy type XVIII, XVIV, and XXI submarines waiting at the piers to be manned with trained crews. A British member of the team said, "We didn't win the war any too soon."²

Why the large gap in military technology between the Allies and the German war machine? It was no myth that in Nazi Germany, scientists and engineers had been coddled and given immeasurable perks by politicians and military chiefs since the 1930s. In contrast, the U.S. and British military tended to shun scientists and modern innovations and to distrust new technology. Training manuals for the British tank corps still called for use of tanks in the role of cavalry as late as 1939. Compounding these obstacles, the subsequent Allied wartime blockade of minerals, petroleum products, and chemicals had compelled German scientists to develop an astounding array of synthetic fuels, materials, and even food products, which increased their technological lead in many areas over the Allies. The notion that because the Allies were winning the war their weapons were better was proved to be absurd. They were winning because they had more of everything and because the Nazi war machine was crumbling due to inept leadership, rather than from lack of modern military science. And as has been established in recent historical studies, the Germans were defeated on the ground by the Allied fighting men. Many of the much-touted German generals of the earlier blitzkrieg successes were outperformed not only by American and British generals, but, more important, by the soldier in the field. The Allied armies outfought the Germans on the ground primarily because of the rugged individualism and initiative of the individual GI and Tommy. As Secretary of the Navy James Forrestal had put it, “The guy with the rifle and machine gun is the man who wins the war in the last analysis and pays the penalty to preserve our liberty.”³

Wartime Naval Intelligence Cooperation among the Soviet Union, Britain, and the United States

On June 22, 1941, on learning of the Nazi invasion of the Soviet Union, the British Foreign Office took the now unprecedented step of informing Moscow that the Finns, and therefore most likely their German partners, were reading Soviet ciphers.⁴ Moscow was initially suspicious that there was a secret “capitalist” arrangement between Berlin and London that allowed Hitler to proceed with Barbarossa, the German invasion of the Soviet Union. The Foreign Office’s gesture of giving the Soviets a heads-up, however, and its offer to send a tri-service mission to the USSR, accompanied by Churchill’s supportive speech, were warmly received by Stalin. Within a month, a military cooperation plan was set up.

In July 1941, a Soviet military mission arrived in London, soon to be headed by Rear Admiral Ivan Kharlamov, while Britain dispatched a “30 Mission” to Moscow with its naval branch under the command of an admiral. By May 1942, naval intelligence exchanges had intensified. Every Tuesday the Admiralty representatives met with Kharlamov.⁵ Intelligence on German naval weapons and on the Baltic theater, including Finnish shore batteries and ports, was passed on to the Soviet admiral, despite the British people’s sympathy for Finland’s war aims. In exchange, the Soviet navy furnished the Royal Navy with detailed characteristics of German battleships and heavy cruisers. The Royal Navy also presented the Soviet navy with intelligence on U-boat radio equipment and raider operations. Meanwhile, the Royal Navy had established a liaison office in the Black Sea under the command of a captain. His data on Romanian and Bulgarian Black Sea defenses were so useful to the Red Navy that he immediately got access to the Black Sea Fleet’s daily intelligence summaries. The Black Sea Fleet later proved to be the most effective source of intelligence for the Axis forces’ detailed orders of battle. Seeking fair trade, the Soviet navy used the British Black Sea naval mission as a back channel to request naval information.

By August 1942, Moscow had also authorized London to set up a communications intercept station called “Y Cottage” at Polyarny in the Kola Peninsula. This station fed the Admiralty information on German ships’ movements in support of the Allied convoys to Murmansk and Archangelsk. After the losses experienced by convoy PQ 15 due to a lack of air cover, the Soviets stepped up their air operations in support of PQ 16. But when Churchill suspended the convoys after the PQ 17 disaster—this convoy was nearly completely lost when the British withdrew all escorts—an infuriated Stalin restricted the intelligence exchanges. Nevertheless, the joint Soviet-British code-breaking “Y Cottage” activities in Polyarny continued during 1943, despite incidents with the local Soviet commander. The Royal Navy’s main concern was the harsh treatment of British sailors by local Soviet authorities, which could have endangered the Y station. As gestures of goodwill, Britain authorized two Soviet personnel to study British intercept procedures in England, and it presented a sample German Enigma machine to the Soviet naval mission in London.⁶ In August, the Royal Air Force stationed a photo reconnaissance unit in the Kola Peninsula to assist a Soviet air force attack on the German battleship *Tirpitz*.⁷

Although cooperation was working in some areas, Admiral John Godfrey, the British director of naval intelligence, failed to obtain a naval

mission in Vladivostok, after much effort. He also had to abandon his idea to send his brilliant and lively aide Lieutenant-Commander Ian Fleming to Moscow, where it was feared that Fleming would cause unwanted difficulties by playing tricks on the Soviets while acting as Godfrey's spy in the British military mission.⁸ Indeed, collecting information on the host country certainly was almost as important as supporting the Soviet war effort. When Stalin asked Captain Jack Duncan over dinner how he would define his mission, the U.S. naval attaché candidly answered that he "was in Russia for the purpose of getting information." The Soviet leader called this statement "the most honest and straightforward" he had heard during the whole evening.⁹

On August 18, 1943, Admiral William Stanley, the U.S. ambassador, accompanied by Captain Duncan and his deputy, Commander Mike Allen, met with Admiral Nikolai Kuznetsov. The commander in chief of the Red Navy gave the U.S. officers presentations on the Soviet Northern and Pacific fleets, with the special request that this information should not be passed to the Royal Navy.¹⁰

