



Werner Albring

Gorodomlya Island

German Rocket Scientists in Russia

*In fond memory of
Gertrud and Werner Albring*

Edited, abridged and translated by Ursula Kuhlmann-Walter
in collaboration with Helmut Wolff,
with contributions from Eleonora K. Adams.

Supplement

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**Archival Findings on the Activities
of the German Rocket Specialists
on Gorodomlya Island from 1946-1953**

Based on Irina Petrovna Suslina's archival research, in
collaboration with Helmut Wolff.

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Part I

WERNER ALBRING

**Gorodomlya Island.
German Rocket Scientists in Russia**

Editorial Foreword

During the early-morning hours of 22 October 1946, an unprecedented meticulously planned military coup took place simultaneously in several cities and towns of the Soviet Occupation Zone of Germany (SOZ). The Red Army put close to 7,000 German scientists, engineers, and technical staff, including their families and entire households, on 92 trains by force and transported them to the Soviet Union. There the Germans were held captive in guarded research camps in various locations where they were forced to work in several fields of technology, such as aviation, nuclear research, rocketry, communications, and electrical and chemical engineering.

The aerodynamicist Werner Albring was one of the leading scientists among the group of rocket specialists who were deported to the remote island of Gorodomlya, approximately 200 miles northwest of Moscow. For the duration of more than six years, they participated in designing and developing the Soviets' long-range ballistic missile, which ultimately launched *Sputnik* into orbit. Albring gave a compelling account of his experiences in the Soviet Union in his memoir *Gorodomlya: Deutsche Raketenforscher in Russland* (Gorodomlya: German rocket scientists in Russia).

[Part I](#) of the present volume is an abridged English version¹ of Albring's memoir. [Part II](#) focuses on Irina Petrovna Suslina's recent research findings in the archives of Gorodomlya, where she had access to the documentation of the heretofore top secret activities of the German rocket collective from 1946-1953 and which she published in an appendix to her second Russian edition of Albring's memoir.²

Circumstances leading to the English translation of Albring's memoir and to the publication of Irina P. Suslina's archival research findings

Initially, the English translation of Werner Albring's memoir was a joint project of Dr. Eleonora (Ella) K. Adams and myself. During the course of a joint research project on the deportation of German scientists to the Soviet Union in the early years of the Cold War, we came across Albring's fascinating memoir of his six-year captivity on Gorodomlya Island. Through a series of coincidences, we had the opportunity to interview Albring and his wife in Dresden, gathering more detailed information on their experiences in Russia. Beforehand, we had sent Albring a copy of our draft for an article on German rocket scientists in Russia. Albring told us that he held the copyright to his memoir and that it would please him very much if we consented to translate it into English, as it had already been published in Russian in 2005. We gladly agreed to take on this challenge, firstly, as a favor to Albring, whose charismatic personality and philosophical views, especially on his participation in Soviet rocketry, impressed us greatly. Secondly, we felt that this compelling first-hand account of a special chapter in German post-war history should also be made available to English-speaking readers.

Helmut Wolff, who holds a doctorate in physics, kindly agreed to edit the chapters containing the predominantly technical passages. He had been well acquainted with the Albrings since their shared years on Gorodomlya Island. Werner Albring and Helmut Wolff's father, mathematician and ballistician Waldemar Wolff, had worked closely together at the island's institute where seventeen-year-old Helmut occasionally assisted them with numerical calculations of flight paths of the A-4 rocket.

After we had translated several chapters of Albring's book, much to our mutual regret, Ella had to withdraw from the translation project, as she had accepted a challenging and rewarding, and also very time consuming, senior administrative post at a university in Pennsylvania, where she was employed as an associate professor of the German and Russian languages.

Irina Petrovna Suslina, who currently lectures at the Saint Petersburg State Technological University, studied aerodynamics in the seventies under Werner Albring at the Technical University of Dresden, where she received her doctorate. Suslina's relationship to Albring went beyond that normally experienced between student and professor, as he and his wife Gertrud had developed a keen personal interest in her and had taken her under their wings. After Suslina's return to Russia, she kept in close contact with the Albrings and, as an expression of her appreciation and gratitude to them, Suslina translated Albring's memoir into Russian and sent the published edition to the Albrings in 2005. Approximately a year later, under unusual circumstances, Suslina gained access to the archives on Gorodomlya, where she was permitted to study heretofore top secret material on the German collective's activities on Gorodomlya Island from 1946-1953. She incorporated her research results in the appendix to her second edition of the Russian translation of Albring's memoir, which was published in 2009, two years after Albring had passed away. In late December 2009, Suslina sent Gertrud Albring copies of her new edition, who in turn, sent a copy to Helmut Wolff, who had acquired his knowledge of Russian at the high school in Ostashkov and at the University of Leningrad (St. Petersburg), where he received a degree as *Diplomphysiker* (graduated physicist) in 1955. Helmut Wolff was fascinated by Suslina's report on the extensive documentation of the German rocket scientists' activities and the good quality of

