Policy, Procedures, and People: Governmental Response to a Privately Initiated Nuclear Test Monitoring Project as a Case Study in National Security Decision-Making

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BY
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I. INTRODUCTION

Through his book Essence of Decision,1 Graham Allison2 revolutionized the way that academics analyze major foreign and defense policy decisions.3 Before Allison's book was

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2. At the time he wrote the book, Allison was a professor at Harvard University. He later became Dean of Harvard's Kennedy School of Government. See Keller, Thinker-in-Residence Brought from Harvard, N.Y. Times, Aug. 15, 1985, at B8, col. 3.
published in 1971, even the leading writers on foreign policy\(^4\) tended to describe and explain governmental decisions almost exclusively as if governments were rational human beings making carefully considered choices among available options.\(^5\) Political scientists did not generally ferret out detailed information regarding the process of arriving at particular governmental decisions. They knew only the actions that were ultimately taken. From these actions, they characteristically reasoned backward to explain governmental choices.\(^6\)

Allison suggested that this classical mode of analysis was incomplete or even misleading, in that it suggested that governments had become irrational or their decisions incomprehensible. Terming this type of thinking "Model I" or the "Rational Actor Model," Allison went on to describe two other ways of looking at governmental decisions. Drawing from the literature of organization and management theory, he described, as "Model II," an "Organizational Process" paradigm. The Model II analyst describes governmental decisions not as rational choices by governments or their leaders, but as the natural outcomes of standard bureaucratic operating procedures.\(^7\) Elaborating on the theory implicit in Neustadt's *Presidential Power*,\(^8\) Allison characterized, as "Model III," a conception of governmental decision as the outcome of political bargaining among individuals, each of whom holds some degree of power.\(^9\) Thus, government de-

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4. Allison quotes the works of such major figures as Hans Morgenthau, Stanley Hoffman, Henry Kissinger, and Thomas Schelling and significant journalistic analyses such as those of the *New York Times*. G. ALLISON, *supra* note 1, at 10-26.

5. Allison quotes many typical examples of this kind of analysis, such as the following statement from A. WHITING, *CHINA CROSSES THE YALU* 159 (1960): "In sum, it was not the particular problems of safeguarding electric power supplies in North Korea or the industrial base in Manchuria that aroused Peking to military action. Instead, the final step seems to have been prompted in part by general concern over the range of opportunities within China's doorstep. At the least, a military response might deter the enemy from further adventures." G. ALLISON, *supra* note 1, at 22.

6. G. ALLISON, *supra* note 1, at 13. A more detailed description of this "Model I" thinking appears *infra* section III.

7. For a more detailed description of Model II, see *infra* section IV.


9. A more detailed account of Model III is set forth *infra* section V.
Decisions can be looked at in terms of policy, procedures, or people. Although the information necessary for Model II or Model III analysis is often difficult to obtain, genuine understanding of governmental decision-making requires an examination from all three perspectives.10

Allison tested his theory with a case study of the 1962 Cuban Missile Crisis. Subsequent writers have applied the Allisonian models (or variants of them) to a variety of policy decisions, including the rise and fall of the multilateral nuclear force,11 the U.S. 1967 decision to deploy an antiballistic missile system,12 the U.S. decision to acquire missiles with multiple independently-targetable warheads,13 the Japanese decision to attack the United States in 1941,14 the major Continental powers' decisions to enter World War I,15 and the U.S. program to acquire the Trident submarine.16 These studies tend to confirm the value of looking beyond the Rational Actor Model for an explanation of governmental action.17