While trying to play the Americans against the British, the Soviets were also acknowledging the leadership that the United States had taken in the course of the war. In effect, the U.S. Navy was allowed to have an assistant naval attaché in Vladivostok and could supplement Allied knowledge on the Soviet navy that was obtained in Murmansk and Archangelsk and in the Black Sea Fleet area by the other British and U.S. liaison officers. During 1942, the Red Navy had provided the U.S. Navy with general information on the German navy, along with data on raiders and U-boat refueling practices and secret information on armor and mines. In exchange, the United States provided the Soviets with its silhouette identification guide books on Japanese and Axis ships. Soviet intelligence on German, Japanese, and Soviet mines also proved very valuable to the Allies. Lieutenant G. B. Bassinger, USN, filed forty-four reports to the Office of Naval Intelligence (ONI). This cooperation ended in July 1944, however, when Admiral Ernest King, the U.S. Navy commander in chief, decided to withdraw the Western teams from Vladivostok due to lack of concrete results. Yet a senior Soviet meteorologist was stationed in the United States and remained there until the end of the war.¹¹

As long as the Soviet Union had not joined the Allies in the war against Japan, exchanges of intelligence about this country were a more delicate matter. On February 2, 1944, Ambassador Averill Harriman raised the issue with Stalin. The Soviet leader gave his approval, and

on February 28, a Soviet captain met with the new U.S. naval attaché, Admiral Olsen, and agreed on a procedure: each party would provide documentation on Japanese naval forces and a list of questions.

In early March, formal naval intelligence exchanges on this sensitive topic had at last been established. The Soviet navy provided the U.S. naval mission with information on convoys, installations on Sakhalin Island, ground tactics, naval training, and losses. The material was sent to ONI and on occasion to the White House. The U.S. side was instructed, however, “not to discuss or exchange navy order of battle intelligence, either surface or air.” On November 22, 1944, Admiral King explained to the U.S. naval mission in Moscow that since the USSR was “still maintaining friendly relations with Japan, we cannot furnish information on Japanese Naval Order of Battle.”¹²

Between February and May 1945, the Allies scaled up the quality of the information passed on to the Soviet Union by providing intelligence derived from decrypted German communications called Ultra Magic sources.¹³ German forces, however, were becoming less capable of acting against the convoys heading for Archangelsk and Murmansk, and accordingly, the level of naval exchanges diminished considerably.¹⁴

Anglo-American cooperation concerning the Soviet Union was not perfect, either. For reasons that may have been related to doubts over U.S. cipher security or competition, the Royal Navy decided not to share with the United States the information obtained through the Soviet interrogation of captured Romanian naval personnel and passed on through the British liaison in the Black Sea.¹⁵ But the most sensitive exclusive information that the Royal Navy sought from the Soviet navy was related to a devastating new weapon.

On July 30, 1944, the Soviet navy submarine chaser MO-103 was patrolling near the northern entry to the Bjorkosund in the Gulf of Finland. A squadron of Soviet minesweepers also operated in the vicinity. They sighted a periscope and signaled the chaser to drop depth charges on the intruder. The U-250, commanded by Werner Schmidt, was seriously damaged by the depth charges, and it briefly surfaced before sinking. This allowed six men, including the commanding officer, to escape and be captured. Soon afterward, the Finnish coastal artillery shelled the location of the sinking U-250, while German torpedo boats attempted twice to penetrate the area. This overreaction to the loss of U-250 appeared suspicious to the Soviet high command, which then made the decision to raise the U-boat.

Once the submarine was refloated and towed to Kronstadt, it was inspected. This turned up valuable documents, ciphers, and a coding

machine. But its torpedoes were the real treasure, by far. Three were the new and yet unknown T-5 acoustic torpedoes. They were quickly taken to a navy facility and neutralized. Meanwhile, the Royal Navy was given ten hours to inspect the U-250 and found this examination profitable enough, despite the fact that the Soviets had removed the radio equipment and documents.¹⁶ When Britain learned of the T-5 acoustic torpedoes, it negotiated the acquisition of the weapon at the highest level: on November 30, 1944, Churchill asked Stalin whether Britain could send an aircraft to take one of the torpedoes to England. Stalin answered with the following: “Unfortunately we cannot at the moment send one of them to Britain. The following alternative is possible: we can provide at once the military mission with drawings and descriptions of the torpedo; and when examination and tests are finished the torpedo itself can be handed over to the British Admiralty; or British experts can depart immediately for the Soviet Union to examine the torpedo in detail and make the required drawings.”¹⁷

The Royal Navy accepted Stalin’s second offer, and in January 1945, a group of British torpedo engineers, headed by Commander E. Conningwood, arrived in Leningrad to inspect the weapon.

Ian Fleming’s Special Units, and the Seizure of Axis Naval Technology

As an Allied victory became more likely, the Allies accelerated plans to exploit Germany’s astonishing technological superiority. As a result, at the Allied conference in Yalta in 1943, the Allied leaders, *inter alia*, clearly outlined plans for sharing the plunder of the Nazi war industry following Germany’s unconditional surrender. In fact, plans to exploit German science and weapons technology were already well under way before Yalta. By spring 1942, imaginative minds in Britain had already seized on the idea of forming combat groups of engineers and technicians, guarded by Royal Marines, to grab German equipment, ciphers, and documents during raids against occupied Europe and then spearheading the major amphibious landings in Africa, Sicily, and Normandy.

The idea was first planned out by Ian Fleming, the special assistant to the director of naval intelligence (DNI). Fleming patterned his special force after German units that were initially employed during their invasion of Crete, when special commando forces accompanied the main assault force to capture British documents, codes, and other sensitive material. In a memorandum to DNI Admiral Godfrey on March 20, 1942,

Fleming described the German operation “as one of the most outstanding innovations in German intelligence.” He suggested that British naval intelligence organize similar units for forthcoming operations against German-held territory.¹⁸

The first British teams of this type were placed under Royal Navy command and participated, initially with no success, in the abortive raid at Dieppe in August 1942. The special unit was then placed under the orders of Royal Navy commander Robert “Red” Ryder, a winner of the Victoria Cross, which was Britain’s highest award for gallantry in action. The teams were given the temporary name of “Special Engineering Unit.” Three such formations were created. One called Number 36 Troop was specially tailored to collect technical data and was manned specifically for the “grabbing of special equipment.”¹⁹ The troops’ first operation was a success, when they landed in Algiers and captured and plundered an Italian headquarters a full two hours prior to the arrival of the main British assault forces.