authentic photographs. He and I both agreed that an English version should be appended to Albring's memoir to bring Irina Petrovna Suslina's research findings to a broader audience, as they shed new light on the German rocket scientists' contribution to early Soviet rocket development.

Historical background to the deportation of German rocket scientists to Russia

At the end of World War II, the successful launch of the A-4 rocket, the first long-range ballistic missile, also known as the V-2 (vengeance weapon), initiated the race for the military development of rocket technology. This missile had been developed in Germany as a novel weapons system, and it played a significant role in the Cold War between the Western Allies and the Soviet Union. Immediately after Germany's defeat, the victorious powers did their utmost to gain access to the know-how of this new and dangerous weapon. The Allied forces deployed special units of scientists and engineers in high-ranking military uniforms who directly followed the fighting troops with the objective to discover and secure weapon-technological research and development sites as well as industrial plants.

Early in July 1945, the final territorial division of Germany into occupation zones, which the Three Great Powers had agreed upon at the Yalta Conference, was put into effect. Consequently, the subterranean rocket plants fell into the hands of the Soviets, who had to make do with what the Americans left behind. Special units scoured their own zone of occupation to find everything connected with rocket development and production, and "headhunters" searched for German experts in aviation, rocket technology, engineering, and other related fields, as there were hardly any of the Peenemünde experts to be found in the Soviet Occupation Zone (SOZ). The Soviets even extended their covert search beyond their zone of occupation. In

Witzenhausen, for example, where the Americans had housed their “captured” rocket experts temporarily before relocating them to the USA, the Soviets made futile attempts at recruiting Wernher von Braun. However, they were able to persuade Helmut Gröttrup, von Braun’s former deputy for missile radio-control, to move to the SOZ with his family. Gröttrup was made head of “Bureau Gröttrup”, a separate division of the Institute RABE (German code word for rocket production and development) that the Soviet administration had established by August 1945 to develop rocket technology based on the A-4 rockets. Gröttrup was given free rein at selecting his own team of experts, among them the aerodynamicist Werner Albring. He and all the other scientists, engineers, technicians, and skilled laborers, who had opted to accept the Soviets’ attractive offers of employment, welcomed the opportunity to work in their specialist fields and to be provided with housing, ample food rations, and good payment, which was impossible to come by in early post-war Germany.

In order to maintain secrecy about their military objectives, the Soviets led Gröttrup and his team to believe that their work on the development of the A-4 rocket would be for peaceful purposes, such as mail service or the exploration of space. To dispel any fear of eventually having to relocate to the Soviet Union, the Germans were given written contracts stipulating that in case of relocation to the Soviet Union, they would be permitted to cancel their contracts and to remain in Germany.

By May 1946, the Institute RABE, which had expanded into a complex called *Zentralwerke* (central works), was incorporated into the newly established “Institute Nordhausen”. It consisted of specially built institutes and plants, where about 7,000 scientists, engineers, technicians, draftsmen, mechanics, and workers began to reconstruct, further develop, and produce the A-4 with all its component parts, using the hardware and documentation from the V-2

the Soviets had collected. Almost one-third of the personnel at the Central Works were comprised of Soviet rocket specialists dressed in military uniforms. The expanded rocket development program in the SOZ was sanctioned by Stalin in a top-secret order and by decree of the Council of Ministers of the Soviet Union of May 13, 1946. The responsibility of the operations was placed on the Secretary of Defense, Colonel General Dimitry F. Ustinov (later Marshal of the Soviet Union). Stalin's order already entailed the eventual transfer of the Central Works to the Soviet Union and the termination of all related activities on German soil toward the end of the year, because it would be increasingly difficult for the Soviets to maintain secrecy of their covert military research and production complex on German soil. Moreover, it was a violation of the agreements reached at the Yalta Conference in February of 1945.

