THE TRACK RECORD
IN STRATEGIC ESTIMATING

An Evaluation of the Strategic National Intelligence Estimates, 1966-1975

6 February 1976

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Approved for Release
CONCLUSIONS

1. The intelligence community, as judged by the findings in its national estimates, has a good record of detecting and determining major characteristics and missions of new weapons systems soon after testing begins and usually well before IOC.

a. This capability has improved since 1966 with the development of higher resolution photography and improved SIGINT capabilities.

b. However, the community was not always right from the outset:

--- The SS-N-8 was considered to have a 3,100 nm range (3,500 nm maximum) until it demonstrated 4,200 nm in November and December 1972 (IOC was in April 1974). Lacking firm data, the analysts misjudged how close to 100 percent to propellant capacity was being used.

--- There was initial confusion about the size and functions of some of the new hardened missile silos introduced in the early 1970s.

--- Not until the early 1970s was it determined that some SS-11 silos, which began deployment in 1967, were oriented to provide previously lacking coverage of China and that others were oriented to cover Europe, the Mediterranean and South Asia. All, however, can be used against the US and are so counted.
c. There were also persistent problems and disagreements over three weapon systems which appeared well suited for one sort of mission but at least marginally capable of performing another mission of more serious concern to the US. These were the SS-9 Mod 4, the SA-5, and the Backfire bomber.

- In all three cases, the limitations of available evidence left uncertainties about detailed system performance, despite the sophisticated analytical techniques employed by the intelligence community. Thus there were questions, some of them still not resolved, about how much of a capability in the second category really existed, and hence about Soviet intentions in designing and building the systems.

2. The intelligence community has also been generally successful in monitoring the deployment of new weapon systems and the introduction of major modifications in existing ones, despite some initial difficulties in determining the scope and pace of deployment. There have been recurring minor uncertainties and disagreements about how many silos are under construction, how many submarines are in the building shed, and the like. These uncertainties have been reduced but not eliminated with the advent of better, more precise sensors.

a. The principal problems arose during the mid-1960s, before the full scope of the ICBM buildup and the pace of Y-class submarine production were clear.

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3. The committee's second major concern was the failure of the
earlier estimate to foresee the degree of which Soviet missile
only reach up to the US in number of ICBMs, but kept on going.
There was a similar failure to recognize that the Soviets
would not demand in return the interim agreement in
1972 — more than the 15-20 modern ballistic missiles submarine,
which the estimates took to represent roughly parity with the US.

b. The estimates appear to have been over-estimated
with the magnitudes of the problem and uncertainties, the Soviet
failed in achieving and then maintaining full equality with the US
and to have over-estimated Soviet concern about provoking new US
deployments or force improvements. At the same time, they
doubtedly underestimated the strength and persistence of the political,
institutional, and probably most of all, military pressures
for continuation of the buildup — probably in part because of
doubt that a push much past equality would be of real military
value.

b. On the other hand, the NIES over-estimated Soviet
willingness to deploy ABMs in defense of key target areas beyond
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46. (continued)

Moscow, even though they identified the weaknesses and shortcomings of the Moscow system, and interpreted failure to complete it as evidence of Soviet discontent with the system, and recognized that there were probably divided counsels over the desirability of further deployment, even with an improved system. A key consideration appears to have been past evidence of Soviet willingness to deploy new and expensive strategic defense systems which had major weaknesses and shortcomings.

c. Deployment goals were more easy to gauge with defensive systems like the SA-5, where the coverage provided by existing air defense systems provided useful precedents, and with air defense interceptors, whose production runs normally fall within certain limits and which are usually deployed to known airfields. Even so, the NIEs for a time overestimated SA-5 force goals and misjudged actual force goals of two interceptors.

d. In the last few years, there have been no discernable problems about estimating force levels in the NIEs. The 1972 SALT accords removed many uncertainties by placing quantitative limits on certain categories, while in others, such as current SAM systems, the Soviets seem to be at or close to completion of deployment. The task was eased by the switch in 1970 from an attempt to define force goals by a single set of low-high numbers to the use of alternative projections illustrating what the Soviets might accomplish under various assumptions.
7. The estimated record in foreseeing qualitative improvements in Soviet strategic systems is mixed. For the most part, they appear to have been successful in identifying major requirements the Soviets would probably seek to satisfy through new or improved weapon systems, though not exactly when or in what form the improvement would appear. In particular, they foresaw the development by the early or mid-1970s of MIRVed ICBMs with improved accuracy and hard target kill capability. They also foresaw the introduction of longer range SLBMs than those of the Y-class. In the various fields of strategic defense, they appear to have identified correctly the problems the Soviets faced and the most promising lines of development.

a. However, there have been some surprises. While anticipating greater Soviet emphasis on the survivability of their ICBMs, they did not foresee -- before construction actually began -- that the Soviets would undertake the very extensive remodeling of silos and construction of new launch control facilities now going on. More important, they failed to foresee that the Soviets would greatly increase the throwweight of their new missiles and introduce new launch techniques with some. Although the throwweight issue was examined in the context of possible SALT constraints, no one anticipated that the Soviets might greatly increase missile volume without increasing silo diameter.

