

The Director of Central Intelligence

Washington, D.C. 20505

National Intelligence Council

NIC# 02651-87
24 June 1987

*Steve -
Interesting +
useful
R.N.*

MEMORANDUM FOR: Deputy Director of Central Intelligence

FROM: MG Stephen E. Nichols, USA
National Intelligence Officer for
General Purpose Forces

SUBJECT: Net Assessment is the Threat

1. The attached item, for your information, was intended to be a submission for the Wednesday meeting with the DDCI/DCI. It now appears that that meeting may not happen again, at least not on my watch.

2. I consider it to be extremely important that we not permit the bean counters of the world to sum up all the hardware (and even the bodies) and declare that one side outweighs the other. There is so much more to it than that.

3. JCS has gone well beyond the simple comparison of numbers of systems, calibers of guns and thickness of armor to portray a balance sheet of opposing forces, Atlantic-to-the-Urals. I have talked with SOVA [redacted] about the desirability of submitting the JCS document to the Intelligence Community, accepting footnotes or non-concurrence appendices--without ever changing the basic JCS document--and publishing it as a community document. I have discussed this possibility with DIA [redacted], as well. DIA and Andy Marshall were kind enough to review my paper. Their comments are attached. I consider that the ball is in the JCS court for now.

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Stephen Nichols

Stephen E. Nichols

Attachment:
As Stated

cc: C/NIC
VC/NIC
DDI



D-2011-1R1

Net Assessment: What Does It Mean?

Increasing interest--inside and outside of the Intelligence Community--in net assessments threatens to lead us down a largely unilluminated path. Before we agree to launch a series of papers identified as net assessments we need to define and understand what it is that we expect to produce.

I judge that it is fair to say that most observers (but not most analysts) believe that a net assessment will identify the adversary most likely to prevail in an armed conflict. All too frequently, the judgment is based on bean counting and statistical probabilities--factors that can be assigned numerical values and thus calculated and manipulated to respond to varying scenarios. Tanks are compared, for example, in terms of their relative armor thickness, main gun caliber and numbers of vehicles. The side with the higher numbers is presumed to be the likely winner in any contest. But these are in the nature of laboratory analyses. Of equal or greater importance may be the relative effectiveness of fire control systems, stabilization of the tank when firing on the move and the agility of the tank through speed and acceleration. Moreover, the level of training of the crew and the teamwork that they have developed by working together, their intelligence, aggressiveness and initiative will tip the scales, as well. Similarly, aircraft with relatively like characteristics will deliver quite different results depending on crew training and flying hours of experience, tactics, sortie rates, munitions available and the logistical and maintenance support to sustain them. These factors are difficult to calculate and are rarely included in net assessments.

The context of an assessment also is important. The more specific the context, the more accurate and therefore more useful the assessment. With clear statements of the objectives to be accomplished, the geography in which the comparison is to be made, time-distance factors involved, the analyst can better weigh the relative strengths of opposing forces.

It is of interest to note that the Soviets prefer a mathematical approach to net assessment. An excerpt from an NIE in preparation is attached. The Soviet method of weighing one force against another is reminiscent of some of today's more advanced commercial war games. War games can be useful in testing forces under various scenarios. The results frequently provide valuable insights but are not a means of determining who would "win" a war.

Some valuable lessons can be learned from retrospective looks at conflicts in which the "stronger," better equipped adversary got soundly thrashed. France had a clear edge over Germany in 1940, but fell in weeks to the audacious blitzkrieg. General MacArthur was hanging on by his fingernails at Pusan in 1950 when he swept into Inchon--where an amphibious operation was judged to be a poor risk--and rolled back superior North Korean forces. The sums have continually gone against Israel in its battles with Arab forces since 1948 and yet the leadership, daring and imagination of the Israeli forces has prevailed each time. A most recent example of confounding the net assessors is the 1987 Chadian victories over more heavily armed Libyan forces north of the 16th parallel. Examples such as these should make us cautious in drawing conclusions from an array of numbers.

Earlier this month the DDI advised the SSCI staff of work that has already been done by the Intelligence Community on net assessments. In the paper are some compelling words of caution concerning expectations that the Intelligence Community can pull from its bag of tricks (and serious analysis) the answer that the policy makers would like to have: Which side is the more likely to win? It is, as the DDI states, absolutely essential that DoD and the Intelligence Community work together on any net assessment of the military balance such as the Packard Commission called for or the arms control negotiators will need. We have got to be on guard during this effort against overlooking the expertise of those who have thought about wars and how they are won or lost. If we let the bookkeepers and mathematicians dominate our decision-making process, we risk finding ourselves banking on columns of numbers rather than on considered military judgments, which provide us with a generous portion of art to temper the more easily applied science.