During preparations for the 1944 Normandy landings, Fleming regained command of his special technical teams, by then called “30 Assault Unit” and nicknamed the “Red Indians.” The teams had grown to more than three hundred men, a basic core of naval personnel protected by a larger force of Royal Marines. They had gained experience scouring the North Africa battlefields for enemy documents and communications equipment. After much success, the unit was recalled to Britain to train for further deployment into Germany. Following more victories during the liberation of Paris, the freelance units had gained a reputation for being wild marauders and were soon at odds with regular front-line forces. Their most notable accomplishments came during the capture of ports in North Germany, where they uncovered astonishing new German weapons and submarines.

Sensing the effectiveness of the British missions, the Americans were not to be outdone. In 1944, Admiral Ernest King, the U.S. Navy commander in chief, organized and deployed a Naval Technical Mission staffed by two hundred experts, including engineers, scientists, and weapons experts with their own aircraft, unlimited transport, and funds, to scour Europe for the U.S. Navy.²⁰ Meanwhile, during the liberation of Paris in August 1944, the British 30 Assault Unit, led by Royal Marines, as quoted from one of the unit’s reports, “sped through empty Paris boulevards to scour dozens of German naval headquarters. At the Villa Rothschild, the principal German naval headquarters in Paris, the Marines fought briefly with defending Germans but found most buildings deserted,

their sensitive material destroyed. Reluctant to believe the Germans could be so methodical, Granville (their leader) blamed French intelligence, claiming “They got here before us.”²¹ There was truth to his suspicion, because the individual Allies did not always share the results of their own searches.

Among the many technical teams scouring newly conquered areas in Germany was Alsos Team, the intelligence arm of the U.S. Manhattan Project in Oak Ridge, Georgia, which was then racing to produce an atomic bomb. (The word *alsos* is Greek for “grove” and was so named by the commander of the Manhattan Project, Brigadier General Leslie R. Groves.) This team was made up of navy, army, and other technical personnel. Its target was specifically to determine the real state of the German nuclear bomb project and to quickly recover as much uranium oxide as possible.²²

In early 1945, as the eastern and western fronts converged toward Berlin, the Allies began to coordinate the collection of highly advanced technical and scientific data from the withering German armies. Not long after the Yalta meeting, at which the Allies pledged to cooperate in the plunder effort, it became patently obvious that the Soviets were cheating and obfuscating in their race to get to the prizes first. So the Allies did likewise. The geography of the rapidly moving front lines in 1945 gave some advantage to the western Allies, especially in the rocket and missile fields.

The Americans arrived first at the underground rocket construction and assembly area in the Hartz Mountains in a place called Nordhausen, which had been named the Mittewerk by the German armament planners. When elements of the U.S. Third Armored Division, named Task Force Welborn, broke through six fanatic SS companies outside of Nordhausen, the accompanying team of engineers and scientists found the elaborate long-range rocket and naval cruise missile assembly plant nearly intact. On April 11, 1945, as they sifted through the horrible remains of forty thousand slave laborers who had been worked to death at the plant, the incredulous technical team members found hundreds of intact V-2 rockets awaiting shipment and use and several Henschel 293 naval guided missiles, which had also been built and assembled there. They scooped up several hundred of the V-2s and the new *Wasserfall* antiaircraft missiles and quickly shipped them to Antwerp for further transport to U.S. army research bases in the States. The gruesome skeletal forms of more than seven hundred barely surviving laborers were cared for by army medical teams, while horrified war crimes investigators felt

stupefied by their first grisly discoveries. They would soon move on to find more such camps on a much larger scale.

Nordhausen was the first of two underground sites constructed after the September 1943 Allied bombing of the primary German rocket site at Peenemünde, on the Baltic island of Usedom. Hitler quickly decided to relocate the plants to underground sites. In his befuddled brain, seeing this as the answer to impending defeat, he ordered five hundred thousand V-2 rockets to be built for his mythical final secret weapon onslaught, which would include the new unused antiaircraft missile systems and the first naval guided missile used in warfare at sea. The first batch of slave laborers had arrived at Nordhausen from Buchenwald to transform the underground site of a small ammonia mine into forty-six 220-yard tunnels, in which the secret rocket force would be constructed and assembled. It is estimated that about eighteen hundred workers died there each day from exhaustion and hunger or were murdered outright by the SS. When workers died while hand-digging the tunnels, the leading rocket scientist, Dr. Werhner von Braun, personally ordered replacements from other concentration camps, which the SS willingly provided. Braun, an SS major, was the man who would soon lead the U.S. space program.²³

The second underground rocket site was under construction in Ebensee. This small town snuggled in the Austrian Alps, in a region called the Salzkammergut, provided the setting for much of the film *The Sound of Music*. At this site—one of forty-four satellite concentration camps of Mauthausen, Austria—slave laborers hewed tunnels similar to those at Nordhausen into the mountains and made ready to assemble more of the five hundred thousand V-2 rockets ordered by Hitler. The Ebensee camp was never fully completed, and during the last days of the war, it housed a petroleum refinery. More than eight thousand concentration camp inmates died in the hastily constructed effort there.

