

## CZECH URANIUM AND STALIN'S BOMB

**Z.A.B. Zeman** *uncovers a fateful link between Czechoslovakia's brief monopoly of uranium in Europe and the country's subordination to the USSR*

The great uranium rush started in 1943 and lasted for about seven years. Unlike the gold rushes of the past, uranium did not promise untold riches to individuals but instead unlimited power to the state: the atom bomb was the 'absolute weapon'. As long as physicists and deposit geologists assumed that uranium was a scarce raw material, therefore, the great powers were desperate to secure it.

### Jáchymov

By the end of 1943, General Groves, the administrative head of the Manhattan Project, the US atomic enterprise, had under his control two of the three known sources of the metal, in the Belgian Congo and Canada. Only Jáchymov in former Czechoslovakia remained outside the reach of the western Allies. It was under German control during the Second World War and in August 1945, as soon as Stalin decided, following the explosion of the American bomb over Hiroshima, that the Soviet Union should match the American achievement, the Red Army occupied the Jáchymov mines.

The existence of uranium deposits on both sides of the border between Czechoslovakia and the Soviet occupation zone in Germany not only vitally affected the timing and course of the armaments race between America and the USSR but also had a far-reaching impact on the politics of central Europe. In August 1945, nobody yet knew that Saxony had, in the Erzgebirge mountains, the richest deposits of uranium in Europe: in a way, Jáchymov served as a decoy for it had a long-established reputation as a supplier of uranium. The Curies had used Jáchymov pitchblende for their experiments from the end of the nineteenth century and after their discovery of radium, a medical fashion for radiation developed. The building of the Radium Palace Hotel was completed in Jáchymov shortly before the First World War, and the local waters were used for the healing of diseases mainly of the motorial system; the popularity of radiation was such that, between the two wars, visitors could buy 'radium soap' and even 'radium beer'. On 2 August 1939, Albert Einstein wrote to President Roosevelt, warning him that the discovery of nuclear fission would lead to the construction of an extremely powerful bomb. Einstein hinted that 'Germany has actually stopped the sale of uranium from the Czechoslovakian mines which she has taken over. That she should have taken such an early action might perhaps be understood on the ground that the son of the German Under-secretary of State, von Weizsacker, is attached to the Kaiser-

Wilhelm-Institut in Berlin, where some of the American work on uranium is now being repeated.<sup>1</sup>

After the experimental explosion of the American atomic weapon in New Mexico and then its strategic use over Hiroshima and Nagasaki in the summer 1945, there was no doubt in the Foreign Office in London about the impression the atomic explosions made in Moscow. The Russians feared that their victory in the Second World War would be annulled, a British diplomat reported from Moscow. In a memorandum of 11 September 1945 prepared for Bevin, the Foreign Secretary, grave fears for the future were expressed. The British and the Americans, as well as Marshal Stalin, were aware of the possibility of a rift among the Big Three as a result of the development of the atomic weapon.<sup>2</sup>

The 'absolute weapon' in the hands of the Americans forced Stalin to review his policies, at home and abroad. He was perfectly informed by his intelligence services about both the British (code-name Tube Alloys) and the American nuclear projects. He knew of the Maud report on the feasibility of the atomic bomb a few months after it was submitted to Churchill in July 1941. His suspicious nature was incensed by the knowledge that neither Churchill nor Roosevelt would trust him with information on the development of the atomic weapon. Before the Potsdam Conference in the summer of 1945, Stalin spent several long nights talking freely and informally to Churchill. The talk never strayed in the direction of nuclear research and development, though Stalin shared with Churchill an interest in the application of science and technology to warfare. He allocated scarce resources to the Soviet atomic project in 1943; in summer 1945, as soon as the experimental bomb was exploded in New Mexico, the project passed under the supervision of Lavrenty Beria and the security services.

After heavy losses inflicted on it by the war, Stalin continued to drive Soviet society hard, forcing it to make a great leap in technology. Billions of roubles were invested in the atomic project: thousands of tons of uranium had to be produced, and laboratories and factories built. It marked the beginning of the development of the Soviet military-industrial complex and of the arms race with America.<sup>3</sup> The Soviet atomic project was extremely short of uranium, and so Czechoslovakia, and later the whole of the Erzgebirge mountain range on the border between Saxony and Bohemia, found their place in Stalin's reassessment of Soviet policies.