

THE SOVIET UNION'S SECRET OF SECRETS

THE CREATION OF BW FACILITIES ON THE ISLAND OF GORODOMYLA

By 1935, the Soviet military was becoming increasingly concerned that testing at Vlasikha involving dangerous infectious diseases could conceivably pose a threat to Moscow. It was therefore decided to create a new branch of the Red Army's Biochemical Institute based at Gorodomyla Island on Lake Seliger, close to the town of Ostashkov in Tver oblast'. Here, the military appropriated pre-existing facilities belonging to the Foot-and-Mouth Disease Institute, which had been operating under the People's Commissariat of Health since 1932.¹ It had apparently developed and field-tested a foot-and-mouth disease vaccine, and the institute's reputation was such that it organised an international conference on the disease. The island itself first appears to have been appropriated from a local monastery by the Soviet authorities at some point around 1928. Ascetic monks were ruthlessly evicted, and according to a local legend 'one of the defiant monks drowned himself in the internal lake on Gorodomlya and since then his ghost wandered around the island'.²

This was an ideally remote location for Velikanov's new branch, surrounded by countless swamps and evergreen taiga, and located some 316 kilometres (170 miles) from Moscow in the Upper Volga region.³

STALIN'S SECRET WEAPON

Even today, Ostashkov is difficult to access. It can be reached by a five-hour car drive or alternatively via a twelve-hour journey by train.

At some point around this time, Velikanov's main facility at Vlasikha was renamed as the Biotechnical Institute (Biotekhnicheskii institut). The branch on Gorodomyla Island was given the code designation V/2-1094 and was also known as the Velikanov Institute. Hirsch reports that:

From the Autumn of 1935, all work of the nature of BW proper was carried out here. All work was strictly secret, and the premises and the scientific personnel were under rigorous surveillance ... In the central office at Moscow remained only the less dangerous works, particularly the large scale preparation of the dry nutritive materials, but under strictest secrecy.⁴

At some point in 1936, the remaining scientists in Suzdal, attached to the Third Experimental Laboratory of the People's Commissariat of Defence, were loaded on to a special train and transferred to the Red Army facility on Gorodomyla Island. In the same year, in the only known reference to the programme of Gorodomyla, V/2-1094 is reported to have been engaged in studying animal infectivity, the effect of environmental factors on biological agents, rapid detection methods, and disinfection measures for buildings and terrain, using a number of human and animal diseases.⁵ Some experiments were also conducted with regard to infecting fish—presumably to assess the potential for disrupting enemy food supplies. German intelligence was aware of the new BW facility on Lake Seliger and is reported to have discovered that it was in possession of 'cars fitted up with sprays for disseminating tularaemia. In addition they were said to have used over 600,000 rats as plague carriers.'⁶

Fedorov, drawing on the Soviet archives, demonstrates that security at the Gorodomyla Island site was a key issue. He notes that in order to conceal the precise location of the laboratory, it officially operated from the town of Ostashkov on the shore of Lake Seliger. Fedorov also reports that, on 23 August 1936, Marshall Voroshilov, people's commissar for defence, issued an official reprimand to Velikanov for permitting an unauthorised individual access to the island. By late 1936, the deployment in Ostashkov was being mooted of a 179-strong special battalion from the People's Commissariat for Internal Affairs. Its sole mission would be to protect secrecy at the Gorodomyla site.⁷

THE SOVIET UNION'S SECRET OF SECRETS

In his report to Voroshilov in February 1928, Fishman had indicated that it would be desirable to make use of the network of bacteriological institutes belonging to the People's Commissariat of Health for military purposes. The only evidence that this request was acted upon is provided by Valentin Bojtsov and Erhard Geissler in their study of early military biological programmes in the USSR. The two authors report that a public health institute attached to Dnepropetrovsk University was involved in both offensive and defensive BW tests on Gorodomyla Island. The institute apparently focused on experiments with plague and tularaemia, which included the dissemination of tularaemia bacilli in the form of dust clouds.⁸ Fedorov identifies the facility in question as the Sanitary-Biological Institute, with the BW work being led by a Professor Barbolin.⁹ No trace of the scientist or the institute can be found elsewhere in the historical record.