In preparation for the future relocation to the Soviet Union, the KGB compiled secret lists of the names of highly qualified German experts considered to be useful for the rocket program and a number of experts in other fields that were of interest to the armaments industry, such as aviation, guidance systems, instrumentation, electronics, and optics. Thus, on 22 October 1946, the deportation of the German specialists ran its course. The Soviets declared it to be an unlimited compulsory service within the framework of Germany's war reparations to the Soviet Union, which the Three Great Powers had agreed upon at the Yalta and Potsdam Conferences in 1945. The German specialists were given to understand that they had to comply, that existing employment contracts were null and void, and that resistance to the deportation would not be tolerated. In contrast to Wernher von Braun and his Peenemünde team, who were transported to the US without their families, the German specialists to be relocated to the Soviet Union were allowed and even encouraged to take along their families, including their entire households. A

small number of specialists, among them Werner Albring, were presented with an order from Moscow that the Central Works would be transferred to Moscow for the duration of five years.³ However, the majority of the specialists were kept in the dark about their projected stay in the Soviet Union and were not even informed if they could ever return to their homeland. Only a few experts managed to escape from their involuntary relocation to the USSR.

The deportation of German specialists to the Soviet Union after 1945 has been well documented over the years in countless English and German scholarly publications, focusing on a variety of aspects.⁴ To this date, however, none of the personal accounts of the German specialists themselves has been published in English.⁵ The present translation of Werner Albring's memoir aims at filling that gap.

Werner Albring's memoir *Gorodomlya Island. German Rocket Scientists in Russia*

Albring was prompted to start writing his memoir when the first *Sputnik* orbited the earth in 1957. Since his return from the Soviet Union in 1952, he had disassociated himself from his former work on ballistic missiles and had turned to peaceful applications of his field of specialty by accepting a post as professor of fluid dynamics at the Technical University of Dresden. The successful launching of *Sputnik* fascinated the whole world, and speculative reports on German scientists' contribution to the Russian triumph flooded the Western print media. The German specialists were essentially held responsible for realizing the *Sputnik* project, solely because the Russians were considered incapable of such an achievement. The news media in the former German Democratic Republic, however, vehemently contradicted these claims and considered it an insult to the Russians to maintain that the Germans had any part in the

Soviet rocket project at all. According to Albring, both sides exaggerated for different reasons. As one of the earliest island specialists, he felt the urge to write down his own experiences from the viewpoint as a contemporary witness.⁶ He worked on his memoir intermittently and finished the manuscript in 1988, but it was not published until after the reunification of Germany in 1991, when the memoir would no longer be subjected to the censorship of the German Democratic Republic.

Before turning to the narration of his six years of captivity on the island of Gorodomlya, Albring described his life in the British Occupation Zone of post-war Germany, his move to the Soviet Occupation Zone, his activities at the “Institute Nordhausen”, the deportation, and the three-week journey to the Soviet Union.

Gorodomlya Island was encircled entirely by barbed-wire fences that were constantly patrolled by armed guards and by watchdogs. The nearest town was accessible only by boat during the summer and by sled or on foot during the winter; and you were always accompanied by a guard. The Germans were, in effect, imprisoned on this small, remote island in the middle of a lake without any means of reaching the shore undetected. To make matters worse, they were without passports or any other proof of German citizenship throughout the years of their captivity. Albring vividly described the harsh living conditions on the island and the captives’ various attempts at coping with their physical and intellectual isolation, such as creating a wide range of cultural activities to ward off the threat of *Stacheldrahtkrankheit* (barbed-wire psychosis).⁷ It was of particular concern to the adults to provide a carefree and untroubled life for their smaller children and not to let them feel like prisoners behind barbed wire.⁸

As it is to be expected, the Germans’ participation in the design and further development of long-range missiles is an

essential and integral part of the memoir. Without going into technical details or using highly specialized terms, Albring gave a comprehensive account of the activities of the German rocket scientists. They had to work under very restricted circumstances and under utmost secrecy. In contrast to the amicable cooperation between German and Soviet specialists at the “Institute Nordhausen”, the German collective on Gorodomlya was completely isolated from Soviet rocket developments. High ranking commissions scrutinized the project designs of the Germans, but the specialists did not know what became of their findings, nor were they ever involved in the testing phases or in the actual production of the missiles. Albring was convinced that the carrier rocket that launched *Sputnik* was a genuine Soviet development. He only conceded that the German collective with its highly qualified experts in the fields of design, ballistics, control, and radio control “supported and helped” the Russians in their rocket projects.⁹

In the last chapter of the book, Albring reflected on the long period of his captivity, also recalling its positive aspects. He critically viewed his past involvement in the development of weapons, he expressed his concern about the modern predominance of science and technology, and he warned against the dangers of the perpetual arms’ race.