Attachment:

As Stated

CORRELATION OF FORCES AND MEANS

In carrying out their military strategy, the Soviets will calculate the "correlation of forces and means," a concept that finds its source in Western operational research. The Soviets believe that war is a science, and with an estimative process that takes into account the political, economic, geographic, time-distance, ideological, and most importantly the military factors of a given situation, they can determine what is required to accomplish a specific objective. The Soviet decision maker will begin with this objective, determine what probability of success he will risk, build a mathematical model that reflects the situation, and then determine what forces are required. Forces are given scores; values based on their qualitative characteristics (combat potential) and their quantity, and these scores are factored into models. The Soviet decision maker will study the correlation of forces at all levels of warfare (tactical, operational-tactical, operational, operational-strategic, and strategic), using both conventional and nuclear means. This estimative process will be conducted for any given operation; it can be used to evaluate a current situation or to plan a future one, and with the advent of battlefield computers, the Soviets believe this process will also be essential in the execution of combat operations.



DEFENSE INTELLIGENCE AGENCY

WASHINGTON, D.C. 20340-6131

29 MAY 1987

U-0114/DE

MEMORANDUM FOR THE NATIONAL INTELLIGENCE OFFICER FOR GENERAL PURPOSE
FORCES, NATIONAL INTELLIGENCE COUNCIL

SUBJECT: Net Assessment

Reference: NIC memo 02080-87, 11 May 87, subject as above.

1. My staff has read your informal paper with great interest. We could not agree with you more on your thinking and approach to net assessment:

a. We must not let methodology/mathematics alone dominate the conceptual design and approach to this increasingly important part of national estimates production.

b. The quality of the factors considered in a net assessment is as important as the quantity.

c. The context of a net assessment will always remain highly important. The more specific an assessment, the more likely it will be tightly focused, completely analyzed, and better communicated.

d. In our view, war will remain an art, though it is becoming more scientific in approach.

2. The comments below may be useful to the development of your informal paper:

a. Net assessments dealing with the red-blue scenario call for the joint efforts of both the intelligence community and the military planning and operations community. Within JCS, the J-8 is charged with producing net assessments for the Joint Staff, the Services, and the U&S Commands. DIA provides J-2 intelligence. (In its Defense Agency role, DIA supports the OSD Office of Net Assessment.)

b. Net assessments, especially those involving the threat of nuclear war, will be very interpretative and ambiguous. This is because a nuclear war has never been fought. We have no cumulative battle experience on this matter, though there are hundreds of nuclear theorists and strategic thinkers on this topic.

c. Net assessment is often used to mean a comparison at less than all-out conflict. For example, one can compare two tanks or two SAMs in a static side-by-side assessment or one can compare levels of technology of two countries in a particular field. These are often called net assessments; sometimes the words net technical assessment are used to emphasize when technical matters are being evaluated.

d. We believe that certain advanced computerized-assisted approaches to net assessment will help develop a more structured and rigorous analysis. Such analysis, however, is only part of the overall net assessment, not a substitute for reasoned, military judgments based on cumulative experience and battlefield knowledge.

e. Whatever the results of any scenario-driven net assessment, we must always remind our top-level consumers that a specific net assessment is only a "representative example," not a sure guide for a given outcome(s).

3. We would appreciate knowing the results of your discussion with the DCI on net assessment.

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Brigadier General, USA
Assistant Deputy Director
for Estimates

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OFFICE OF THE SECRETARY OF DEFENSE
WASHINGTON, D.C. 20301

DIRECTOR OF NET ASSESSMENT

14 May 1987

MEMORANDUM FOR MAJOR GENERAL STEPHEN E. NICHOLS

SUBJECT: Net Assessment

Attached are the few points that I mentioned to you on the phone. Points 1 and 3 are, I think, of particular importance since they suggest major areas for intelligence community contributions to net assessments.

I hope these are helpful. If you feel it appropriate, let me know how your discussion with Bob Gates goes.

A. W. Marshall
A. W. MARSHALL

MG Nichols' Net Assessment Paper

1. The paper does not address the fundamental point of Soviet calculations of the correlation of forces and means; that is, their impact on the Soviet view of the balance and the implication of that view for the adequacy of deterrence.
2. The paper properly recounts the inadequacies of bean counts, static force measures, etc. because of the demonstrated importance in terms of war outcomes of a number of intangible and non-quantifiable factors.
3. The paper does not address the apparent Soviet concern about the impact of new conventional weapons technologies and how they may lead to a new "revolution in military affairs". The Soviet concern is leading them to reevaluate their MOE's, their operational concepts, etc. and net assessments need to take that into account.
4. The paper talks about DoD and the intelligence community working together on any net assessment of the military balance such as the Packard Commission called for. The Commission was discussing military net assessments to accompany the CJCS' military strategy options and recommended that the CJCS conduct those assessments in consultation with the Service Chiefs and the DCI. There are other types of net assessments and the legislation passed last year on DoD Reorganization only called upon the CJCS to conduct the assessments that the Packard Commission referred to.