An escape from the lab: plague in Moscow, December 1939

In December 1939, the Soviet authorities were provided with a vivid demonstration of the potential dangers posed by research on highly dangerous pathogens when plague (*Yersinia pestis*) escaped from a research laboratory and reached the streets of the capital itself. The incident involved Abram L'vovich Berlin, a leading plague researcher and deputy director of the Mikrob Institute in Saratov. He also headed-up the institute's Anti-Plague Vaccine Laboratory. In 1939, Berlin, together with two colleagues, Evgeniya Il'inichna Korobkova and V.M. Tumanskii, bravely injected himself with a new experimental live plague vaccine based on the EV strain. For a long period of time, the authorities had not consented to the experiment, but they had at last relented. Fearing that administration of the unproved vaccine could itself potentially lead to infection with plague, the three researchers isolated themselves from the outside world. The scientists all survived, and the vaccine was then tested on additional volunteers.¹⁰

In December of the same year, Berlin undertook additional experiments on laboratory animals. He immunised the animals with the live EV vaccine strain and is then reported to have challenged them with virulent plague bacteria. It was during the course of this experiment that Berlin was infected with plague.¹¹ Berlin, unaware of his illness, then travelled to Moscow where he was scheduled to present a paper

STALIN'S SECRET WEAPON

to the People's Commissariat of Health. He checked into the capital's Metropol Hotel. The very next day, Berlin collapsed and subsequently died. Within three days, a barber who had given him a shave, along with two doctors who had treated him at the Infectious Diseases Hospital on Sokol Hill, were all dead.

The Central Committee was quickly alerted to the outbreak and arranged for experts to be flown in from Rostov-on-Don to the capital. A plague hospital was rapidly established, and all persons who had come into contact with Berlin—along with anyone observed to be suffering from pneumonia—were placed in quarantine there. Both the Metropol Hotel and the Narkomzdrav offices were subjected to disinfection. In addition, autopsies were performed by coroners on the bodies of the plague victims. The authorities were desperate to prevent news of the outbreak leaking out internationally and so placed all this work—which was performed at night—under the strict control of the NKVD. The epidemic is reported to have been isolated and halted.¹²

The immediate consequence of the Moscow outbreak was that the authorities prohibited all plague research within the environs of the capital. It must also have provoked awareness in Stalin and other senior officials of the potential hazards associated with microbiological work in general and research focused on BW in particular. There was certainly no possibility, henceforward, of reactivating the Red Army's BW facilities in the environs of Moscow at Vlasikha.

The Great Terror and the decapitation of the leadership of the Red Army's BW programme

In 1936, Stalin and his security organs unleashed the mass repression dubbed the Great Terror. These centralised, thoroughly planned operations of state terror reached their culmination in the winter of 1937 through to the autumn of 1938, when it is estimated that approximately three-quarters of a million Soviet citizens were subject to summary execution and more than a million others were imprisoned within the labour camps of the Gulag.¹³ The repression was to have an enormous impact on microbiology and resulted in the decapitation of the leadership of the Red Army's BW programme. On 24 July 1937, the NKVD, another forerunner of the KGB, issued a directive on a special purge of personnel based at water-supply stations, bacteriological stations and

THE SOVIET UNION'S SECRET OF SECRETS

scientific institutes and laboratories concerned with microbiology. The directive further ordered that all foreigners and former foreigners who had been granted Soviet citizenship, those having connections abroad and active anti-Soviet elements based at the microbiology institutions were to be subjected to immediate arrest.¹⁴

The main scapegoat used by the security police as cover for their operation was none other than Professor Heinrich Zeiss. Geissler reports that, according to the NKVD, German intelligence had been funding a secret organisation of spies and terrorists, composed of microbiologists and bacteriologists. This organisation had been operating in the USSR since 1930. Zeiss was the alleged mastermind of the operation, recruiting Soviet public health personnel and bacteriologists for acts of treason and, in an echo of the earlier accusations against him, allegedly disclosing information to Germany regarding bacteria 'destined for war purposes'. In the event of war, it was further alleged that the members of the organisation would commit acts of bacteriological sabotage with the contamination of water and food supplies and the spreading of cholera and typhoid agents among the civilian population.¹⁵

