

= George Koval =

George Abramovich Koval (Russian : ????? (???????) ????? ? ?????? ????? ? ?? ; IPA : [ʒorʔ (ʒorʔorʔj) ʔʔbramʔvʔʔtʔ kʔʔvalʔ] , Zhorzh Abramovich Koval , December 25 , 1913 ? January 31 , 2006) was an American who acted as a Soviet intelligence officer . According to Russian sources , Koval 's infiltration of the Manhattan Project as a Glavnoye Razvedyvatel 'noye Upravleniye (GRU) agent " drastically reduced the amount of time it took for Russia to develop nuclear weapons . "

Koval was born to Jewish immigrants in Sioux City , Iowa , USA . Shortly after reaching adulthood he traveled with his parents to the Soviet Union to settle in the Jewish Autonomous Region near the Chinese border . Koval was recruited by the Soviet Main Intelligence Directorate , trained , and assigned the code name DELMAR . He returned to the United States in 1940 and was drafted into the US Army in early 1943 . Koval worked at atomic research laboratories and , according to the Russian government , relayed back to the Soviet Union information about the production processes and volumes of the polonium , plutonium , and uranium used in American atomic weaponry , and descriptions of the weapon production sites . In 1948 , Koval left on a European vacation but never returned to the United States . In 2007 Russian President Vladimir Putin posthumously awarded Koval the Hero of the Russian Federation decoration for " his courage and heroism while carrying out special missions " .

== Early life ==

George Koval 's father , Abram Koval , left his home town of Telekhany in Belarus to immigrate to the United States in 1910 . Abram , a carpenter , settled in Sioux City , Iowa , which at the turn of the 20th century was home to a sizeable Jewish population of merchants and craftsmen . He and his wife Ethel Shenitsky Koval raised three sons : Isaya , born 1912 ; George (or Zhorzh) , born Christmas 1913 ; and Gabriel , born 1919 .

George Koval attended Central High School , a red @-@ brick Victorian building better known as " the Castle on the Hill " . Neighbors recalled that Koval spoke openly of his Communist beliefs . While attending Central High he was a member of the Honor Society and the debate team . He graduated in 1929 at the age of 15 . Meanwhile , his parents left Sioux City as the Great Depression deepened . Abram Koval became the secretary for ICOR , the Organization for Jewish Colonization in the Soviet Union . Founded by American Jewish Communists in 1924 , the group helped to finance and publicize the development of the " Jewish Autonomous Region " ? the Communist answer to Jewish emigration to the British Mandate of Palestine then being undertaken by the Zionist movement . The Koval family emigrated in 1932 , traveling with a United States family passport . They settled in Birobidzhan , near the border of Manchuria .

The Koval family worked on a collective farm and were profiled by an American Communist daily newspaper in New York City . The journalist Paul Novick wrote to his readers that the family " had exchanged the uncertainty of life as small storekeepers ... for a worry @-@ free existence for themselves and their children . " While Isaya became a champion tractor driver , George Koval improved his Russian language skills in the collective and began studies at the Mendelev Institute of Chemical Technology in 1934 . At the university he met and married fellow student Lyudmila Ivanova . Koval graduated with honors in five years and received Soviet citizenship .

= = Recruitment and espionage = =

Later , Koval was recruited by the Soviet Main Intelligence Directorate (??????? ??????????????????) , or GRU . By the time he received his degree he had left Moscow under orders as part of a subterfuge . He was drafted into the Soviet army in 1939 to explain his sudden disappearance from the city . Though his parents had relinquished their US family passport , Koval returned to the US in 1940 , replacing a spy recalled during Stalin 's purges . His code name was DELMAR . Arriving in San Francisco , he traveled to New York City . According

to Arnold Kramish , an American colleague he befriended and with whom he re @-@ established contact in 2000 , it was there that Koval assumed deputy command of the local GRU cell . This outpost operated under the cover of the Raven Electric Company , a supplier to firms such as General Electric . Koval told coworkers he was a native New Yorker and an only child . He ingratiated himself with everyone he met . While Koval originally worked under a pseudonym , gathering information on toxins for use in chemical weapons , his handlers decided to have him work under his real name .

During the beginning of World War II , President Franklin D. Roosevelt had re @-@ introduced the draft (conscription) in September 1940 , and Koval registered for it on January 2 , 1941 . Raven Electric Company secured him a year 's deferment from service until February 1942 . According to historian Vladimir Lota , Koval 's handlers wanted him to steal information about chemical weapons , and felt that he would not be able to do so while drafted . When the deferment expired , Koval was inducted into the United States Army . He received basic training at Fort Dix in New Jersey before being sent to the Citadel in Charleston , South Carolina . There , Koval served as a private in the 3410th Specialized Training and Reassignment Unit . On August 11 , 1943 , he was transferred to the Army Specialized Training Program , a unit established in December 1942 to provide talented enlistees with an education and technical training . Koval attended the City College of New York (CCNY) and studied electrical engineering . His CCNY classmates looked up to the older Koval as a role model and father figure who never did homework and was a noted ladies ' man , never knowing about his Soviet education and wife . Colleagues recalled that he never discussed politics or the Soviet Union .