Just ahead of the U.S. Army's arrival at the underground sites, the German scientists and engineers hastily fled to Bavaria and holed up in the mountains awaiting their fate. Allied relations with the advancing Red Army appeared on the surface to be correct but were rapidly disintegrating. Nordhausen would soon be a part of the Soviet zone, as decided in Yalta, so Allied technicians stripped everything they found of value and blew up what they could of the rest. Allied technical teams were ordered by their local commanders to take anything that was useful, contrary to the supreme Allied commander's orders to leave it all in place, intact, until the agreed-on zone occupiers arrived. This same tactic was used with a great deal less finesse by the Soviets, where entire factories,

design bureaus, and shipyards found in the British zones were hastily removed, lock, stock, and barrel, to the Soviet Union. Ebensee was liberated by the U.S. Second Armored Division and would remain in the U.S. zone in Austria. Although little of technical value was left in Ebensee, the plans for the rocket work at that site were recovered intact.

The Soviet army finally arrived to occupy the Mittewerk at Nordhausen two months after the Americans, on July 5. When the Soviets realized that this had been the main site of German long-range rocket construction, they sent Sergei Korolev—the future chief designer of the Soviet space program—to investigate. He then commenced a full study of all the German sites within the Soviet occupation zone, beginning with Peenemünde in the north, where much valuable material had been hidden after the Allied bombings. By this time, however, U.S. Army ordnance teams had found and retrieved fourteen tons of the rocket archives from a mine where they had been concealed and shipped them to the United States before the Soviets arrived.

Soon the Allies were advancing on the sacred grounds of the North German Baltic ports. With them were the British and U.S. technical intelligence-collection teams. The following intelligence report conveys the remarkable flavor of what transpired in the flickering last minutes of the Third Reich:

Wednesday 2nd May

Commander Hinds and Lieutenant Commander Blackler [of 30 Advance Unit] were sent into Luebeck in advance. . . . The *Hafenkommandant* had committed suicide before our entry. I directed Commander Hinds to proceed to Travenau and Lieutenant Commander Blackler to join the armoured force about to occupy Neustadt. Shortly afterwards I proceeded by myself to Travemuende which had just been occupied by Commando Units and representatives of 30 Advance Unit. It was reported to me that a German flag officer across the river wished to surrender, so I commandeered a fishing craft and went over to the Priwall Air Station, but he failed to appear. . . . It was later reported that he was not a naval officer but a member of the Luftwaffe and his anxiety to surrender was due to his belief that he was in the Russian zone. At Priwall on the east side of the Trave River I found a large collection of motor transport of all types, filled with German officers, some of high rank, troops, mostly armed, women, luggage etc. I was approached by a Prussian colonel, mounted on a poor type of steed who requested that the party be allowed to cross the Trave by ferry. He also asked how far the Russians were off. I had much pleasure in informing him

that the Russians were close on his heels, and that they were not to cross for the moment. There is no doubt of the great fear held by the Germans for the Russians at this time.

Friday 4th May

With a force of eight tanks in support, Lieutenant Commander Blackler occupied the barracks of the U-boat training establishment, which at the time was flying a Red Cross flag. While interviewing the Commandant, *Fregattenkapitaen* Schmidt, another officer attempted to shoot him, but was suitably dealt with by the escort. There was considerably difficulty with displaced persons, mostly Russians, who were out of hand, and in finding accommodations for refugees from the S.S. *Athen*, berthed alongside the submarine school. She was greatly overcrowded, with many of her 3,000 to 4,000 passengers suffering from starvation and in need of medical attention. Blackler went aboard this ship and found her in a most appalling condition of utter filth. He considered at the time that the only thing to do was to take her out of harbour and sink her, but early the next morning at 0400, she caught fire. Blackler took charge in clearing her and eventually succeeded in having her towed out into the roads. Then Blackler showed me the bodies of a number of refugees, about fifty, who had been taken out of the S.S. *Athen* and shot by the SS on the morning of his arrival. From evidence obtained in the *Athen* it appears these victims had been selected at random by SS from the refugees in *Athen*, and had been executed by them at the harbor entrance within a cable of this prison ship. They were probably Poles or Russians. I viewed most of the bodies, and each one had been killed by a burst of machine-gun or Tommy gun fire in the head whereby they were terribly mutilated. No heart shots were apparent. It's hard to imagine what could be the object of such sadism at such a stage of the war. Subsequently I heard that a large barge was found on the rocks close to the harbour entrance. The barge contained a large number of dead bodies (600–1,000) of victims who had been killed by Tommy-guns and being axed in the head. Evidence showed they had spent seven days in the hold without being allowed out, and this barge with others had arrived in tow from the eastward.

The senior military officer, Brigadier Mills-Roberts, ordered civilians of Neustadt to clear the barge of the bodies, and bury the victims, but not before Field Marshal Milch [Erhard Milch, the state secretary of Herman Goering's Luftwaffe], who had arrived to surrender, had been compelled to view both the bodies and the execution place on the barge. A subsequent remark of his to the effect these were only

Poles or Russians, so infuriated the Brigadier, that he seized the Field Marshal's baton out of his hands, and beat him over the shoulders with it, breaking it to pieces. Some of the SS thought to be concerned in this slaughter were arrested later.²⁴

The Submarine That Could Win World War III

Just four days prior to the German capitulation on May 8, the British 30 Advance Unit was converging on the prized naval ports from the west. U.S. Navy captain Albert Mumma accompanied the unit that was headed for the main German naval headquarters in Kiel. This city was the lair of the celebrated Admiral Karl Doenitz, the father of the submarine fleet and briefly the successor to Adolf Hitler. On the way, however, there were many adventures. The advancing team found that the Germans had been systematically destroying all of their laboratories, had vacated most concentration camps, and had burned secret documents. In Luebeck, the team found a hydrofoil capable of speeds up to 50 knots, human torpedoes, and a two-man midget submarine. The biggest prize was the Walterwerke, the home of the high-speed, hydrogen peroxide–fueled torpedoes and submarines. Production had just ceased the day before, on May 3, and the teams found two sabotaged hydrogen-peroxide submarines, U-1408 and U-1410, smashed at the piers.