Zeiss himself was let off lightly and expelled from the Soviet Union. However, a violent political storm of unprecedented proportions was about to affect the Soviet microbiology community with Geissler estimating that some forty-eight members of the alleged conspiracy were arrested during the Great Terror. The drip-drip-drip of arrests must have created an atmosphere of terror and panic among the small pool of microbiologists. The two most prominent victims were among the first to be arrested. Fishman was taken into custody on 5 June 1937 and Velikanov a month later, on 6 July 1937. One of the first civilian victims appears to have been Nikanorov, the former director of the Mikrob Institute in Saratov.¹⁶ He was arrested, charged with assisting Zeiss and convicted on 4 October 1937 and then shot. He was subsequently rehabilitated on 31 October 1956.

Georgii Nadson, director of the Institute of Microbiology, was arrested on 29 October 1937. Next, on 5 March 1938, was Il'ya Lvovich Krichevskii, a professor at the same facility. Then came Vladimir Lyubarskii, a deputy director at the Moscow-based L.A. Tarasevich Institute for Experimental Therapy and Vaccine and Sera Control. He was arrested on 15 April 1938. One of the last to be taken was Vladimir Barykin, the scientific director of the Central Institute of Epidemiology

STALIN'S SECRET WEAPON

and Microbiology. Along with other colleagues, these scientists were accused during the period of 1931 through to 1937 of having undertaken BW sabotage operations, which included contaminating food supplies and killing cattle.¹⁷ On 14 April 1939, Nadson, Krichevskii, Lyubarskii and Barykin were sentenced to death by the Military Collegium as members of a counter-revolutionary organisation. They were shot the very next day and not rehabilitated until 1955. Among the others arrested for participation in Zeiss's alleged spy network during this wave of terror was O.A. Stepun, a deputy director at the Moscow Chemical-Pharmaceutical Scientific-Research Institute.¹⁸

The end of Fishman's management of the Soviet offensive BW programme

In the early 1930s, Fishman, head of VOKhIMU, appeared to be at the height of his powers. He had successfully reorganised the Soviet Union's offensive BW programme, focusing on the creation of a single powerful institute as demanded by Stalin. The Soviet authorities recognised his achievements in 1933 with the award of the Order of the Red Star. This was quickly followed by his promotion to corps engineer under the terms of Order No. 2396 issued by the USSR People's Commissariat of Defence on 20 November 1935. In 1936, he became a doctor of chemistry.

The first sign that something was amiss with regard to the security of Fishman's position came about when, sometime around March 1937, VOKhIMU lost control of the Biotechnical Institute. During the war, German intelligence discovered that the facility had been transferred to the direct control of Marshal Aleksandr Il'ich Egorov, deputy people's commissar for defence and chief of the General Staff of the Red Army, as well as being a candidate member of the Communist Party's Central Committee. Egorov himself was to be arrested in February 1938, so his tenure would, at any rate, not have lasted long.¹⁹ Russian sources, meanwhile, contradict the German accounts and report that the institute was at this point transferred to the Red Army's chief of armaments, Tukhachevsky,²⁰ who was himself arrested on 22 May 1937. The decapitation of the Red Army's senior officers meant that the Biotechnical Institute was at this point operating in a power vacuum and worse was to follow with the arrest of its director, Velikanov.

Fishman, by this point, must have been anticipating what was to

THE SOVIET UNION'S SECRET OF SECRETS

come. Within months of losing control of the Biotechnical Institute, he found himself among the first of a large number of prominent BW specialists to be arrested by the security organs during the Great Terror. On 5 June 1937, Fishman was taken into custody, with his active role in military cooperation activities with the German Reichswehr in the 1920s being cited in the charges against him. The NKVD then established a Special Commission 'to unmask the sabotage activity' of Fishman and his associates in the Military Chemical Directorate. According to Bojtsov, in May 1937 this commission quite terrifyingly recommended that, on condition that their health was not harmed, the accused should be subject to human experimentation. The commission justified this by noting that this measure would 'help to undo the "damage" inflicted on the Soviet biological warfare programme by the accused saboteurs'.²¹

Fishman was subsequently imprisoned for ten years and then released. After securing his freedom, he was placed in charge of the Department of Chemistry at the Saratov Institute of the Mechanisation of Agriculture. He was then appointed a senior lecturer at the Uman Agricultural Institute. He was again arrested in 1949 and exiled to Norilsk where he was a deputy head of a shop at a chemical factory. Fishman was finally rehabilitated in 1955 with the rank of major general (engineers) in the Red Army. He retired in the same year and eventually died in Moscow on 12 July 1961.