= = = Atomic secrets = = =

The Specialized Training Program was dissolved in early 1944 , as the progress of the war tipped in favor of the Allies ; many of the CCNY classmates were transferred to the infantry , while Koval and a dozen others were selected for the Special Engineer Detachment . The Detachment was part of the covert project to design , engineer , and fabricate an atomic bomb ? an American , Canadian and British initiative known as the Manhattan Project . Koval was assigned to Oak Ridge , Tennessee ; at the time , Project scientists were researching enriched uranium and plutonium @-@ based bombs , with the Oak Ridge laboratories central to the development of both . The Project suffered from a lack of human resources , and asked the Army for technically qualified men .

Koval enjoyed free access to much of Oak Ridge ; he was made a " health physics officer " , and monitored radiation levels across the facility . According to Federal Bureau of Investigation records , the job gave him top @-@ secret security clearance . At the time , Project scientists discovered reactor @-@ produced plutonium was too unstable for the intended bomb designs , and that polonium initiators (urchin) were needed for the necessary chain reactions to occur . Koval was charged by his handlers with watching Oak Ridge 's polonium supply to transmit information about it through a Soviet contact named " Clyde " . His information reached Moscow via coded dispatches , couriers , and the Soviet Embassy . Among the intelligence he sent was that Oak Ridge 's polonium was being sent to another Project site at Los Alamos National Laboratory .

Koval was transferred from Oak Ridge to a top @-@ secret lab in Dayton , Ohio on June 27 , 1945 , where polonium initiators were fabricated . The world 's first atomic bomb was detonated in New Mexico on July 16 of that year . Atomic bombs were dropped on Japan on August 6 and 9 , leading to Japan 's surrender and the end of World War II . The Soviet Union responded by increasing efforts to develop its own atomic bomb . While the American Central Intelligence Agency estimated the Soviets would not succeed until 1950 ? 53 , the first Soviet atomic bomb was detonated on August 29 , 1949 . The initiator for the plutonium bomb was , according to Russian military officials , " prepared to the ' recipe ' provided by military intelligence agent Delmar [Koval] " .

= = Later years = =

After World War II , Koval was discharged from the Army . He returned to New York and CCNY ,

where he received his bachelor 's degree in electrical engineering on February 1 , 1948 . Telling his friends he was thinking about taking a trip to Poland or Israel , Koval secured a passport for six months ' travel to Europe . According to the Russian publication Rossiyskaya Gazeta , he might have left because American counter @-@ intelligence agents had discovered Soviet literature about his parents after being tipped off about the leak by a Soviet defector . He left by sea in October 1948 and never returned to his birth country . In Russia , he left the Soviet military with discharge papers as an untrained rifleman and the rank of private . His foreign background and service record made him " a very suspicious character " , he wrote to Kramish . Turned down for education and research positions , Koval turned to his old GRU contact , who secured him a job as a laboratory assistant at the Mendeleev Institute . Eventually , Koval managed to obtain a teaching job there ; his students often laughed at his foreign pronunciations for technical terms .

While other spies such as Julius and Ethel Rosenberg and Klaus Fuchs were caught after the war , Koval apparently went unscrutinized for years . Among the reasons given for his maintained cover was that inter @-@ service politics undermined efforts to perform proper security checks on employees . Another possibility is that the U.S. government chose scientific ability over clear records and political sympathies . In the 1950s , the FBI investigated his wartime activities and interviewed his former colleagues , leaving them with the impression that he might have been a spy . The matter was kept confidential for sixty years as the US was afraid of the damage that would result from the exposure of Koval 's activities .

In 1999 , Koval was living on his small pension in Russia and had heard that U.S. War Veterans like he could apply for U.S. Social Security Payments . He applied . In 2000 , the Social Security Administration 's Office of Central Operations , Baltimore , Maryland in this one sentence letter said , " We are writing to tell you that you do not qualify for retirement benefits . "

Koval described his 57 years of post @-@ spy life living in Russia as " uneventful " . His family knew he had done work for the GRU , but the subject was never discussed . He did not receive any high awards upon his return , a fact that bothered him . Bigger awards went to " career men " , he told Kramish . However , he ended his correspondence by saying that he was not protesting his treatment ; " [I am thankful] that I did not find myself in a Gulag , as might well have happened " . Koval died in his Moscow apartment on January 31 , 2006 , at the age of 92 .

Koval 's activities as a spy began to emerge after the publication of a 2002 book , The GRU and the Atomic Bomb , which mentioned Koval by his code name and listed him as one of a handful of spies who evaded counterintelligence groups . On November 3 , 2007 , he received the posthumous title of Hero of the Russian Federation bestowed by Russian President Vladimir Putin . When Koval was honored , the Russian presidential proclamation stated , " Mr Koval , who operated under the pseudonym Delmar , provided information that helped speed up considerably the time it took for the Soviet Union to develop an atomic bomb of its own " .