Thousands of naval personnel surrendered quietly to the small advance unit, including the plant owner, Helmuth Walter.²⁵ Initially, Walter was uncooperative. A hard-line Nazi, he was determined to destroy all of his valuable new work. Later, however, upon receipt of written orders from former German submarine force commander Admiral Doenitz, Walter began to cooperate. Royal Navy commander Aylen, accompanying one of the units, wrote,

On May 7, Walter began his revelations, starting with the admission that prior to the incineration, all the documents had been microfilmed and the cans hidden in the coal cellars. For the first two weeks we found new weapons at the rate of two a day. [Combustion] chambers were hauled up from flooded bomb craters, key torpedo data dug up from underground, a miniature twenty-five knot U-boat salvaged from the bottom of a lake, parts of [a] Messerschmitt jet engine [were taken] from a train on the Danish border, and there were prototypes of new and ingenious weapons: long-range guns, mine sweeping devices and jet powered grenades.²⁶

One of Walter's most coveted realizations was the Type XXI Electroboot. The Type XXI was the first real submarine: a streamlined diesel-electric 1,600-ton boat with better batteries than its predecessors, allowing for submerged speeds as high as 18 knots. These were superior at the time to all western submarines in endurance, submerged speed, passive sonar capabilities, and sonar (anechoic) hull shielding.

When U.S. and British advance units found the German type XVIII, XIX, and XXI submarines intact, they snatched all they could and informed the Soviet advance teams that the missing submarines had been scuttled or were damaged beyond repair. Tom Bower, the author of *The Paperclip Conspiracy: The Hunt for Nazi Scientists*, wrote,

While the Walterwerke and the submarines were rapidly stripped of equipment, the Admiralty embarked on a deliberate deception. A top-secret cable from London gave instructions that if the Russians inquired about the survival of equipment, Allied officers should issue bland rebuttals. Three prototype U-boat hulls were on no account to be sunk, but if the Russians [asked] questions about the vessels, they should be informed that they were scuttled and their machinery sabotaged. . . . Anything likely to emphasize the importance of these vessels should be avoided. Pleased with the Machiavellian guile of their "denial policy," the Admiralty informed Washington: "No important naval unit has fallen undamaged into Russian hands and all surviving U-boats and important surface ships have been captured."²⁷

The cheating worked both ways. The Soviets had begun to deceive their allies soon after the Red Army captured a German torpedo research center in Gdynia, Poland. After a high-level exchange of correspondence between Churchill and Stalin, an Anglo-American technical team set out to visit Gdynia. In an expert act of obfuscation by the Soviets, however, the team was sent via Sweden, Romania, and Iran, and it never arrived in Poland. In another such case, the Soviets greeted an Anglo-American team in an occupied part of Prussia near Koenigsburg to view captured German naval equipment, only to then tell the team that the area was not yet in Soviet hands. The Allies later discovered, however, that Soviet recovery teams had already captured the plans of all of the important naval designs in Gdynia and had squirreled them east to Leningrad, where they would form the backbone of the Soviet postwar naval buildup.

Splitting the German Fleet

According to plans agreed on in Potsdam in July 1945 and implemented by the Allied Control Commission in Berlin, the remaining units of the German fleet were to be divided among the Allies. The commander in chief of the Soviet navy, Admiral of the Fleet Nikolai Kuznetsov, recorded in his autobiography the tensions that surfaced during the negotiations:

In mid-June 1945 I heard from General of the Army A. I. Antonov, Chief of the General Headquarters, that I was to leave for Potsdam to attend a conference of the Allies.

At dawn on July 14 our plane took off from the Central Airport and steered a course for Berlin.

On July 16 on the newly-built platform of the railway we—Marshal Zhukov, General of the Army Antonov, Vyshinsky, who then was our Deputy Foreign Minister, and the author [Kuznetsov]—were to meet the Soviet delegation, led by Stalin. Exactly at the scheduled time a steam locomotive with several cars pulled up to the platform. Stalin stepped off from one of the cars. He wore his usual grey service coat (though he already had the title of Generalissimo). Warmly greeting us, without lingering at the station, he got into a car. Together with Molotov and Zhukov, he went to Babelsberg—the residence of the delegations.

Though in the Far East, the war was still continuing, all members of the delegations were in a victorious frame of mind. However, the heads of government of the USSR, USA and Britain had other serious and difficult questions facing them.

I for one was concerned with the question of division of the captured Nazi fleet.

Despite the victory and the outwardly excellent relations between the Allies, unlike at the Crimean conference, here, in Potsdam, many wide-ranging political matters caused debates. I distinctly remember an angry exchange between Stalin and Churchill over the division of the German fleet. The British stubbornly declined an equal division of this fleet while Stalin insisted on it, motivating his stand by the role the Soviet armies and fleets had played in defeating Germany.

Quite often, difficult questions would be put off “until better days” and the delegations would pass on to other questions. That was what happened this time.

But when only two or three days remained until the end of the conference I grew anxious and reminded Stalin about the captured fleet. The three commanders-in-chief—of the USSR, USA and Britain—were

assigned to meet with foreign ministry representatives and draft a proposal.