A continuing focus on tularaemia: the arrest of Velikanov and his replacement by Leonid Moiseevich Khatenever

In July 1937, shortly after the arrest of Fishman (head of VOKhIMU), Velikanov was arrested by the security organs. Leonid Moiseevich Khatenever was appointed acting director of the Biotechnical Institute. He is a little-known scientist but was in fact one of the Soviet Union's foremost experts on tularaemia. Khatenever's appointment presumably reflected the continuing Soviet military interest in the weaponisation of tularaemia. It is worth looking at the background of Velikanov's successor in a little more detail. Khatenever, a Jew, was born in Minsk, Belarus, in 1896. He attended a Jewish school in Minsk, the Belarusian capital. During the period 1918 to 1920, he served as a commissar in a Red Army battalion. Khatenever graduated from the Medical Faculty of the First Moscow State University in 1925. From 1925 to 1929,

STALIN'S SECRET WEAPON

he worked in the USSR People's Commissariat of Health's Skin-Venereological Institute. In 1931, Khatenever was appointed head of the Department of Microbiology at the Belarusian Medical Institute. From 1933 to 1935, he was appointed director of the USSR People's Commissariat of Health's Scientific Control Institute of Sera and Vaccines. Khatenever was concurrently the head of the Experimental Department of the Skin-Venereological Institute. In 1935, he was awarded his doctor of medical sciences degree. In 1935, Khatenever again joined the Red Army.²²

Khatenever's research focused on the epidemiology, diagnostics, treatment and prophylaxis of tularaemia. He became one of the Soviet Union's leading specialists on this microorganism. In 1928, he organised the Soviet Union's first laboratory for the study of tularaemia infection. Khatenever directly participated in the elimination of sources of tularaemia including at the front during the Second World War. He developed means of prophylaxis and methods of early diagnosis of tularaemia and suggested the use of the allergic reaction for this purpose. Khatenever developed a simplified method for the diagnosis of tularaemia (blood-drop agglutination on glass). He also developed methods for preparing diagnostic preparations and put forward a proposal for a therapeutic anti-tularaemia vaccine. He was the author of fifty scientific publications, including seven monographs.²³

According to testimony provided to German intelligence by a Soviet prisoner-of-war, after Khatenever's appointment as director, a special military council was created at the Biotechnical Institute. The leading member of the council is reported to have been Brigade Commissar Saporozhets—who is reported to have later become the head of the Military Political Administration of the Red Army. He and Khatenever are reported to have led experiments on Vozrozhdenie Island in the Aral Sea in the summer of 1937.²⁴ At around this time, the Biotechnical Institute's former main facility in Vlasikha was relocated to join its branch on Gorodomyla Island.

Khatenever served only a year as director. His removal at the end of 1937 does not appear to be connected to Stalin's purges, and he was subsequently appointed as the head of a laboratory at the All-Union Institute of Epidemiology and Microbiology. He became a professor in 1940 and died in Moscow on 8 October 1948.²⁵

Given the accusations of sabotage that were being levelled against

THE SOVIET UNION'S SECRET OF SECRETS

lead military biological scientists at this time, it is not surprising to learn that the authorities sought to tighten-up control over storage and access to dangerous pathogens within the Red Army's BW facilities. On 13 October 1937, Fedor Viktorovich Rybin, head of the Red Army's Main Sanitary Administration, issued a set of guidelines for the storage and dispensing of pathogenic cultures, viruses and toxic products in military labs.²⁶ Clearly, the senior military personnel had at least to go through the pretence of being concerned that BW agents might fall into the hands of Red Army bacteriologists plotting against the political hierarchy—even if, in reality, they were fully aware of the fraudulent nature of the accusations.

