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Security Information

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TAB A

IMPLICATIONS OF SOVIET NUCLEAR WEAPONS TESTS DURING 1953

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1. On the basis of information now available [redacted] it is concluded that the USSR is capable of producing air delivery type nuclear weapons with explosive powers in the range of a few thousand tons of TNT to approximately one million tons of TNT.

2. Having demonstrated the capability to utilize thermonuclear reactions to increase energy yields from fissionable materials, the Soviets may direct efforts toward the eventual modification of the previously estimated stockpile of 30 to 100 KT weapons in one or more of the following ways:

- a. Increase the number of 30 to 100 KT weapons.
- b. Increase the energy yield per weapon in the stockpile, the number being approximately the same.
- c. Produce very high yield weapons (e.g. 500-1000 KT) by accepting corresponding reductions in the total number of weapons in the stockpile.

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3. [redacted] may also indicate an advanced stage, but not the culmination, of a thermonuclear program having as an objective the production of weapons yielding more than a million tons of TNT in which thermonuclear reactions directly contribute a substantial amount to the total energy yield.

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