

CIA HISTORICAL REVIEW PROGRAM  
RELEASE IN FULL

CENTRAL INTELLIGENCE AGENCY

25 November 1958

Memorandum To Holders of NIE 11-5-58

1. The United States Intelligence Board has reviewed the most recent national intelligence estimate on Soviet ICBM capabilities, which was set forth in Conclusions 6-9 of NIE 11-5-58: **SOVIET CAPABILITIES IN GUIDED MISSILES AND SPACE VEHICLES**, 19 August 1958 (TOP SECRET). The Guided Missile Intelligence Committee of the USIB and an *ad hoc* panel of consultants to the DCI have participated in this review.
2. On the basis of this review, the Director of Central Intelligence, with the concurrence of the United States Intelligence Board, has modified the estimate in the following principal respects:
  - (a) to downgrade still further the possibility of a limited Soviet capability with comparatively unproven ICBMs in 1958;
  - (b) to change from 1961 to 1962 the more probable date at which it is estimated that the USSR could achieve an operational capability with 500 ICBMs.
3. The attached summary estimate, reflecting the above modifications, is submitted as superseding Conclusions 6-9 and paragraphs 75 and 91 of NIE 11-5-58. Table 4 of Annex A of that estimate should also be modified accordingly. It should be noted that paragraph 2 of the attached summary represents no change in the previous estimate of probable characteristics of the Soviet ICBM.

### Soviet ICBM Capabilities

1. Since the completion of NIE 11-5-58, we have conducted an intensive re-examination of the Soviet ICBM test firing program and its implications. On the basis of sufficient intelligence coverage to establish with a high degree of confidence the number of Soviet ICBM test firings, it is clear that over the past year this number has not been as great as we had anticipated. Nevertheless, considering the Soviets' progress in the whole field of missiles and the capabilities demonstrated in their ICBM, earth satellite, and other ballistic missile launchings, we continue to estimate that the USSR will probably achieve a first operational capability with 10 prototype ICBMs at some time during the year 1959. While it is possible that a limited capability with comparatively unproven ICBMs might have been established in 1958, we now believe this to be extremely unlikely.

2. When it first becomes operational, the Soviet ICBM system will probably be capable of delivering a nuclear payload to a maximum range of about 5,500 nautical miles (n.m.), with an accuracy (CEP) of about 5 n.m. and a reliability of about 50 percent after launching. (Some additional percentage of missiles, which we are unable to estimate, would prove unserviceable before launching.) We estimate that the Soviet ICBM is designed to carry a nuclear payload of about 2,000 pounds, although there is a possibility that it is designed to carry about 5,000 pounds. Reliability will probably be considerably improved by the early 1960's. At the beginning of the period 1962-1966, the CEP could be about 3 n.m. with radio command/inertial guidance, and could be reduced to about 2 n.m. later in that period. In 1960-1963, an all-inertial system with a CEP of 3-5 n.m. will probably be available.

3. We believe that Soviet planners intend to acquire a sizeable ICBM operational capability at the earliest practicable date. However, we have insufficient evidence to judge

the magnitude and pace of a Soviet program to produce and deploy ICBMs. Considerable preparations for a build-up of operational ICBM capabilities could already have been made without detection by intelligence, as implied by Khrushchev's recent statement that the production of ICBMs has been "successfully set up." In our re-examination, we have considered those factors which would affect an operational ICBM build-up, including the Soviet capacity to produce missiles and associated equipment, and concurrently to complete launching facilities, establish logistic lines, and train operational units. These factors have been considered in the light of such indirect evidence as does exist.

4. Taking into account the complexities of the tasks which would have to be accomplished, we believe that the Soviets could achieve an operational capability with 500 ICBMs<sup>1</sup> about three years after first operational capability date. Based on our estimate that a first operational capability will probably be achieved in 1959, we therefore believe that a capability with 500 ICBMs could be achieved some time in 1962. With overriding priority and exceptional success in their test and production program, this capability might be achieved in as little as two years after first operational capability date, i.e., some time in 1961. Assuming a build-up in three years from first operational capability to a capability with 500 ICBMs, a capability with 100 ICBMs<sup>1</sup> would be achieved in about a year and a half; assuming a two-year build-up, 100 would be achieved in about a year. The achievement of operational capabilities such as these within the time periods estimated would require an extremely high order of planning and accomplishment, and would also require an increase in the average rate of ICBM firings for test and training purposes.

<sup>1</sup>These numbers of ICBMs are selected arbitrarily in order to provide some measure of the Soviet production and deployment capacity; they do not represent an estimate of the probable Soviet requirement or stockpile.