The Sanitary-Technical Institute (STI)

By the spring of 1938, the Biotechnical Institute's personnel and equipment had been fully transferred from Vlasikha to Gorodomyla Island. On 25 April of that year, Voroshilov issued Order No. 58 decreeing that the now fully amalgamated facility was to be henceforward known as the Sanitary-Technical Institute (Sanitarno-tekhnicheskii institut or STI), also known as Military Unit No. 8,000.²⁷ As stated above, these organisational changes were being undertaken at the time of the Great Terror. It is therefore not surprising to learn that, against the ensuing chaos, personnel changes were frequent. After the departure of Khatenever, two additional acting directors were appointed during the period 1938–9, N.A. Spitsyn and A.A. Dorofeev. Little is known about these two individuals. Dorofeev had previously served as a head of department or laboratory at the Biochemical Institute in Vlasikha. Spitsyn was a candidate of veterinary sciences who subsequently served as full director from 1939 to 1940.²⁸

By February 1939, STI is reported to have comprised seven laboratories employing twenty-eight people. The facility had at its disposal twenty aircraft, a steamer, two transport vessels, two high-speed motor-boats, three tugs and an ice-breaker, as well as ambulances and fire engines. The roster of experimental animals at the site included five monkeys, twenty horses, thirty sheep and goats, 200 cats, 200 rabbits, 2,000 guinea pigs, 2,000 white mice, 250 rats and 100 pigeons.²⁹

In 1940, Major-General Nikolai Fillipovich Kopylov, a candidate

STALIN'S SECRET WEAPON

of medical sciences, was appointed director of STI. He was to serve in this position right through the wartime period and led the successive evacuations of the facility, first from Gorodomyla Island to Saratov and then on to Kirov. Kopylov participated in Soviet research on the development of a live dry vaccine against plague based on the *EV* strain.

The Soviet Union was really big on secrets: here are ten of the most audacious. In May 1961, US President John F. Kennedy announced that he believed the US should commit to landing a man on the moon by the end of the decade. Until that point, the Soviets had led space exploration, achieving the first object into orbit, the first animal into orbit, and the first man into space. Yet on 20 July 1969 Neil Armstrong became the first man on the moon, defeating the Soviets in that race. Except for the fact that the Soviets never officially took part – they denied ever having a manned lunar program until 1990. This was part of a larger policy of keeping every space program secret. We recommend booking The Secret Soviet Bunker tours ahead of time to secure your spot. If you book with Tripadvisor, you can cancel up to 24 hours before your tour starts for a full refund. See all 5 The Secret Soviet Bunker tours on Tripadvisor. What's the best way to see The Secret Soviet Bunker? According to Tripadvisor travelers, these are the best ways to experience The Secret Soviet Bunker: All Inclusive Honest History Tour - Å€raiÅ¡i, CÄ“sis, LÄ«gatne, Sigulda (From RUB 18,461.08). Introduction 1 Origins: The Launch of the Moscow Strand of the Red Army's Offensive Biological Warfare Program 2 The Creation of a BW Prison Laboratory: The Bacteriological Convent 3 From Defence to Offence: The Development of the Red Army's Biological Warfare Facilities at Vlasikha 4 The Soviet Union's Secret of Secrets: The Creation of BW Facilities on the Island of. Gorodomyla 5 The Rise and Fall of a Working-Class Hero: Ivan Mikhailovich Velikanov, Lead Scientist of the Soviet Union's Å to Glanders: Soviet Military-Veterinary BW Programs 9 On the Brink of Bacteriological War: Stalin's BW Program and WWII 10 Stalin's BW Archipelago: Mapping-Out a New Post-War BW Network 11 From Swords to Ploughshares: The Scientific and Industrial The Soviet Union, officially the Union of Soviet Socialist Republics (USSR), was a federal socialist state in Northern Eurasia that existed from 1922 to 1991. Nominally a union of multiple national Soviet republics, it was a one-party state prior to 1990 governed by the Communist Party, with Moscow as its capital in its largest republic, the Russian SFSR. Other major urban centers were Leningrad (Russian SFSR), Kiev (Ukrainian SSR), Minsk (Byelorussian SSR), Tashkent (Uzbek SSR), Alma-Ata (Kazakh SSR)