

Attachment

Methodological Development

The objective of the planned effort in this area is to develop an analytical framework for obtaining a better understanding of the Soviet defense decision-making process by drawing on the existing body of economic and other behavioral science theory, and the tools of mathematics. Existing intelligence can then be tested in an attempt to identify consistent patterns and explanations of past behavior. If this effort is successful, it will provide a more reliable and explicit means for predicting future Soviet defense programs.

One approach is to examine past Soviet defense programs against the background of the strategic decision theory developed primarily by Schelling. This approach draws heavily on the economic theory of rational choice and the tools of mathematical analysis. OSD (Systems Analysis) has experimented with this approach -- but apparently in only a general and limited way -- and identified a number of Soviet programs that appear to have been "irrational" in terms of the analytical framework. Some additional independent testing of this approach by OSR, however, is probably desirable.

A second approach that has promise is one that has been suggested by a panel of OSD consultants. This approach is based on organization theory. It postulates that decisions are determined not so much by "rational economic choice" as by the functioning of a large complex bureaucracy.

A third approach is a relatively straight-forward statistical analysis designed to identify parameters which seem to function as decision criteria -- e.g., budgetary limits.

The problem of matching the relevant analytic framework to pertinent and available intelligence data is complex and difficult. These suggested approaches probably will produce at best only slight incremental improvements in understanding Soviet actions and formulating intelligence estimates. Initial projects of limited scope and objective can be specifically designed to test the feasibility and potential of a methodology.

A manpower effort of about one man-year using several analysts with complementary analytic skills and intelligence backgrounds over a period of (six) months should provide enough experience to evaluate progress toward the initial limited goals, and provide a basis for planning more specific research programs for the future.