* * *

Albring’s memoir is a fascinating contemporary historical document in its own right, and many of Albring’s views are still valid today. His diversified narrative style, i.e. a blend of concise, matter-of-fact statements and of vivid and pictorial descriptions, including a fine sense of humor, make the book highly readable.

Irina P. Suslina’s recent research findings in the archives of Gorodomlya, which include numerous authentic

photographs of buildings, test sites and technical equipment, add a new dimension to Albring's descriptions of the German collective's activities in retrospect. They make Albring's memoir all the more significant to readers generally interested in engineering and technology and to those with a special interest in early Soviet long-range ballistic missile technology. Perhaps even more importantly, Suslina's findings shed new light on the German rocket specialists' contribution to the early Soviet long-range missile technology, which has been a topic of discussions in countless publications since the launching of *Sputnik*.

- 1 The German editor's foreword, his interview with Albring, and the reprinted article from *Spectrum* contained in the German original were omitted, since they are not actually part of Albring's memoir. In the chapters "[Theater and Literature](#)" and "[Episodes of Life on the Island](#)", a few passages were deleted in order to enhance readability, such as the detailed description of Albring's appendectomy.
- 2 Irina Petrovna Suslina, *Nemeckie specialisty i rakety Rossii*, 154-229.
- 3 Albring was shown a handwritten German translation of the order, which stated that the Central Works were being relocated to the Soviet Union for the duration of five years. Albring, *Gorodomlia*, 69.
- 4 Some of the more recent publications are: Dolores L. Augustine, *Red Prometheus: Engineering and Dictatorship in East Germany, 1945-1990*; Asif A. Siddiqi, "Germans in Russia"; Christoph Mick, "Serving Two Dictators".
- 5 Werner Albring, *Gorodomlia*; Heinz und Elfi Barwich, *Das rote Atom*; Kurt Berner, *Spezialisten hinter Stacheldraht*; Ferdinand Brandner, *Ein Leben zwischen Fronten*; Kurt Magnus, *Raketensklaven*.
- 6 German editor's interview with Albring of December 1990, "We called ourselves 'prisoners of peace'", published in Albring's German memoir, 11.
- 7 Albring, 241.
- 8 Numerous personal interviews with *Inselkinder* (island children) sixty years after the anniversary of the deportation impressively prove the success of their parents' efforts.
- 9 Albring, 13.

Acknowledgments

I would like to express my deep gratitude to Helmut Wolff for his consistently enjoyable and fruitful collaboration, which entailed, among other things, editing the technical terms and passages in Albring's memoir, providing historical background information, editing Suslina's Russian appendix and translating it into German, and editing the 22 photographs in [Part II](#) of this volume. I highly value Helmut Wolff's advisory support, and I greatly appreciate the time he generously devoted to this project.

Helmut Wolff and I are very grateful to Irina P. Suslina for giving us the permission to incorporate her archival research findings in this English edition of Albring's memoir, including a selection of authentic photographs.

My grateful thanks are extended to Werner Albring's son Dr. Ing. Peter Albring for his encouragement and material support regarding this project and to Peter Albring's son Maximilian for designing the jacket cover and to his wife Cornelia for her critical reading of the manuscript.

I would like to thank Rosemary Reidel and Karin Veit wholeheartedly for their various valuable contributions to the translation project and for their continued support and encouragement.

I would also like to thank Ursula (Ulli) Gröttrup for supplying a copy of her father's unpublished report to the CIA in 1954.

I am especially grateful to Richard Brown for his wholehearted support and encouragement throughout, for his numerous helpful suggestions, for his sound advice and constructive critiques, for his technical expertise, for giving

the manuscript its final polish, and, last but not least, for his warmth and infectious sense of humor.

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March 2016

Gorodomlya Island.

German Rocket Scientists in Russia

Ostashkov, Mailbox No. 1. Or: My motivation for writing my memoir

During the summer of 1952, train loads of German specialists¹⁰ and their families, including all their personal effects, were being transported from the Soviet Union back to Germany. For nearly six years, isolated from the rest of the world, they had been living on a very small island in Lake Seliger, situated in the sparsely populated area halfway between Leningrad and Moscow, not far from the source of the Volga.

