MEMORANDUM FOR: Assistant Director, Scientific Intelligence
FROM: Chief, Guided Missiles Division, SI
SUBJECT: Consultants Views on GMIC Conclusions to DRAFT SNIE 11-10-57
REFERENCE: GMIC Memorandum to ONE - SUBJECT: GMIC Contribution to SNIE 11-10-57

1. Per your request, members of GMD/SI and of ID/RR visited the below listed personnel on 11 and 12 November 1957 to ascertain their opinions on the GMIC draft conclusions of SNIE 11-10-57:

2. At appropriate classification levels, the listed personnel were briefed on the available evidence of the Soviet development and testing of offensive ballistic missile systems. Tab A was also shown and explained to the consultants as the basic calculations on which the production and operational dates were based. They were further informed that the US had no firm evidence as to Soviet intention to produce nor how far along they were in their probable production and site construction program, but that Tab A indicated capability only.
SUBJECT: Consultants Views on GMIC Conclusions to DRAFT
SNIE 11-10-57

3. Specifically, the consultants were asked to express opinions on six questions which are attached as Tab B. The details of their opinions are indicated in Tabs C, D and E. The consensus of opinion was that the CIA-Army position, noted in conclusions of Reference, is entirely reasonable and must be accepted as the dates at which the various levels of threats could exist.

Attachments:
1 - Tab A
2 - Tab B
3 - Tab C
4 - Tab D
5 - Tab E
ADDENDUM TO CIA PROPOSED DRAFT OF SNB 11-10-57

Estimated Soviet ICBM Production Capabilities

We have no direct information regarding the production facilities devoted to the Soviet ICBM program; however, we do know the USSR has a highly developed industrial base which includes all the skills and facilities necessary for the quantity production of ICBM systems. We believe that these industrial resources will be marshalled on a first priority basis to support the Soviet ICBM program.

Two alternative Soviet ICBM production and allocation programs are considered. The first alternative (A) assumes that the ICBM under development is largely a new design with little direct extension from the shorter range ballistic missile programs. It therefore, will require a comprehensive flight test program of 40 to 50 missiles to prove out the design. This program assumes that the missile "know how" acquired by the USSR from its shorter range missiles will enable it to carry out the flight test program without interruption due to major technical failures. The flight test program includes earth satellite vehicles which we assume contribute to the ICBM test program.

The second alternative (B) assumes the ICBM design under development is largely an extension from the shorter range ballistic missile programs and that the USSR was confident enough of success to commit production resources early, initiate launch site construction and equipping, and in general risk these resources on the assumption of success. In alternative B about 20 missiles would be flight tested to prove out the warfare of the many already proven components and systems adapted from previous programs.
There are certain key dates of accomplishment in the ICBM program.
The first of these is the date when the first Soviet prototype ICBM, having a limited operational capability, is delivered to an operational unit. This first prototype missile, provided essentially for troop training, and additional prototype missiles delivered thereafter could be used for military purposes. The second key date is the date of "design freeze", that is, the date when the decision is made to shift from R & D production status to series production. The third key date occurs when 10 prototype ICBM's could have been delivered to one or a few operational sites.

The estimated dates of attaining these important objectives in these two alternatives are as follows:

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<tr>
<th></th>
<th>Alternative A</th>
<th>Alternative B</th>
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<tbody>
<tr>
<td>First prototype at operation site:</td>
<td>in July 1958</td>
<td>in March 1958</td>
</tr>
<tr>
<td>Design freeze:</td>
<td>end of December 1958</td>
<td>end of April 1958</td>
</tr>
<tr>
<td>10 ICBM's delivered to operational sites:</td>
<td>in December 1958</td>
<td>in July 1958</td>
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We estimate further that the USSR could have the following quantities of operational ICBM's in the hands of trained units by the dates indicated:

<table>
<thead>
<tr>
<th></th>
<th>Alternative A</th>
<th>Alternative B</th>
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<tbody>
<tr>
<td>50 ICBM's in October 1959</td>
<td></td>
<td>50 ICBM's in March 1959</td>
</tr>
<tr>
<td>100 ICBM's by January 1960</td>
<td></td>
<td>100 ICBM's in May 1959</td>
</tr>
<tr>
<td>500 ICBM's in December 1960</td>
<td></td>
<td>500 ICBM's in May 1960</td>
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</tbody>
</table>
These estimated alternative Soviet ICBM production and deployment programs are based on an assessment of Soviet industrial capabilities time-phased with the progress demonstrated by Soviet earth satellites and ICBM test launchings. We therefore consider them as sound estimates of overall Soviet capabilities in this field. Whether the USSR carries out either of these programs depends on Soviet intent, and the vigor with which the USSR may choose to exploit the capability we estimate it possesses.

Attached are two charts showing the schedules and flows for ICBM production, tests, deliveries to sites and site completion under alternatives A and B.
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ESTIMATED SOVIET CAPABILITY FOR PRODUCTION AND ALLOCATION OF ICBMs

(Alternative A)