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A spy among the trees: The story of Oscar Seborer

What did he steal? What did he know? The truth may surprise you



By Senior Laboratory Historian Alan Carr

It's long been known that during World War II, **Theodore "Ted" Hall**, **Klaus Fuchs** and **David Greenglass** committed espionage at Los Alamos. Each worked at the secret laboratory charged with creating the world's first atomic bomb, stole classified weapons information and shared it with the Soviet Union.

Just recently, though, in September 2019, historians confirmed a fourth wartime spy: **Oscar Seborer**. But who was he, what do we know about him, what did he steal, and what happened to him?

Soviet mole's swift rise through the U.S. Army ranks

Seborer was born in New York City in 1921. Little is currently known of his early life, but when WWII started, he was studying electrical engineering at Ohio State University.

> Joins the Army's Special Engineering Detachment

He joined the Army in the fall of 1942 and, due to his academic training, was assigned to the Army's Special Engineering Detachment (SED). Private Seborer was initially sent to Oak Ridge; in December 1944, he was transferred to Los Alamos.



>> Promoted to Technician Fifth Class (Corporal); detonator development

Late in 1944, the Explosives Division (X) was struggling with detonator development. Seborer's group, Detonator Circuit (X-5), was tasked with developing electrical equipment for measuring explosives tests and the firing circuits to ignite the implosion bomb's detonators.

Significant progress was made on the detonator circuit in early 1945, so in April, Seborer, who had just been freshly-promoted to Technician Fifth Class (Corporal), was loaned to the Research Division to help prepare for the upcoming Trinity test, which would be the first successful detonation of a nuclear bomb.

>>> Promoted to Technician Fourth Class (Sergeant); preparing for Trinity



Part of Seborer's assignment included working on the rehearsal for Trinity, the "100-Ton Test." The same day the rehearsal was completed (May 7), Seborer's group leader in X-5 requested his immediate return. Although this was approved, only a dozen days later Trinity Test Director Kenneth Bainbridge asked X-5 to return Seborer to the Research Division no later than mid-June because he was "extremely valuable" to their work.

That summer, Seborer was promoted for the second time in six months, this time to Technician Fourth Class (Sergeant). It's clear Seborer was in high demand and also highly thought of by his managers.

Transferred to Destination Program; preparing for Japan

Seborer asked to be transferred to the Destination Program in May 1945. The program was tasked with preparing the atomic bombs for deployment to Japan, but it's unclear if Seborer's request was granted. After the war, however, X-5 was transferred to Z Division, which had inherited many of the Destination Program's responsibilities. Only a few years later, Z Division became an independent organization — what is today Sandia National Laboratories.



The father of the Soviet atomic bomb?

A January 27, 2020, the [New York Times](#) proclaimed Seborer's knowledge "most likely surpassed that of the three previously known Soviet spies at Los Alamos, and played a crucial role in Moscow's ability to quickly replicate the complex device."

However, records in the National Security Research Center (NSRC), LANL's classified library, do not support that conclusion.

Seborer likely had a limited view of the Manhattan Project

Even after his two promotions, Seborer only had a limited view of the Manhattan Project overall. He likely knew a considerable amount about the implosion bomb's firing circuit, and he would have known something about diagnostic measuring equipment and techniques. Because he may have participated in the Destination Program and because he worked in Z Division, Seborer may also have known something about the general concept of implosion and assembly procedures for the atomic bombs.

Klaus Fuchs was the real villain



Klaus Fuchs, circa 1944.

But, any knowledge Seborer would have been privy to would have been greatly eclipsed by that of his fellow mole, Klaus Fuchs.

Fuchs was a senior theoretical physicist. Like Seborer, Fuchs worked at Oak Ridge before joining the Los Alamos staff. Though nothing is known about Private Seborer's work at Oak Ridge, it is known that Fuchs helped design the control system for the gaseous diffusion plant for enriching uranium.

At Los Alamos, Fuchs was considered a technical staff member; he independently authored several reports and co-authored others with his division leader and future Nobel Laureate **Hans Bethe**.

Fuchs knew as much as anyone about the implosion bomb because he played a major role in its development. On the other hand, the information Seborer had access to would have been useful to the Soviet program, but not decisive.

Evading prosecution, but not contempt

Though the discovery of Seborer's treachery is an immense contribution to the story of Manhattan Project-era espionage, the prevailing narrative remains unchanged: Fuchs was, by far, the most damaging spy of wartime Los Alamos.



Fuchs spent nearly a decade in prison after confessing in 1950. The following year, **Julius** and **Ethel Rosenberg** (Ethel being the sister of Los Alamos spy David Greenglass) were sentenced to death for committing espionage elsewhere on behalf of the Soviets, and Seborer quietly slipped out of the country.

Through an informant, FBI investigators discovered Seborer was a spy in 1955. By then, however, he had already immigrated to the Soviet Union.

Thus, the story of Oscar Seborer remained buried in classified FBI files until [it was unearthed by Professor Harvey Klehr and Historian John Earl Haynes](#) just months ago.

Records from the National Security Research Center, Los Alamos National Laboratory's classified library, provide a technical context for Seborer's tale, which came to an end April 23, 2015, with his death in Moscow

(**Note:** LANL Historian Emeritus **Ellen McGehee** discovered several documents in the NSRC collections, which made this story possible.)