For all these years then, these specialists, made up of skilled workers, mechanics, electricians, mathematicians, physicists and engineers, had worked on the island in a gray flat-roofed building that served as the research institute, or else on test stands or in workshops. One hundred and fifty specialists and their families, adding up to a total of nearly five hundred people, had lived in small row houses.

In the early days after World War II, there were no man-made satellites circling the earth and beaming back high-definition photos of any spot on its surface. But let us imagine what an observer might have discovered, had such images been possible at the time. He would have seen a small island with a dense forest of tall conifers encircling a tiny village, no more than a dozen brown two-floor wooden dwellings and a few lime-washed stone houses. He would have seen an administrative building, a small restaurant, a

school and a clinic; however, a closer look would have revealed to him signs of technical work, such as a slender mast mounted with parabolic-reflector antennas, batteries of pressure tanks, and the power plant on the shore of the inland lake. Initially, an old wood-burning *Lokomobile* (steam tractor) had supplied the power to generate the electricity, later it was replaced by a diesel engine.

The district town Ostashkov lies to the South of the island on the far shore of the large lake. Every day, a small steamboat travels between the harbor and the island, issuing thick clouds of dark steam. The severe and long-lasting cold of the winter turns the water into gigantic sheets of ice. Snow soon follows, and heavy trucks drive back and forth between the island and Ostashkov, leaving deep tracks in the snow and eventually creating a broad roadway. During the summer, a close-up by the camera would also reveal small objects like children playing between the flowery front gardens of the houses, and behind the houses, sheds with piles of firewood for the winter. In the hours after work, a husband and wife might be observed using a large crosscut saw to cut long tree trunks into logs and then splitting the logs into manageable pieces with an axe. There is swimming from the white sands of the reed-covered south beach. At the edge of the village are the tennis courts. The players are impeccably dressed in white, and many spectators are sitting on the benches around the russet-brown court with its white marking lines.

Some more images of winter: The village is completely covered in snow. People, muffled in padded jackets and with felt boots on their feet, are plodding along the narrow paths. Outside the village, long ski tracks lead to a bare hillside, marked with scratches and slick with ice. This is the practice slope for the skiers who are racing downhill towards the inland lake through steep clearings in the forest. Children are building snowmen in the village; and in the early dusk of

the late December days, the warm glow of the candles on the Christmas trees can be seen through many a window.

A cursory glance at this scene would suggest that here we have a totally normal, albeit very small, village. However, a closer look at the photos would reveal that the entire island is encircled by barbed wire and that armed guards are patrolling the fences. But there were no man-made satellites in the first decade after World War II and therefore no such photographs of the island. In those days, the immense distance from any densely populated settlements as well as the barbed wire fence was quite sufficient to conceal from the outside world the nature and the objective of the work being done here. Although there was postal service between the island and the distant homeland, all written communication was subject to strict censorship. Letters and packages took a long time to reach the recipients, probably longer than it would have taken a horse-drawn coach to cover the same distance at the beginning of the previous century.

By looking at the composition of the group of specialists and their specific fields of expertise, ever suspicious Western countries felt confident that they knew what kind of work was being conducted. There was a lot of speculation among journalists of the more imaginative type. On July 19 in 1950, the Mannheim daily newspaper "*Der Morgen*" reprinted an article from the "*New Yorker Staats-Zeitung*"¹¹, which stated that since 1946, in Ostashkov at Lake Seliger, German specialists had been working on the development of large highly efficient long-range rockets. Our exact location was still unknown to the West at that time because the German specialists were forbidden to mention the island in their letters. Instead, they were told to use Ostashkov, P.O. Box No. 1, as their return address.

When the first man-made satellite, the Soviet *Sputnik*, circled the earth in 1957, a deluge of newspaper articles

and books appeared in the West, assuming a close connection between the work of the island specialists and the flight of the *Sputnik*. But many of these claims were highly speculative. It was then, being one of the first island specialists, that I began to feel the urge to relate my own experiences. My writing might contribute to an archive and thus become part of the material documenting the conditions under which a group of people were living and working, people who had been kept in isolation for many long years.