10. "Only in comparative analyses of this sort can models be systematically diversified and mental images of the decision-making process significantly improved." Weil, Can Bureaucracies be Rational Actors?, 19 INT'L STUD. Q. 432, 433 (1975).
17. For example, Model I tends to describe the reasons for major U.S. strategic weapons acquisitions in terms of reactions, based on doctrines such as the need for "mutual assured destruction," to various real and anticipated Soviet threats. But a more careful analysis, taking account of Models II and III, also emphasizes the goals and procedures of the Army, Navy, and Air Force, which are "rarely" controlled by political officials; the tendency of these services to sponsor weapons systems that are essentially marginal improvements to their existing systems; and the political bargaining among services, design laboratories, the Office of the Secretary of Defense, the defense contractors, and members of Congress. Allison & Morris, supra note 13. But see Maoz, The Decision to Raid Entebbe: Decision Analysis Applied to Crisis Behavior, 25 J. OF CONFLICT RESOLUTION 677 (1981)
Virtually all of the published studies have chosen to focus on a foreign or defense policy decision or series of decisions that can be characterized as "major." They involve, for example, national or international crises, procurement of major weapons systems, or major international negotiations. Understandably, few scholars have chosen to examine the process of governmental decisions in which much less is at stake. Yet a careful examination of more routine, second-level decisions is also needed for several reasons.

(concluding that "in this particular case the predictions of the analytic model fit much better the observed choice processes at both the individual and group levels"). Maoz acknowledges that "these findings run contrary to most of the evidence regarding choice processes under crisis conditions, and may suggest that decision-making in the Entebbe crisis is the exception rather than the rule." Id. at 704.

18. Indeed, "[s]tudies of decision-making under crisis conditions have become a booming enterprise over the last two decades." Maoz, supra note 17, at 677. Maoz' own study of the Entebbe rescue is an analysis of this type, as is Allison's ESSENCE OF DECISION, supra note 1.

19. See R. COULAM, supra note 3; E. BEARD, DEVELOPING THE ICBM: A STUDY IN BUREAUCRATIC POLITICS (1976); N. HALPERIN WITH P. CLAPP & A. KANTER, supra note 12; Allison & Morris, supra note 13; J. STEINBRUNER, supra note 11; and Steinbruner & Carter, supra note 16.


21. There is no clear dividing line between major and second-level decisions, but some characteristics that divide some decisions from others in terms of their significance may exist. A "second-level" American foreign policy decision perhaps may be identified as one that receives some treatment in major newspapers (thus distinguishing it from completely routine or trivial actions, such as the holding of an otherwise unimportant diplomatic lunch, or providing an additional military attache to an embassy), but which meets all of the following tests: (1) human life was not imminently at risk; (2) the President of the United States was not personally involved; (3) no military mobilization was contemplated; (4) less than $100 million was involved. The following decisions, for example, may be characterized as second-level matters: (1) a change in the U.S. bargaining position for an arms control negotiation regarding the percentage of weapons that should be eliminated during a particular phase of a treaty's life; (2) a decision regarding whether to position a new surveillance satellite to emphasize coverage of the Soviet Union or of other areas of the globe; (3) a decision to reprogram $50 million of foreign aid from one country to another; (4) a decision to revoke the accreditation of a foreign diplomat suspected of spying; (5) a decision to ask an African country for permis-
First, national security decisions are critical, so that even second-level decisions will affect, to some extent, the probability that the United States will eventually be involved in armed conflict, conventional or nuclear. Second, although small governmental decisions are by definition less important, there are obviously many more of them and cumulatively, their impact is very great. Third, a consequence of Model II is that big decisions are likely to be the product of many small ones. For example, the “lengthy process from which weapons emerge involves hundreds of important, relatively independent decisions that no one political official can possibly oversee.” 22 Fourth, many scholars writing about American foreign policy outside of crisis contexts continue to rely on Model I, treating governments as if they were single, rational persons. 23 Finally, studies of second-level governmental decisions may shed new light on the application of decision theory to major policy choices as well. 24