Admirals King and Cunningham and the author met on the upper floor of the Zezilienhof Castle. I was lucky to preside over this conference and decided to insist at all costs on a solution satisfactory to the Soviet Union. I had been so ordered by the Supreme Commander-in-Chief. We argued till we finally hit upon an unorthodox decision to divide the surrendered fleet into three “approximately equal parts” and draw lots. I feared that Stalin might be displeased by such a solution but everything went off well. One way or another, the Allies divided among themselves more than 500 military vessels and 1,329 auxiliary craft. We received 155 combat ships.²⁸

The Soviet navy would gain significantly from the decision to divide up the German fleet. Soviet naval reparations from former Axis navies after the war, which were granted at the 1945 Allied Berlin Conference, helped compensate for Soviet wartime losses and a period of stalled shipbuilding. From the Germans, the Soviets received one damaged and incomplete 20,000-ton aircraft carrier, *Graf Zeppelin*; the 13,000-ton battleship *Schleswig-Holstein*; the 6,000-ton light cruiser *Nuremberg*; ten destroyers; and ten operational U-boats, including four type XXI Electroboote.²⁹ From the Italian navy, the Soviets later received the 24,000-ton battleship *Giulio Cesare*, the light cruiser *Emanuele Filiberto Duca d'Aosta*, four destroyers, fourteen torpedo boats, and two submarines. From Japan came six destroyers and numerous small combatants.³⁰

In addition, in 1945, conquering Red Army forces acquired vast amounts of naval plunder from the Soviet zone in northern Germany, primarily in the ports on the Baltic. There, they found intact unfinished ships, entire submarine sections and propulsion machinery, whole factories, and large quantities of scientific and technical data. Soviet forces seized undamaged and partially completed German U-boats, notably the modern diesel-electric type XXI. Three had been allocated to the Soviet navy as war reparations, while some of the twenty unfinished boats in Danzig were moved to Leningrad but were never completed and were eventually scuttled or scrapped.³¹

The Soviets were quick to recognize the value of the industrial assets found in the Baltic ports. Soviet commanders set up a headquarters in occupied Berlin specifically to sift through the vast amounts of confiscated technology. Priceless to the development of future Soviet long-range diesel attack submarines were the German-designed Kreislauf closed-cycle

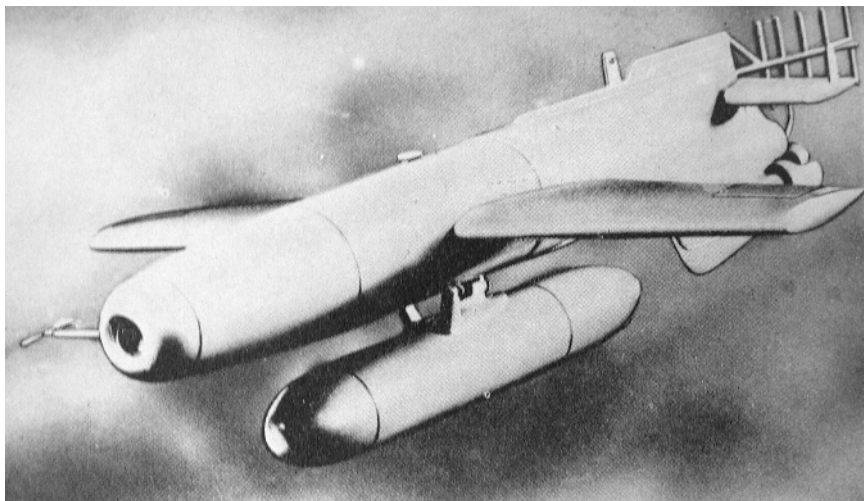
turbine propulsion systems for sustained high-speed underwater endurance without air intake through a snorkel. The most valuable long-term asset was the central German submarine design bureau at Blankenburg, seized in 1945, from which Soviet builders adopted the German modular, prefabricated system of double-hulled submarine construction. This is the highly efficient method of building entire submarine cross-sections at widely dispersed locations, transporting the sections by barge over protected inland waterways, and assembling them inside a construction hall, a procedure that is still used today in building modern nuclear submarines. Soviet forces also gained an early naval cruise missile advantage over the West by using German rocket engineers and V-2 underwater missile canisters captured at Peenemünde, to become the world's first navy to employ antiship cruise missiles on a wide basis.

Tracking the Father of the Naval Cruise Missile

Of most intense interest to Allied naval technical teams, which were already roaming the ports in northern Germany, was the Viennese rocket engineer and inventor Dr. Herbert Wagner, who had worked at the Henschel Aircraft plant at Himmelberg outside Berlin. He had designed and built the world's first cruise missile to be used in combat and a sophisticated anti-air missile defense system called the *Schmetterling* (butterfly). Wagner was also the father of the ingenious He-293, a glide bomb that turned into a cruise missile, which was mentioned earlier in this book's introduction. Along with his cronies, Wagner scurried south to Hitler's redoubt and was scooped up and arrested in a quaint mountain cottage near Oberammergau.

There, several American Alsos Teams had been sent out by General Groves. Members of one Alsos Team, headed by the U.S. Navy commander Henry Schade, found to their great surprise not only Dr. Wagner, but his associate Werhner von Braun and half a dozen leading long-range rocket scientists from the Nordhausen underground works.³²

The American team initially hid the group in the small town of Bad Sachsa, south of Hanover, then quickly sent the scientists to Paris for safety. This was a prudent move, as it is now known that a team of Soviet army special forces was roaming the U.S. zone, trying to kidnap these very Germans from the Americans.³³ Swift action on the part of the Americans saved these most-wanted experts from being squirreled away to the darkest regions of the Soviet Union. Many other experts were indeed later captured by the Soviets.³⁴



Dr. Herbert Wagner's Henschel Hs-293D naval cruise missile, which inspired both U.S. and Soviet developments.

