

Letter from the USSR People's Commissar for State Security to L.P. Beria on the preparation of atomic bomb test in the United States¹

№ 4305/m

July 10, 1945²
Top Secret
Urgent

We have received information from several reliable USSR NKGB agent sources that in July of this year³ the U.S. has scheduled the first experimental explosion⁴ of the *atomic bomb*. The explosion is expected to take place on July 10th.

We have the following information on this *bomb*:

The *bomb* is made with *element 94 (plutonium)*, which is analogous to *uranium-235* in its *nuclear* fission properties. Element *94* is a product of nuclear fission of *uranium-238*, which takes place in *atomic* machines (*uranium* boilers).

The *plutonium* is in the shape of a sphere weighing 5kg. At the center of the sphere there is a so-called initiator, a *beryllium-polonium* source of *alpha*-particles that activates the active material in the *bomb* at the necessary moment. The *plutonium* mass is surrounded by an 11cm thick

¹ The letter was prepared by E.M. Potapova (there is a note from the typing office) based on information received – see document № 367.

Preparations for the Potsdam Conference were underway during this time for the three allied powers – the USSR, the U.S., and Great Britain, scheduled for July 17-August 2, 1945. According to the FSB Central Archive of Russia, Stalin left Moscow for Potsdam on July 16, 1945, at 5:30p.m. It is quite possible that Beria gave him this information before his departure. An indirect confirmation of this assumption is the fact that the original copy of the message about the testing of the atomic bomb was not found in Beria's archives. A search of Stalin's archives for the original has not been conducted. In Potsdam on July 16, Truman received a telephone message, and on July 21 a full report on the successful test of the atomic bomb. As is known, during the conference Truman informed Stalin about the creation of the atomic bomb. According to James Byrnes, it happened as follows (from the record of conversation between Byrnes and Herbert Feis, 1958): "Byrnes said that he came to the conclusion that it would be catastrophic for the U.S. and China to draw the Soviet Union into the war in the Pacific. This led him to think that it would be nice, to put it mildly, to not fully inform Stalin about the atomic bomb's potential. Otherwise, Stalin could speed up the Soviet Union's entry into the war. This is why the decision was made to tell Stalin about the test results in passing, at the end of one of the meetings of the heads of government. After agreeing on what to say, Truman and Bohlen (who was present as an interpreter) walked around the table and in the most casual manner Truman said to Stalin that he wanted to inform him that a new and powerful weapon was developed in the U.S., which the U.S. decided to use against Japan. According to Byrnes, the entire conversation between Truman and Stalin lasted no more than a minute." (Quoted from the book by V.L. Malkov, "The Manhattan Project" *Razvedka i diplomatiya* – M.: Nauka, 1995, pg. 234). According to recollections, there was no reaction from Stalin to this information from Truman.

² The typing office note shows this document was printed on July 6, 1945.

³ [A reference to Soviet espionage directed at the Manhattan Project]

⁴ Hereafter italics indicate parts of the text that were handwritten in empty spaces on the printed document.

aluminum casing. The aluminum casing is in turn surrounded by a layer of the explosive material pentolite 46cm in thickness.

The total weight of the *bomb*, including the weight of the pentolite, the case, etc. is around 3 tons.

The estimated explosive power of the *bomb* is equivalent to 5 thousand tons of TNT.⁵

The same sources provide the following information on the reserves of active materials for the *atomic bomb*:

- a) *Uranium-235*. As of April of this year, the U.S. had 25kg of *uranium-235*. The production is approximately 7.5kg per month;
- b) *Element-94*. There are 6.5kg of this substance in Camp-2⁶. Its production in *atomic* machines is established and the production plan is being overfulfilled.

The USSR People's Commissar for State Security
Commissar of State Security First Rank, V. Merkulov⁷

⁵ Tests have shown that the explosive power is equivalent to 15-20 thousand tons of TNT.

⁶ [A reference to Los Alamos].

⁷ There is no signature.