MEMORANDUM FOR: Director of Central Intelligence

SUBJECT: Report of DCI Ad Hoc Panel on Status of the Soviet ICBM Program

1. This Panel, consisting of the below membership and meeting at your request, has reviewed available evidence relating to the Soviet ICBM program. We have also reviewed the Guided Missiles and Astronautics Intelligence Committee (GMAIC) report on this subject, dated 21 August 1959 and have discussed their report with the (GMAIC) members.

Mr. L. A. Hyland, Chairman
Mr. Charles R. Irvine
Major General John E. Medaris
Dr. William J. Ferry
Dr. W. H. Pickering
Rear Admiral W. F. Raborn
Major General Osmond J. Ritland
Dr. Albert D. Wheelon

2. Based on the foregoing, this Panel has arrived at the following conclusions:

a. Evidence acquired, primarily at the TYURA TAM missile test range, indicates the Soviets are following an orderly, and effective ICBM program, and intend to acquire a substantial capability at the earliest reasonable date. We believe the Soviets are now testing the initial complete system capable of the intercontinental range required by their needs. Although there is only indirect evidence of KAPUSTIN YAR support to this program, it is considered reasonable that the ranges have been mutually supporting with respect to component testing and shared experience.

b. The Panel believes that a Soviet IOC capability with a very few operational missiles (10) is at least imminent. This number of missiles, however, represents only a highly limited capability, and an operational capability sufficient to assure the application of effective force in the international field (100 missiles) will probably not be available until late 1960 or later. It is also believed that the Soviet determination as to their balanced needs may result in a

*There is no evidence to support or deny the present availability of ten IOC missiles. However, the test program observations support the judgment that the ten IOC missile availability is imminent and that the probable production buildup to an accumulation of 100 is reasonable by late 1960 or later.
deployment of not more than 400 to 500 ICBMs, which could be attained by the latter part of 1962. The Panel no longer believes that this latter capability will be obtained in two years after IOC, as the evidence is now firm that the Soviets are not engaged in a "crash" program.

c. Regarding the characteristics of the ICBM at IOC, the Panel finds the subject thoroughly discussed in the GMAIC report and, on most points, generally valid. Two additive statements to the GMAIC report are submitted, however, and in one instance, the Panel favors the minority statement, as follows:

(1) In the area of system mobility vs fixed sites, we find the GMAIC statement well considered. We believe further that whatever the operational launching mode, the Soviet railroad will play a central role in the operational deployment and usage of ICBMs.

(2) The Panel considers the determination of the CEP to be extremely important, but does not find hard evidence to substantiate the CEP figures in the GMAIC report. Recent successes in the U.S. program indicate that achievement of CEPs considerably better than 3 n.m. theoretical and 5 n.m. operational may not be as difficult a problem as initially believed. Recognizing the difficulties of equating U.S. accuracies with Soviet capabilities, the Panel believes the statement should be: "The operational CEP of the Soviet ICBM at IOC will not be worse than 5 n.m. and may very well be better."

(3) Available evidence does not adequately support a probability of more than one basic type ICBM currently being flight tested at TYURA TAM. Variations noted in current test programs could well be achieved through relatively minor modifications. Such changes would also be sufficient to accommodate specific special missions, such as certain space requirements. The current missile should be capable of delivering a warhead of at least 6000 pounds to a range of about 5500 n.m., or with warhead reduced to the order of 3000 pounds could achieve 7500 n.m. range.

d. Positive evidence relative to Soviet ICBM production facilities or operational deployment sites continues to be missing. The Panel believes that intelligence on the status of the Soviet program requires these inputs if it is to be as precise as national security demands. Recognizing that these types of data have not been accumulated on other types of offensive missiles either, some adjudged to have been operational for several years, the Panel giving consideration to collection means available to the U.S. finds this situation alarming.
e. The Panel can see no indications that the Soviet space program has interfered with their ICBM program, nor vice versa. The Panel considers that the Soviet facilities are probably adequate to handle both programs even under a program more accelerated than observed heretofore. While the Soviet space program, observed to the current time, appears to have utilized considerable ICBM hardware, there appears to be no deficiency in reserve missiles or equipment.

3. Available intelligence information continued to be inadequate for assessing the Soviet ICBM threat. We therefore strongly recommend that:

   a. All collection concepts capable of providing data on the status of Soviet ICBM accuracy, deployment and production be vigorously pursued.

SIGNED

L. A. HYLAND
Chairman