I believe that working as a technical and scientific team and sharing so many personal problems provided us with a unique experience of life that deserves to be recorded rather than forgotten. I will make an effort to keep my report as objective as possible, bearing in mind that human beings with their worries and sufferings, their joys and successes, their setbacks and needs, cannot react like a calibrated instrument. Besides, all the pent-up experiences of six years, once written down, could fill many volumes. Even limiting my account to a few aspects that seem important to me, involves a measure of subjectivity. Also, I would like to talk at length about the technical and scientific work we did, even though today it is still unusual to display a lot of technical knowledge in a book that aims to entertain the reader in a pleasant way. Keeping this in mind, I ask the reader not to be alarmed at my intention to write about technical details. All I ask is that my reader approaches my writing with the same tolerance he displays when faced with the sort of special musical terminology he might come across in belletristic writing. Thomas Mann, for example, wrote extensively about music theory in his novel *Doktor Faustus*. To be sure, every professional writer has the advantage that his reader will place greater value on the stylistic excellence than on the scientific contents of the book. Yet, as a non-professional writer, I still dare to ask for the reader's indulgence in the face of my inexperienced

attempts. I promise that this book will not be a manual for the construction of rockets nor for the aerodynamics of such missiles. I also promise to avoid the technical jargon used by engineers or words belonging to the specialized language of mathematicians and physicists. I will only choose terms from everyday language.

We seldom take account of what great part of past life is forgotten. This is also true for reading a book for the second time after several years have passed. In my case, only those passages were still vivid in my mind which on my first reading, I had related to my own thoughts and experiences. It was the same when I viewed a film or a play for a second time or listened again to an opera after the passage of some years. Only a few details remained in my memory. Everything else appeared to be entirely new. I tend to believe that if someone had the opportunity to re-experience unremarkable scenes from his past life, he would not realize that they were actually a repetition. In order to counteract such forgetfulness, it is good practice to keep a written record of important events. The island dwellers wrote many letters to friends and relatives at home, describing their experiences and adding photographs.

However, we do not only forget our own experiences, but also many of the predictions we were bold enough to make. Here, the weather of a following day comes to mind, the nature of a future winter or summer, and the success or failure of an undertaking. All too quickly do we forget our own statements, especially when events turn out differently. The written word in a diary, on the other hand, will survive longer. When the writer has made assumptions about the future and realizes at a later time that things have developed quite differently, he will learn his lesson and in the future, he will exercise greater care, circumspection, and reserve when it comes to making a prediction.

- 10 Term coined by the Russians, referring to scientists, researchers, engineers, and experts in all fields of technology, including technical staff and skilled workers.
- 11 Leading German language weekly newspaper in the United States, founded in 1934 by German immigrants.

Earthshaking news

On a warm sunny day in October 1957, I was sitting at a festive table together with my colleagues from the department of Applied Fluid Dynamics at the Technical University of Dresden. The manual workers, the assistants, the secretary and the draftswomen were wearing their Sunday best. For the first time since the founding of the department in 1952, a doctorate in engineering was conferred on a colleague. It was the young, blond, slender and energetic senior assistant Ruprecht Vogel.

In those days, when the defense of a dissertation was still a rare occasion at the Technical University, the departments concerned went to great lengths to publicize the event in a humorous way. The chemists put their candidate on a donkey and led the procession from the university grounds through nearby streets. His colleagues marched behind him, imitating alchemists, wearing their white lab coats and with turbans of toweling on their heads. The automotive technicians came up with a unique hoax. They mobilized an antique single-cylinder automobile, which resembled a small open carriage without horse and shafts. With the candidate behind the steering wheel, the motor slowly chugged along, followed by the celebrants. The men wore black top hats, which people of former generations used to wear at weddings and funerals.

The very competent, young, pretty and vivacious secretary of our department prepared something special for the festive procession. A few days earlier, she asked me to create a slightly caricatured image of our candidate using a brush and black paint on a large piece of white cardboard. The youngest mechanic was to carry the portrait at the head of the procession. The rest of her preparations were a closely kept secret of which nothing was revealed. When the

examiner and the newly graduated senior assistant left the conference room after the examination, all members from the department were lined up in the large hallway. They congratulated the new doctor with many flowers; they put an elaborately crafted medal around his neck and placed a big black, very pointed doctoral hat upon his head, which initiated the humorous part of the celebration. The procession was formed and marched down the broad stone staircase toward the sunny, park-like courtyard behind the building. From the top of the stairs, through the glass panes of the large door, I could see an enormous gray object in the bright sunlight of the courtyard. However, not until we were all outside did we realize that it was an elephant waiting there, attended by a brown-skinned Indian with a turban. The secretary had borrowed the pair from the circus.

