

"NET ASSESSMENTS" IN NATIONAL INTELLIGENCEA. Problem

1. In the debate of the last several years about "net assessments" in national intelligence issuances, the differing views among departments and agencies have focused on the quality and thus the value to consumers of specific types of analyses and on bureaucratic prerogatives of CIA and the Department of Defense. Resolution of the issue has been hampered by the lack of a common understanding among agencies of the definition of net assessments and the relationship of such assessments to the estimative process. The purpose of this exposition is to examine the several aspects of the issue; to delineate the points of contention, providing a better basis for the continuation of the debate; and, hopefully, to stimulate some accord about the proper content of National Intelligence Estimates. (C)

2. Objections have been raised about two types of analyses appearing in National Intelligence Estimates on Soviet strategic programs.

--The Presidents' Foreign Intelligence Advisory Board (PFIAB) and the Senate Select on Committee on Intelligence characterized as misleading subjective judgments about some aspects of Soviet capabilities, such as low altitude air defense, because they gave the impression that they were based on quantitative interaction analyses when in fact they were not.

--Department of Defense intelligence agencies have objected to interaction analyses involving the use of data on US forces and capabilities as being "net assessments" beyond the purview of intelligence. In practice, DoD agencies have been inconsistent. They have not taken issue with all such interaction analyses as net assessment. They objected when they have disagreed with the substantive findings of the assessments, or when they felt certain assessments had been given undue emphasis.

Thus, the objection to assessments in the NIEs involves issues of both substance and bureaucratic turf. (S)

3. Despite the contentious nature of this issue, the National Security Council staffs of three administrations did not raise objections to any of the assessments in the NIE. On occasion, moreover, the Intelligence Community was tasked by the NSC staff to perform the type of assessments which DoD agencies find objectionable. Also President Carter, indicated that he found the interaction analysis in the NIE useful. (S)

B. Net Assessments in NIEs

4. The proscription of all "net assessments," that is, all types of interaction analyses, in NIEs would be contrary to the nature of the estimating process.

--All estimates of future developments, like forecasts of any kind, are the end product of interaction analyses. Estimates are predictions based on a systematic evaluation of the likely interactions of key determinants of future developments. US policies, intentions, military forces

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and capabilities are among the important determinants in the evaluation process. The US element of the analyses may be revealed in intelligence estimates only by oblique references or may be expressed by explicit references to US forces.

--The estimates or judgments which result from interaction analyses are conveyed in NIEs as quantitative expressions of probability ranging from terms such as "almost certainly" to complex statistical presentations. The estimating process is therefore one of narrowing uncertainty--of assigning relative probabilities to future events from among many that are feasible. (S)

5. As far as can be determined there are no comprehensive studies which catalog all the analytical techniques used in the intelligence process or which differentiate between permissible and impermissible types of estimates. The categories of net assessments discussed below are not all inclusive of the many hundreds of individual analyses involved in even a single NIE, but they serve to isolate the interaction analyses that have drawn objections as "net assessments" from those that have not.

--Political Assessments. Estimates in NIEs of the future policies of foreign nations are the product of complex interactions with those of the United States. The quality of a forecast will be adversely affected if the estimators are unclear about the US side of their analytical equation. The US element in political assessments can be highly visible such as in an estimate of likely foreign reactions to specific US courses of action or it may be implicit.

--Weapon Characteristics. The most prevalent assessments in military NIEs that involve interaction between US and foreign forces are estimates of the technical characteristics and performance of weapon systems of an adversary. The performance of individual weapon systems can be expressed parametrically to encompass a range of targets, but it is usually expressed in terms most meaningful to intelligence users, namely, against known US weapons. After all, many Soviet weapon systems were designed with US targets in mind. DoD intelligence agencies as well as CIA perform this type of assessments.

--Subjective Assessments of Military Capabilities. National Intelligence Estimates have included assessments which were based on the estimators' judgments about Soviet capability to perform a specific mission, such as defense against US low altitude bombers. Even though these type assessments, as noted by the President's Foreign Intelligence Advisory Board, were not based on simulations of Soviet and US force interactions, they involved valid analytical techniques. They were based on evidence that Soviet forces could not perform at least one of the sequential functions required for successful mission performance. DoD intelligence agencies have not disagreed with this type assessment.