Fortunately for the Americans, Dr. Wagner proved cooperative and had the foresight to realize that his brightest future lay with the Americans, in a country where he could best employ his expertise for personal gain. His He-293 air-to-surface cruise missile had been incredibly successful. Originally called a glide bomb, this missile had been designed and tested by Dr. Wagner at the Henschel Aircraft works. His deputy, the talented Hans Muehlbacher, also from Vienna, devised the guidance system for the missile. Muehlbacher is a most colorful character who, at the time of this writing, was ninety-one years old and still played the concert violin. He was the inventor of stereo phonics. The aeronautical engineers Reinhard Lahde, Otto Pohlmann, and Wilfried Hell had developed the missile further for launch by aircraft.³⁵ It was built as an aircraft fuselage with stubby wings, weighed 550 kilograms, and carried a 295-kilogram warhead adapted from a German SC500 aerial mine. Wagner had intended to use the missile configured as a BV-143 aircraft body to drop a missile into the sea, which would submerge and become a torpedo. (Wagner's eventual work at the U.S. naval missile test center at Point Magu, California, led to the development of Asroc/Subroc antisubmarine missiles.)

The Hs-293 had been first tested by the Viking Fighter Squadron 100 at Peenemünde-West in early 1942. The test squadron then deployed to Athens, where the missile was initially launched from a Heinkel-111 and then a Dornier-217E against Allied ships in Bari, Italy, with devastating

results. Later in 1942, it was used in combat in tactical support of the German Sixth Army in Stalingrad. Equipped with a new guidance system, it was later used against Allied ships during the invasion of Sicily and then against ships of the Normandy invasion fleet. Its total maritime damage was as follows:

Sunk

- Italian battleship *Roma*, 41,000 tons
- 2 cruisers
- 10 destroyers (one of these was the U.S. Sumner class destroyer the USS *Meredith*)
- DD 726, sunk off Utah Beach during the June 6, 1944, Normandy invasion (and whose engineering plant has been partially recovered and can be seen today outside Bayeux)
- 10 merchant ships
- 1 flak boat
- 2 LTC
- 1 LST

Heavily damaged

- 4 battleships
- 6 cruisers
- 12 destroyers
- 29 merchant ships totaling 215,000 tons ³⁶

Enrolling Nazi Scientists and Weapons Specialists

The cooperation of Nazi scientists was indispensable in training the Allies to use the technology they recovered as war booty. Without the German scientists' compliance, would some of the major post-war achievements have been possible or so rapid? The most significant weapon was the ballistic missile V-2, which had already demonstrated its devastating effects on British and Belgian cities in the closing days of the war. The V-2 had been a German army project, but it was being modified to be launched from canisters towed at sea by submarines.³⁷ Even though this naval application was not the first development that the Soviet and Western Allies had in mind, the V-2 served as a basis for the Soviet R-11 rocket, which on September 16, 1955, became the first ballistic missile to be launched from a submarine. This was five years before the firing of the first U.S. *Polaris* missile in June 1960.

Back in July 1945, the Soviets had settled down in their occupation zone around the missile facilities of Peenemünde and Nordhausen and established a clearinghouse for captured Nazi scientists. The headquarters chosen by leading Soviet scientific intelligence teams, headed by Major Boris Chertok, was the elegant house called Villa Frank, in Bleicherode, where Werhner von Braun had lived since the bombing of Peenemünde. There, the Soviet intelligence team set up a safe house, hoping to lure German scientists who either had not made up their minds which side to support or were captured by Chertok's engineering snatch teams. Wrote Chertok in his memoir *Rockets and People*,

Our headquarters was called RABE, an acronym that stood for *Raketenbau und Entwicklung* [missile construction and development]. Our "cover" had emerged—we established a place where German specialists scattered by the war could take refuge. This was clearly a guerilla operation on our part that could lead to diplomatic complications with the Allies, especially since the border was only sixteen kilometers away, and immediately beyond the border was a town where, according to our intelligence, the Americans command had assembled several hundred German specialists.

But we still needed authentic Peenemunde missile specialists. For this I set up a secret second program, which I entrusted to Vasily Kharchev. His task was to establish a network of agents, and if necessary, personally penetrate into the American zone to intercept specialists before they were sent to the United States. [Kharchev] assigned this program the code name of "*Operation Ost*" (East). Semyon Chizhikov was instructed to supply Kharchev with cognac, butter, and various delicacies "on account" for Operation *Ost*. The division chief of staff agreed to open and close the border between our zone and the American zone at Kharchev's request. Pilyugin undertook a special mission . . . and brought back many dozens of wristwatches to be used as souvenirs and "bribes" for the American border guards. Vasily Kharchev could barely sleep because of his intensive German and English studies.

The first success of operation *Ost* was to win over and bring to the RABE staff an authentic specialist on the combat firing of V-2 missiles, Fritz Viebach. The Americans unexpectedly gave our operation *Ost* a boost. Early one morning, I was awakened by a telephone call from the town commandant. He reported that his patrol had stopped two Jeeps with Americans who had apparently burst into the town and were trying to abduct German women. The latter raised such a ruckus that our

patrol had arrived. The arrested Americans were raising Cain over at the commandant's office. They explained that these women were the wives of German specialists who were supposed to be sent to America. I asked the Commandant to serve the Americans tea and offer them some Kazbek cigarettes and promised to be there soon.

I woke up Chizhikov and Kharkov and ordered them to find some cognac, some good snacks, and to set the table at once. When I appeared at the commandant's office, the din was terrible. The four American officers, each trying to out yell the others, were communicating with the commandant through two interpreters—a German interpreted from English to German and a Russian lieutenant from German to Russian and vice versa.