The candidate had to mount the elephant and ride through the George-Bär-Strasse, the Fritz-Förster-Platz, and the Einstein-Strasse, while enthusiastic participants were taking photographs, using up many rolls of film. The destination of the procession was the House of the Professors, a small restaurant, where the new doctor had invited all the participants for breakfast. Now we were sitting in a merry circle, relieved and relaxed. Appreciative speeches had already been delivered. I suggested that one of our assistants, Horst Ihlenfeld, write a report about the unusual procession for the Dresden daily newspaper, complete with photographs. We had to come up with a striking headline, and the result of our spirited joint efforts was "Elephantastic goings-on at the Technical University".

At this moment, one of the assistants came in and announced, "Just now an artificial moon has been launched to orbit the earth." I asked, "By the Americans or by the Russians?" This was a reasonable question to ask, because 1957 had been declared the international year of worldwide geophysical research. The Americans had announced that they would launch a man-made satellite to observe the

earth. I had attended the exhibition the Americans had organized in the West German city of Hannover to display the current status of their preparations. The Russians, however, kept quiet until the launch of their satellite, soon to be known as *Sputnik*. From this day, the newspapers were full of articles about this event. The Americans tried hard to catch up with the Russians, but they were out of luck due to a series of launch failures. The long awaited but not forthcoming American satellite had become popularly known as the *Spätnik* (late-nik), referring to the German saying “he is late in coming, but he will come”; whereas the Russian word *sputnik*, meaning satellite or trabant, calls up an association to the German word *sich sputen* (to hurry).

In the five years after my return from the Soviet Union, I completely disassociated myself from my former technical work. I lectured at the Technical University of Dresden, initially on water turbines, later, on fluid dynamics. I installed a small laboratory with test stands for water turbines and injector pumps, including wind and water tunnels. However, after the launch of *Sputnik*, I wanted to refresh my memory of the years on the island and put everything down in writing. I turned to my old diaries, but they only contained philosophical thoughts, reflections on art, especially on theater performances, and on conversations with friends. I had not written down anything relating to technical problems, I had to reconstruct everything from memory. However, once stimulated, my memory reproduced a great deal, not only of technical matters, but also of life in the former community. I know that my memory has a tendency to store pleasant experiences which I can recall at will, whereas I quickly forget the unpleasant ones. So some of my recollections in this book, which are often closely related to my friends and acquaintances, may appear to be happy and serene. They reflect the course of events as I perceived them at the time. Later, I will introduce by name just three dozens of the one

hundred and fifty German colleagues in the community, because I came into close contact with them through work. Some of them also belonged to the circle of my friends and acquaintances. Another member of the group writing his memoir would doubtless recall different people.

The advantage of our community was that it was large enough to enable each of its members to maintain social and friendly contacts with people of their liking. In very small groups living in isolation, conflicting personalities may find themselves in close contact, which can lead to serious psychological problems. In larger communities, people like that have a chance to avoid one another.

The transfer to the Soviet Occupation Zone

In March 1946, the northern part of West Germany had been under British military authority for almost a year. There was no central German government. The occupying forces were insisting in the media that the Germans should first learn to establish a democracy from the bottom up. Consequently, we had a German mayor in our small town of Wildemann in the Harz mountains and a German district administrator in Claustal, the county town.

The first post-war winter was severe. At the start of February, the British occupying forces reduced our daily food rations to a thousand calories, which was half of what doctors considered standard consumption. The Harz mountains where we lived had always been an agriculturally poor area. We could only prepare for the winter by collecting and preserving mushrooms and raspberries, the sole fruit of the forest that the rocky landscape yielded. My wife Gertrud provided us with a very large quantity of these preserves.

Every day, the village community gathered in the rooms of the local school to receive a midday meal, consisting of plain, fat-free soup ladled from a large container, and of potatoes and vegetables, doled out to the people waiting in line. There was no meat. We had to eat large amounts of what was available in order not to be hungry all the time. "I am going to die of a distended stomach and malnutrition", a colleague said jokingly.

Wildemann was located next to the railway line between Claustal and Goslar, with the little river *Innerste* running parallel to the tracks throughout the deep valley. Our sleepy little town was situated right where the creek *Grundbach* flowed into the *Innerste*, after passing through the valley called *Spiegelthal*. The gloomy pine forests had withdrawn almost to the mountain tops, there forming a borderline to