SUBJECT: Estimate of Soviet Capabilities in the Field of Atomic Energy

TO: Commanding General
   Air Materiel Command
   Wright-Patterson Air Force Base
   Dayton, Ohio

1. Attached hereto for your information is an estimate of Soviet capabilities in the field of atomic energy. This estimate has been concurred in by all members of the Joint Nuclear Energy Intelligence Committee which has representation from the Army, Navy, Air, Central Intelligence Agency, State, and Atomic Energy Commission intelligence departments.

2. The significant changes in this paper from the previous estimate of 1 January 1949, which was furnished your headquarters by letter dated 15 January 1949, same subject, are as follows:

   a. Whereas the 1 January estimate indicated that the dates of mid-1950 and mid-1955 were based on U. S., British, and Canadian experience in the field of atomic energy and by a comparison of Soviet and western industrial performance in other fields of similar size and complexity, this latest estimate indicates that intelligence substantiates these dates in general.

   b. This latest estimate includes information indicating that if the Soviets are attempting an atomic bomb by one method only (method not indicated), the earliest possible date by which we might expect them to produce an atomic bomb would be mid-1951. The information to date is not sufficient to state that this is the only method by which the Soviets are attempting an atomic bomb.

   c. In this estimate the bomb stockpile figures for the Soviets have been increased as indicated.
Ltr. CG, AMC, Subj: Estimate of Soviet Capabilities in the Field of AE

3. Based on the information available, it is believed that this paper represents as reliable an estimate as can be stated at the present time.

BY COMMAND OF THE CHIEF OF STAFF:

1 incl
Tab A

Identical Letter sent to following:

Commanding General
Strategic Air Command
Offutt Air Force Base
Nebraska
STATUS OF THE U.S.S.R. ATOMIC ENERGY PROJECT - 1 July 1949

The Joint Nuclear Energy Intelligence Committee makes the following estimate of the status of the U.S.S.R. Atomic Energy Project:

(1) In the 1 January 1949 report it was stated that the earliest possible date by which the U.S.S.R. might be expected to produce an atomic bomb was mid-1950, and the most probable date was mid-1953. The information now available substantiates these dates in general, although new information indicating one method by which the Soviets are following suggests that their first atomic bomb cannot be completed before mid-1951.

(2) Based on evidence that the Soviet effort is directed toward producing a plutonium bomb, on current estimates of the amount of uranium available, and on the assumption that their plants will operate at reasonable efficiency, the maximum number of atomic bombs the Soviets could stockpile after a mid-1953 initial date is 60 by mid-1955 and 150 by mid-1957, by which time it is estimated that currently known uranium sources would be exhausted. The maximum number of atomic bombs the Soviets could stockpile after a mid-1950 initial date is 130 by mid-1955 and 150 by mid-1957.

It must be emphasized that estimates of bomb stockpiles depend very strongly on the amount of uranium ore available to the U.S.S.R. If the current ore estimates are revised, the bomb stockpile will be changed correspondingly. It is anticipated that various low-grade sources of uranium may be developed within the U.S.S.R., but it is impossible to estimate whether, or on what scale, such a development program will be carried out.