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--Quantified Assessments of Military Capabilities. For use in NIEs, the CIA has conducted computer simulations of the interaction of Soviet and US strategic nuclear forces. These analyses have been intended to show trends in Soviet forces relevant to certain types of military missions, such as the potential of Soviet forces to destroy US ICBMs or to survive a US counterforce first strike or the potential of Soviet civil defense to limit damage from a US nuclear attack. These assessments provide insights into the US-USSR strategic force relationship, but they do not show the likely outcome of a nuclear exchange nor are they net assessments of the strategic balance. The DoD intelligence agencies have only objected to quantified assessments depicting the size and destructive potential of the two sides following a counterforce attack by one side on the other, singling out these interaction as "net assessments."

--Comprehensive Net Assessments of the Strategic Balance. The Department of Defense conducts what are referred to as comprehensive net assessments of the interaction of US and Soviet forces for the purpose of measuring the capability of the two sides to conduct several types of attacks, the damage and casualties sustained under the several attack situations, and the residual forces of the two sides after a full nuclear exchange. Intelligence has not conducted this type of assessment for use in NIEs. The Soviets apparently conduct such assessments to measure what they call the "correlation of strategic nuclear forces," but intelligence has not yet been able to replicate them.

--Net Assessments of the US-USSR Military Balance and Balance of National Power. National Intelligence Estimates have sought to identify the main trends in Soviet forces and capabilities for military operations and conflicts threatening to US security and national interests. As such, the NIEs have constituted a set of terms of reference for further consideration by national leaders responsible for security policy, but have not contained assessments of the overall US-USSR balance of military or national power. Such assessments, embodied in the grand strategy and perceptions of Administrations, include judgments about US public attitudes, politically feasible programs and policies, and other factors well beyond the limits of national intelligence.

-6. In summary, assessments in national intelligence employ analytical models similar to those used in policymaking and defense planning, but they differ in purpose. In concept and practice, intelligence evaluates alternative policies, forces and conduct of foreign states using as a given, US policies, forces and plans. Policymakers and defense planners evaluate alternative US policies, forces and actions using as a given intelligence estimates of likely foreign developments. Producers of national intelligence have stopped far short of making net assessments such things as the balance of US and Soviet military power or the NATO-Warsaw Pact military balance. The limits of assessments in national intelligence has been the use of computer simulations of the interaction of USSR and US strategic nuclear forces to measure trends in Soviet capabilities to perform generic military missions.

### C. Genesis of the Net Assessment Issue

7. Early 1950s -- The question of the proper role of intelligence in assessing threats to the United States is not a new bureaucratic issue. In 1951, the DCI proposed to the National Security Council that CIA prepare an appraisal which integrated national intelligence on the USSR with military, political and economic operational data dealing with US capabilities--in the nature of a "commanders estimate" of the situation. The Joint Chiefs of Staff objected on grounds that preparation of the estimate proposed by the DCI was not a proper function of intelligence, rather, that it was within the responsibilities of the JCS. (S)

8. Early 1960s -- During the first half of the 1960s, none of the assessments in NIEs on Soviet strategic nuclear forces was based on the type of computer simulations then being used for cost-effective analyses by the Department of Defense. Intelligence estimators were informed by the OSD cost-effectiveness analyses, but there was no analytical requirement or demand from consumers that intelligence estimates compare US and Soviet forces or use computer simulations to depict changes and trends in Soviet capabilities to perform strategic missions. The lack of consumer demand for these comparisons in NIEs was mainly because, in strategic nuclear power, the US was widely perceived to be superior to the USSR in most measures of the balance and was expected to remain so throughout the decade. (S)

9. Late 1960s -- Following Secretary McNamara's tenure, cost effectiveness analytical techniques lost their central role in defense planning. Instead, planners at several levels of the bureaucracy made "net assessments" of US options for deliberation and selection at the NSC level. The term "net assessment" cropped up in the titles of DoD positions, organizations and defense planning studies and in justifications for contractor analyses. "Net assessments" were not defined as any particular form of analysis; they ranged from net assessments of policy options to net technical assessments. Despite the proliferation of the net assessment function and the plethora of types of analyses, there was no periodic, national level, comprehensive net assessment of the US-USSR balance of power, of the NATO-Warsaw Pact military balance or of the US-USSR strategic nuclear balance.