22. Allison & Morris, supra note 13, at 123.
23. See, e.g., Kanost, The American Performance in Micronesia: A Retrospective Appraisal, 12 AMERASIA J. 57, 72, 76, 79 (1985) (“In the long run, the United States was more willing to make substantial concessions on economic issues than to compromise its future regarding strategic control over the area. . . . [T]he United States has assumed that its permanent control over the area must be assured”); Lindsay, Trade Sanctions as Policy Instruments: A Re-examination, 30 INT'L STUD. Q 153, 156-58 (1986) (“Two strategies were used to determine the [countries'] objectives . . . . [T]he initiator's publicly stated goals were taken as objectives . . . though where information about the decision was scarce, these goals were imputed . . . . The Saudis' announced objective was to pressure the US to force Israel to withdraw. . . . [The] Saudis also intended the embargo to increase international support for the Palestinians”); Fischer, Decisions to Use the International Court of Justice, 26 INT'L STUD. Q 251, 275-76 (1982) (research on motivation to invoke World Court conducted by sending questionnaires to officials asking about the assessments made by “your government” and the views of “your state”).
24. In addition, while Allison focused on governmental decision-making, his models are also applicable to the decisions of industrial and other large bureaucracies. Indeed, he derived his paradigm for Model II from the literature of organization theory. G. Allison, supra note 1, at 69-78. Studies of less critical governmental decisions, therefore, also may be valuable for their insight into the more routine choices of corporations, labor unions, and other private bureaucratic entities.
This Article applies the Allisonian framework to the U.S. Government's response to a private arms control initiative undertaken in 1986 by the Natural Resources Defense Council (NRDC), an environmental organization. This case lends itself to fruitful analysis for several reasons. First, while it fits the criteria for second-level decisions, it also involves a critical area of international relations—the control of nuclear weapons. Second, the involvement of numerous government agencies in the project presents ample opportunity to examine processes within and among agencies. Third, the reaction of the United States appears, at first blush, to have been ambivalent or inconsistent, for the U.S. Government in turn assisted, impeded, and again assisted the NRDC's effort. This curious response invites the analyst to see to what extent, if any, Models II and III can usefully contribute to understanding why the Government acted as it did.

While the type of analysis that Allison pioneered nearly two decades ago has become a mainstream tool for social scientists, it is virtually unknown to lawyers and legal academics. Indeed, with the exception of a single student-written note, law reviews, legal treatises and even the administrative law case books simply do not make use of Allison's comparative modeling. The aim of this exposition is to better enable lawyers to understand bureaucratic decision-making in other contexts. This study may even be more relevant than Allison's original work to lawyers' needs in this respect, for most bureaucratic problems that lawyers face will be second-level decisions rather than major national crises. In addition, lawyers and legal scholars may benefit particularly from the discussion of Model II, for it treats the application of statutes and regulations to bureaucratic problems as but one way in which standard operating procedures emerge as constraints on official behavior.

The first section describes the NRDC initiative and the Government's response. The next three sections describe in detail each of Allison's models and apply them to the government's responsive actions. The fifth section considers the models in terms of their contributions to understanding the Government's actions in this case and speculates about the

25. See supra note 21.
relatively greater significance of one of the models to other national security decisions of like magnitude. The sixth section considers how multi-model analysis can be of practical use to legislators and lawyers. The final section describes the NRDC project in the two years after the events that are analyzed in this study.

II. THE NRDC PROJECT

In May 1986, the Natural Resources Defense Council, a non-profit environmental organization, signed a novel agreement with the Academy of Sciences (SAS) of the Union of Soviet Socialist Republics. Under this agreement, each organization would send scientists to the territory of the other organization's country to install and operate sophisticated seismic monitoring equipment near the host country's primary site for nuclear weapons testing. When implementation of the agreement began less than two months later, the NRDC accomplished what the U.S. Government, since the Eisenhower Administration, had tried and failed to achieve: it put American scientists on Soviet soil with types of equipment that could help to verify Soviet compliance with limitations on nuclear weapons testing.

The events leading up to this agreement, the steps taken to implement it, and the Government's response to NRDC requests for various types of licenses are set forth later in this section. First, a description of the historical context of the NRDC-SAS agreement is necessary.