I introduced myself as the Soviet representative for [the] German missile specialists. I asked our American friends to calm themselves and take a break from their tiring work by joining us for refreshments at the Villa Franka. They responded with an "Okay," and the cortege set out for our villa. Chizhikov had not let me down. When the Americans looked at the table their eyes lit up. All four young Yankees broke into smiles and exclamations of approval followed. . . . We found out that in September and October all of the German specialists that the Americans had named as war criminals would be sent to Witzhausen via France to the United States. But several of their wives or mistresses had remained in the Soviet zone, in particular Bleicherode, and the Germans categorically refused to go without them. On behalf of the command, the Americans requested that the Soviets help them return these women to them. . . . [A] week later we received a report through our new female network of "agents" that Frau Groettrup, the wife of a German specialist, wanted to meet with us. She said her husband Helmut Groettrup was von Braun's deputy for missile radio-control and for electrical systems as a whole.³⁸

The Groettrups settled in a separate villa and were offered a very high salary and expensive food rations, compared with those of the other Germans. Groettrup stayed and headed a contingent of German missile experts that worked for the Soviets. Later, the same group tried unsuccessfully to raid the U.S. camp to kidnap von Braun and Wagner.

The Soviets immediately began to exploit the material they had found in their zone of occupied Germany. According to the British intelligence digest, the Soviets succeeded in assembling a small batch of A-4s and began flight tests from Peenemünde and Gdynia.

Spiriting Nazi Scientists to the United States

Operation Paperclip was in full swing. This was the joint U.S. Army and Navy program to capture the top German scientists—especially in the fields of rockets and weapons—and move them quickly to the United States, disregarding the simultaneous hunt for Nazi war criminals. This controversial program won the ire of those most intent on capturing key Nazi war criminals and eventually trying them in Nuremberg. After being captured, figures such as Drs. Werhner von Braun and Herbert Wagner were spirited to the United States, while army and navy intelligence officers falsified their records to satisfy U.S. Immigration authorities and the State Department requirements for de-Nazification.

The United States lost no time in jumping into the race with the USSR. In February 1945, the U.S. Army Ordnance Department established the White Sands Proving Ground in southern New Mexico for the purpose of testing new rockets, including the captured German V-2. Of the four hundred German rocket scientists who surrendered to the United States, one hundred were recruited under the Paperclip operation. In November 1945, they arrived in the United States onboard the liner *SS Argentina* and were sent to Fort Bliss near White Sands in January 1946 to assist with V-2 launchings.³⁹ After the failure of the first firing on April 16, a successful flight was completed the following month, which marked the beginning of six years of V-2 tests. The Naval Research Laboratory was associated with the V-2 early on to make measurements in the upper atmosphere. The navy also proceeded with its own trials on board the aircraft carrier *USS Midway* (September 1947) and from White Sands. The V-2 provided the United States and the Soviet Union with their first opportunity to fire large missiles.

The presence of the German scientists working for the U.S. Army and Navy in the immediate postwar period was not popular. Many Americans were against giving jobs to these men, who, despite their personal loyalties, had only months earlier been working for the Nazi regime. The Federation of American Scientists protested in a letter to the U.S. government, stating that it was an affront to the people of all of the countries that had fought beside the Allies. To that protest, the U.S. Navy offered the following response, which was published in the 1946 *ONI Review*:

To those petitioning American scientists, we offer the following proposition: If they will first amend their protest to declare that Russia's importation of hundreds of German scientists to work in their laboratories was an "affront" to the American people, we'll gladly give

the protest a second reading. If they will then convince Russia that she should forthwith deport their captive scientists back to Germany, we'll go further and give the protest a second thought. Until those two conditions have been met, we must continue to believe that America's defense and security are better served by having German scientists—with their knowledge of V-1 and V-2 bombs, atomic energy, cosmic rays, and all other awful forces of destruction—working in our laboratories rather than in Russia's.⁴⁰

Marshal Stalin's Amorous Naval Connection

One intelligence report from the period was unique for defining one of Stalin's lesser-known connections with his navy. On February 1, 1946, an obscure intelligence report was written by a Royal Navy intelligence officer assigned to the captured German port of Wilhelmshaven, Germany. It contained bizarre personal information about the Soviet leader Generalissimo Joseph Stalin. The information had been gleaned from a Soviet naval officer, who was about to return to the USSR from occupied Germany. Captain Third Rank Rodion Kirkevitch was the chief naval engineer of the Soviet Naval Mission in Wilhelmshaven, which was being dissolved in February 1946. In a rare one-on-one meeting with the British officer—usually, the Soviets were accompanied by political commissars, as minders—Kirkevitch expressed some reluctance to return to Moscow and to see his family. According to the sad Russian, in 1942, Stalin had married Kirkevitch's then twenty-year-old sister, who bore Stalin two children. One was a son, Alexander, born out of wedlock; the second, a daughter, Nadia, was two years younger. Besides these two children, Stalin had two sons—Yasha, who had been killed in a German POW camp, and a second son, Vasily—as well as a daughter, Svetlana.

Stalin's affection for Kirkevitch's young sister had cooled considerably by 1946 because he began an affair with the daughter of Soviet marshal Semen Timoshenko. (Timoshenko, a two-time winner of the highest award, Hero of the Soviet Union, was the famed leader of the Red Army's South-West Front, which included Stalingrad during the 1942–1943 victory over the German Sixth Army.) Kirkevitch stated that he would not be surprised if Stalin, ignoring all laws, divorced his sister and married the new girlfriend. "Stalin is all powerful and does what he pleases," said the poor captain. "Of course my sister will be well pensioned off, but, nevertheless will put up a fight." Talking about his future, Kirkevitch said, "Stalin had suggested I leave the navy and promised a high official

post in the civil service. But I am afraid that Stalin's benevolent attitude toward his brother-in-law would certainly change, when Stalin decides to get rid of his present wife." Kirkevitch foresaw that "I will in all probability fall in disgrace, lose my post and find myself in a very precarious position."⁴¹

Although the war was over and the plunder of Nazi technology well underway, the uncertainty of the geopolitical European boundaries would give both sides opportunities to penetrate the other's innermost sanctums.