10. Early 1970s -- In the last half of the 1960s, CIA began using computer simulations of Soviet and US force interactions to evaluate the implications of changes in Soviet forces, to quantify uncertainties, to illuminate force effectiveness and to assist in understanding Soviet perceptions. The first depiction in an NIE of the results of CIA's force interaction analyses appeared, without objection from other intelligence agencies, in NIE 11-8-73 to show the potential of Soviet ICBMs to destroy US Minuteman silos. (S)

--The "new look" in decisionmaking during the 1970s also resulted in requirements for NIEs on Soviet military developments that were much more detailed. They contained several alternative future force projections, more explanation of their findings, and explicit depiction of uncertainties. These requirements stimulated greater use of computerized force interactions to assess Soviet strategic nuclear capabilities and to quantify

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uncertainties. In part for this purpose, the DCI established the Strategic Evaluation Center within the Office of Strategic Research, CIA.

--Also, there were cogent substantive reasons for increased CIA use of computer simulations. With the Soviets having attained a strategic posture recognized as equal to that of the US, even modest changes in Soviet strategic programs took on greater significance. Interaction analyses to depict the Soviets' growing threat to the US Minuteman received more emphasis in NIEs. The analyses became more complex with Soviet deployment of MIRVed missiles and the need for calculations of ranges of uncertainty in NIE findings. These assessments were expected by the users of NIEs and were not objected to by DoD intelligence agencies.

--As the Soviet potential to destroy the US Minuteman force grew, the number of missile weapons remaining to the two sides following first strike attacks was of increasing interest to intelligence analysts and to NIE consumers. Accordingly, NIE 11-3/8-74 and NIE 11-3/8-75 depicted the number of ICBM and SLBM weapons (excluding bomber weapons) remaining to the two sides following countersilo first strikes. The analyses were included in the NIEs without objection by Intelligence Community representatives. (S)

11. NIE 11-3/8-76 -- The next step in assessing the implications of the growing Soviet counterforce potential was to depict the size and composition of all the strategic offensive forces remaining to the US and USSR--missile RVs and bomber weapons and the equivalent megatonnage carried by these weapons--following first strikes against offensive forces. These analyses of "residuals" of offensive forces provided some insights about the Soviets' incentives to strike first, their ability to maximize damage to US offensive forces and their potential to attack other targets. For the first time, the 1976 NIE on Soviet strategic capabilities depicted the size and composition of Soviet and US remaining and surviving forces following counterforce first strikes. The Senior Intelligence Officer of the Air Force (joined by the intelligence representative of the Department of Energy) objected to the "residual" analyses, stating that the simulated attack used was overly simplistic, operationally unrealistic, potentially misleading and did not belong in an NIE. (S)

12. NIE 11-3/8-77 -- For the 1977 NIE, the new DCI, Admiral Stansfield Turner, directed that greater prominence be given to the analysis of US and Soviet residual weapons and that measures be devised to show the destructive potential of the residual weapons of the two sides. For this purpose, two measures were used:

--Lethal Area Potential - a measure of the potential of the residual weapons of the two sides to destroy soft area targets, that is, to subject targets to a given overpressure.

--Hard Target Potential - a measure of the potential of the residual weapons of the two sides to destroy point targets of a nominal hardness.

These measures of residual weapons appeared in the summary volume of NIE 11-3/8-77 and received even more emphasis in the DCI's briefing of the US-USSR strategic

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force relationship to Congressional committees. As a result, the Director, DIA and the Senior Intelligence Officers of all the military services joined in the Air Force position. They noted that interaction analyses falling short of a comprehensive net assessment of a full-scale, two-sided nuclear exchange probably did not provide useful insights into how the Soviets might perceive the strategic balance, but that conducting such assessments was outside intelligence responsibilities. (S)

13. NIE 11-3/8-78 -- The DCI's emphasis on the residual analysis was continued in the 1978 Estimate. The DoD intelligence agencies expanded their dissent by citing the findings of a JCS study depicting the results of a full, two-sided US-USSR nuclear exchange. The purpose was to show in the NIE the type of net assessment the dissenting agencies regarded as the only valid measure of the strategic balance. While the purposes and thus the results of the NIE and JCS analyses differed, the trends depicted in the relative capabilities of the two sides were consistent. The dissenting agencies continued to hold that the residual analyses were misleading and constituted a net assessment outside the purview of intelligence. (S)