A. Background: Thirty Years of Test-Ban Negotiations

The NRDC initiative took place in the context of nearly thirty years of sporadic efforts by governments to negotiate

28. The Academy, founded in 1724, is composed of the Soviet Union's leading scientists. The main coordinating body for research, the Academy directs more than 260 laboratories and research stations. 1 New Encyclopedia Britannica Micropedia 50-51 (15th ed. 1987).
29. These limitations could be either unilateral, as in the case of the Soviet Union's self-imposed moratorium on testing in effect at the initiation of the project, or reciprocal, as would be the case under present or future treaties.
30. See infra text accompanying notes 66-89.
prohibitions on nuclear weapons tests, efforts which had often floundered, at least in major part, over disputes between the United States and the Soviet Union over whether compliance with proposed agreements could be monitored effectively. In 1958, after the health dangers associated with fallout from atmospheric nuclear testing had become a matter of world concern, scientists representing the United States and the Soviet Union concluded that seismic and other technology then available would "make it possible to detect and identify nuclear explosions, including low-yield nuclear explosions (1-5 kiloton (kt))." President Eisenhower and Soviet Premier Nikita Khrushchev began formal negotiations on a comprehensive test ban (CTB) and entered a testing moratorium which lasted until 1961. After a promising initial period, the negotiations became stale-mated. The U.S. delegates reported to their Soviet counterparts "new data" suggesting that the experts had been too optimistic in their estimates of the verifiability of a treaty. Desultory negotiations continued after this event. But when the Eisenhower Administration ended, the two countries were far apart on numerous issues, including operation of the control system of monitoring stations and the number of on-site inspections that each side would be allowed to

31. The advantages and disadvantages of treaties restraining nuclear testing are beyond the scope of this study. Two very balanced and well-researched analyses of this issue have been published. See National Academy of Sciences, Nuclear Arms Control: Background and Issues 204-23 (1985) [hereinafter NAS]; York & A. Greb, The Comprehensive Nuclear Test Ban (1979) (California Seminar on Arms Control and Foreign Policy Discussion Paper No. 84). Herbert York was President Carter's Ambassador to the comprehensive nuclear test ban negotiations of 1979-80.

32. NAS, supra note 31, at 188. Yields of nuclear weapons are expressed in terms of kilotons (kt) or megatons (mt) of TNT-equivalent.

33. In arms control parlance, and in this study, the term "comprehensive test ban" and its acronym CTB refer to a prohibition on tests of nuclear weapons in all environments: in the air, under water, in space and under ground.

34. NAS, supra note 31, at 189.

conduct in order to resolve seismically suspicious events.\textsuperscript{36}

The Kennedy Administration continued the negotiations, but its efforts in 1961 were also bogged down in controversy about verification. For example, the United States sought to have the detection system in the Soviet Union operated by personnel from other countries, while the Soviets wanted it to be run mostly by Soviet citizens. The United States insisted on twelve to twenty annual on-site inspections. The Soviets were willing to concede only three.\textsuperscript{37} In any event, the negotiations and temporary moratorium on testing collapsed when, in August 1961, the Soviets resumed testing, citing the failure of the United States to adhere to the 1958 experts' conclusions and the continued nuclear testing of a U.S. ally, France.\textsuperscript{38}

By the spring of 1962, the Soviet position on verification had become more rigid. The Soviets insisted that any ban be monitored only by "national" means of detection, thus excluding Americans from any monitoring posts on Soviet soil.\textsuperscript{39} After the Cuban Missile Crisis brought the world to the brink of nuclear war,\textsuperscript{40} CTB negotiations intensified, but the United States and the Soviet Union were unable to resolve their differences concerning verification.\textsuperscript{41}

\textsuperscript{36} NAS, \textit{supra} note 31, at 190. Eisenhower considered his failure to achieve a CTB his greatest regret about his presidency. H. YORK \& A. GREB, \textit{supra} note 31, at 8.

\textsuperscript{37} NAS, \textit{supra} note 31, at 191.

\textsuperscript{38} Broadcast of Radio Moscow, August 30, 1961, \textit{summarized in Geneva Conference, supra} note 35, at 171-72. In fact, the Soviets had warned the previous May that continued French testing might compel the Soviets to end their moratorium, but the French did not test between May and August. Statement by Charles C. Stelle, Acting U.S. Representative to the Geneva negotiations, \textit{id.} at 629-33.