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b. In addition, the Soviets have thus far failed to make a number of advances which analysis in the estimates indicated would be necessary or desirable -- e.g., the development of quieter submarines with a capability for covert trail of U.S. submarines. Why not? Very significant.

8. In terms of the threat to the Triad, the record can be summarized as follows:

a. The threat to Minuteman from Soviet hard target. MXVs has been overestimated in terms of how soon high accuracy would be obtained, if the current estimates are correct, but was underestimated in terms of throw weight and number of RVs. Although the key consideration remains accuracy, the early availability of additional RVs will move up the date when there will be enough to threaten Minuteman survivability.

b. The threat to U.S. bombers and ASMs penetrating Soviet territory has grown about as the estimates indicated, with the Soviets continuing to make incremental improvements in virtually all phases of air defense, but not the drastic improvements in low level intercept capabilities that were required. Although it is now judged that the Soviets may be able to overcome current deficiencies by the early 1980s, it remains uncertain whether this will provide an effective operational capability under actual combat conditions. There is no indication that the
Soviets are developing a depressed trajectory mode of operation for submarine-launched ballistic missiles, so that they could be used against US bomber bases with reduced warning time.

c. Soviet ABM capabilities did not develop as expected; improved systems have been slower to develop, additional deployment at Moscow or elsewhere failed to take place and deployment is now severely limited by treaty.

d. Soviet ASW capabilities against US SSBNs have remained very low as was estimated, despite vigorous Soviet ASW programs.

9. With respect to the effectiveness of the NIEs in depicting Soviet motivations, goals, and expectations over the past decade, it is probably impossible to provide an evaluation that will satisfy everyone. However, in terms of the intelligence community's present perceptions and judgments, the only particular shortcomings we would note are the following:

a. In retrospect, it is evident that the estimates of the mid and late 1960s failed to convey an adequate sense of the determination of the Soviets to build up sizable force and warfighting capabilities, however long it took. Perhaps there was temporary uncertainty in Moscow about what courses of action to follow and how the US might respond, as those estimates suggest. It now looks as though the Soviets adopted ambitious
strategic force goals and moved steadily forward without much concern that the US might feel it necessary to step up its own programs in turn.

b. NIE 11-8-72 gives the impression that Soviet acceptance of the 1972 SALT accords involved greater Soviet interest in a stabilized strategic relationship with the US and a greater concern to avoid actions which might jeopardize detente than proved to be the case — although it estimated that new weapon programs would be "vigorously and demanding," and presented force projections comparable to or in some cases more ambitious than the modernization programs now in progress.

b. In fact the Soviets have taken a highly competitive view of the strategic relationship with the US; have evidently considered a high level of force development activity as quite consistent with detente, and appear to have looked on arms control primarily as a means of constraining US force development rather than as a means of curtailing the overall competition and thus achieving greater stability.

10. One final point is that, just as the strategic situation has changed greatly over the past decade, so have the scope and contents of the estimates. The estimates of the mid and late 1960s were relatively short and general in nature, with details about
how future Soviet forces might develop relegated to supplementing documents like the NIPP. More recently they have included greatly expanded and more explicit treatments of the evidence and analysis underlying key judgments and more on the organizational aspects and operational implications of the capabilities being built up. The content and focus of the estimates have since varied in some degree from year to year, depending on the observed progress of Soviet programs, on what topics were considered most pertinent and important, and on the availability of new analytical studies. Beginning in 1974 the NIE 11-3 and NIE 41-3 series have been combined in a single document, so that all aspects of Soviet strategic policy and activities are considered together.

11. How effective these changes have been in improving the usefulness of the estimates is for the customer to say. With respect to the estimative track record, however, it is pertinent to note that the analysts whose work is reflected in the estimates have had to address increasingly complex questions and in answering them have been under heavy pressure to be explicit about the nature and extent of their evidence, how their conclusions were arrived at, and how much confidence can be placed in them. Moreover, while there remain important limits on how much can be learned about Soviet strategic weapons and about Soviet strategic plans and policies, there have been important improvements in both the quality and quantity of information available to US intelligence.