14. NIE 11-3/8-79.

--Following publication of NIE 11-3/8-78 the DCI accepted an offer from the Chairman, JCS, for his representatives to participate in a net assessment of the US-USSR strategic balance to be conducted by the Studies, Analysis and Gaming Agency (SAGA), Organization of the Joint Chiefs of Staff. It was the hope of the Director, DIA, and the Chairman, JCS, that, with the DCI's participation in the SAGA analysis, the assessments in the NIE to which DoD intelligence agencies objected could be deleted from the Estimate. The SAGA analysis did not become an agreed DoD or national level net assessment. The DCI consented, however, to include the results of both the SAGA and the CIA analyses in the main text of the NIE. The findings of the SAGA analysis were removed from the Estimate prior to its publication because Secretary of Defense Harold Brown informed the DCI that he did not regard the SAGA conclusions as suitable for use in an NIE. Secretary Brown believed that force exchange calculations provided insights into the relationship in strategic forces but they did not, by themselves, depict the strategic balance. The DoD intelligence agencies, conforming to the desires of Secretary Brown, did not cite the findings of the SAGA analysis in their dissenting position as they did the previous year.

--In the Summary Volume I of the 1979 NIE, however, the DCI made the results of the residual analysis a centerpiece. The DoD intelligence chiefs thus lost ground in their disagreement with the DCI on the emphasis given to the results of the residual analyses as key measures of the US-USSR strategic relationship. Consequently, they disassociated themselves from the Summary of the Estimate, contending that its judgments were unduly shaped by US perceptions and strategic thinking and were not properly reflective of Soviet strategic objectives. (S)

15. NIE 11-3/8-80 -- The Summary of the 1980 NIE gave balanced coverage to all of the important findings of the more detailed Estimate. The DoD intelligence chiefs did not disassociate themselves from the Summary, but they disagreed with the DCI on which of the Estimate's findings should be included in the Key Judgments. As a result, the DCI's version of the Key Judgments

were followed by Key Judgments that had been coordinated among agencies of the Intelligence Community. While the coordinated Key Judgments section contained dissenting views, it was acceptable to DoD intelligence chiefs because it did not contain the residual analysis as a centerpiece.

16. While the debate about net assessments had its origins in a particular type of analysis in NIEs on Soviet strategic programs, the DoD intelligence agencies have applied their concept about the proper functions of intelligence to other estimates:

--In what was probably an overzealous application of a bureaucratic position, a DIA officer refused to provide data comparing the thickness of the frontal armor of a Soviet T-72 tank with the penetrability of US antitank weapons. He contended that he did not have access to "blue" (US) data and that making such a comparison would amount to a net assessment outside the responsibility of intelligence. In general, however, DoD agencies have not objected to assessments which depict the characteristics and performance of individual foreign weapon systems.

--The DoD intelligence agencies objected to the assessments appearing in NIE 11-12-80, "Soviet Military Research and Development," comparing Soviet and US technology applicable to military programs, although the NIE was requested by the Department of Defense. They refused to participate in production of an NIE on the NATO-Warsaw Pact military balance, and insisted that US forces be omitted from an NIE titled "The Military Balance on the Korean Peninsula." (S)

#### D. Summary and Recommendations

17. The history of the debate about net assessments in national intelligence shows that, to reach a solution to the problem, two issues must be addressed. The first concerns DCI and CIA prerogatives for producing national intelligence since it has been contended that net assessments are not their proper function and should not be included in NIEs. The second concerns the substantive value of the analyses that have been criticized as being misleading net assessments. (C)

18. The Issue of DCI Prerogatives. While there are no extant statements of policy concerning the proper content and scope of national intelligence, the producers of NIEs have conformed to well understood limits on their products. National estimates on Soviet strategic programs, and, so far as can be determined, on other subjects have not contained suggestions, recommendations or evaluations of US policies, weapon systems, forces or plans. They have not contained "estimates of the situation" which take into account domestic as well as international developments. At the same time, the producers of national intelligence have not believed they were foreclosed from using any particular type of analysis even if it was also being used by another department or agency. (S)

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19. The argument that "net assessments" of any kind that analyze the interaction of US and foreign policies, programs and forces, are beyond the purview of intelligence is patently without merit.

--To proscribe these types of assessments for NIEs would be contrary to the nature of the estimating process since all forecasts are the result of interaction analyses in which US policies, programs and forces are important elements. The analysis of US and Soviet residual weapons employing computerized simulations to which DoD agencies have objected is merely one of the many such assessments used in producing NIEs.

--The DoD agencies have been inconsistent in their position on this issue. They have not objected on any grounds to other types of interaction analyses appearing in NIEs on Soviet strategic programs which fall within their definition of net assessments.

--Finally, the DoD intelligence agencies have concluded incorrectly that the prerogatives of the DCI and CIA for conducting computerized simulations of US and Soviet force interactions are the same as those of departmental intelligence agencies. The responsibility for conducting these types of analyses within the Department of Defense and the Military Services has been assigned to staff organizations other than intelligence. It does not follow that the DCI and the CIA should be constrained in producing national intelligence by a particular allocation of staff functions which the Department of Defense finds suitable to its needs. (S)

20. The Substantive Issue. The challenge to DCI prerogatives for conducting net assessments came about during intensification of disagreements between the DCI and DoD intelligence agencies on a substantive issue. On substantive grounds, the objections of the DoD intelligence agencies to the analysis of residual weapons in NIEs had greater merit than their objections related to bureaucratic "turf." (C)

21. A further indication that the crux of the problem was substantive was in the fact that in NIEs on Soviet strategic programs the DoD intelligence agencies invoked their challenge to DCI prerogatives for conducting net assessments only in the case of the analyses of residual weapons and destructive potential of the two sides following first strike counterforce attacks. They did not take issue with assessments in the NIEs depicting Soviet potential to destroy US ICBMs, the vulnerabilities of Soviet ICBMs to a US attack, the potential effectiveness of Soviet air defenses against a US bomber and cruise missile attack, the potential of Soviet ASW forces to destroy US ballistic missile submarines, or the potential effects of Soviet civil defense in protecting the USSR from a large US nuclear attack. (S)

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22. In part, the substantive objections to the presentation of the residual analyses in the NIEs were justified in that the calculations are simplified and do not necessarily reflect a Soviet point-of-view. When used as the sole basis for an assessment of a Soviet perception of its strategic sufficiency in the late 1980s, these measures are inadequate and could be misleading. The DoD intelligence agencies believed such assessments of the balance would require comprehensive net assessments of a full, two-sided US-USSR nuclear exchange. (S)

23. On the other hand, the DCI's position had merit. He pointed out in the NIE that the purpose of the residual calculation was to put into broader perspective some of the qualitative attributes and asymmetries which affect Soviet and US capabilities and options, to illustrate trends, and to display these trends in a manner most relevant to deterrence in its most elementary form--that is, assured destruction. While the measures of residual weapons were simplified ones, they depicted the same overall trends in the relationship of US and Soviet forces as the more complex, so called net assessments of full two-sided nuclear exchanges. Moreover, he noted that such DoD assessments supposedly gave more attention to operational considerations than the NIE analysis, but in fact, they also used simplifying assumptions to treat the most important operational variables. (S)

24. In recognition that any assessments of the present and especially the future relationships between military forces will always be subject to uncertainties and alternative views it would be useful to agree on certain guidelines for the presentation of such analyses. The advice of Lieutenant General Paul Gorman, Director of Plans of the Joint Staff, concerning intelligence assessments of military force relationships would be appropriate for adoption by the Intelligence Community:

--Compare opposites. (Compare numbers of tanks with numbers of anti-tank weapons or numbers of bombers with numbers of air defenses.)

--Measure output rather than input. (Measure the results of interaction rather than the forces interacting.)

--Show trends (Show changes in numbers of forces and their capabilities over time rather than the current situation.)

--Be selective (Look for key indicators rather than comprehensive measures of force relationship.)

--Go Graphic (Show visually the key findings of the analysis of force relationships.)

--Think Soviet (Try to replicate Soviet measures of force relationships.)

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--Deal with perceptions (Try to judge how the relationship of forces is perceived by the USSR and other nations.) (S)

25. Recommendations. The DCI should resolve the problem of net assessments by enunciating policies substantially as follows:

--Affirm that net assessments of US-USSR military balances will not appear in NIEs and reaffirm restrictions on NIEs containing suggestions, proposals or evaluations of US policies, programs, weapons or plans.

--Acknowledge that producers of national intelligence are not foreclosed from using any type of analyses.

--Prescribe that interaction analyses should be conducted by intelligence to assist in evaluating alternative policies, forces and conduct of foreign nations using as a given, US policies, forces and plans.

--Reserve judgment of the DCI on the appropriateness and substantive value of the interaction analyses used in any particular NIE.

--Emphasize that the national intelligence production process permits and encourages dissenting and alternative views competing with key findings in NIEs, including findings based on force interaction analyses.

--Require that the Intelligence Community make an even greater effort to replicate Soviet assessments of the US-USSR force relationships.  
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