\textsuperscript{39} NAS, \textit{supra} note 31, at 192.

\textsuperscript{40} \textit{See} R. KENNEDY, \textit{Thirteen Days} (1969).

\textsuperscript{41} Late in the fall of 1962, Soviet Premier Khrushchev agreed to "two to three" annual onsite inspections as part of a CTB agreement. He was apparently under the misimpression that this number would be acceptable to President Kennedy. In the opinion of British Labor Party Leader (later Prime Minister) Harold Wilson, this misimpression probably resulted from the fact that the U.S. Ambassador to the Geneva negotiations was "often vague." G. SEABORG, KENNEDY, KHRUSHCHEV, AND THE TEST BAN 178-81 (1981). Kennedy eventually offered to reduce the U.S. demand for annual inspections to seven, but the two leaders were unable to agree to the obvious compromise at five. Available evidence suggests that each
At this time, however, a new verification concept entered the debate. U.S. and Soviet scientists, meeting as private citizens rather than as government representatives at the Tenth Pugwash Conference in September 1962, had discussed installing a number of unmanned automatic seismic stations in both the United States and the Soviet Union. Soviet concerns about espionage would be alleviated by the fact that personnel from other countries would not have to be stationed permanently on Soviet soil. In December, the Soviets expressed their willingness to have such stations installed in the Soviet Union.\footnote{42}

In the spring of 1963, Premier Khrushchev accepted President Kennedy's proposal to negotiate a ban on nuclear tests in the atmosphere, under water, and in space, since compliance with a ban on tests in these environments could be verified without in-country seismic instrumentation or on-site inspections. The Limited Test Ban Treaty\footnote{43} signed in August of that year forced testing underground. Since the political opposition to testing had been rooted primarily in fears about fallout from atmospheric testing, rather than in opposition to the development of more advanced nuclear weapons, the opportunity to prohibit all nuclear testing passed.\footnote{44}

\footnote{42. NAS, supra note 31, at 177. The fact that the 1962 Pugwash Conference produced an idea that later became a foundation for government-to-government negotiations was an important precedent for the NRDC-SAS initiative nearly 25 years later. See infra text accompanying note 59.}


\footnote{44. Even during the final Moscow negotiations on the Limited Test Ban Treaty, the U.S. representatives tried to persuade Khrushchev to agree on "the nature and number of the inspections" so that "we can get a comprehensive agreement on the end of all nuclear testing" in those talks. Hand-delivered letter from Kennedy to Khrushchev in Ambassador Harriman's files, quoted in G. SEABORG, supra note 41, at 240-41. Khrushchev leader was dealing with powerful domestic opponents to any further compromise. NAS, supra note 31, at 193. Even if the sides had been able to compromise on five inspections, however, they would have remained far apart on other verification issues, such as the rights of the inspectors and the establishment of seismic control posts to monitor the events from which the inspectors would select what they wanted to see.}
After entry into force of the Limited Test Ban Treaty, both the United States and the Soviet Union continued to test nuclear weapons at "a high rate" and "added significantly to the variety and sophistication of their nuclear weapons."\(^4^5\) Eleven years passed before negotiations resumed on further restrictions on nuclear weapon testing.\(^4^6\)

The Nixon Administration concluded a Threshold Test Ban Treaty (TTB Treaty) with the Soviet Union to prohibit underground nuclear tests with yields greater than 150 kt (approximately ten times the size of the Hiroshima bomb).\(^4^7\) This particular threshold was selected both because explosions in this range could be readily detected and identified without seismic stations in the Soviet Union or onsite inspections and because this yield level "was related to our present test program at the time."\(^4^8\) Accordingly, the Treaty relied on long-distance seismic measurements, satellite photography and other "national technical means"\(^4^9\) of verification, plus two cooperative measures agreed upon in the Treaty's Protocol. Each side agreed that for the purpose of calibrating data collected telesismically, it would supply the other side with data on the geological characteristics of its

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refused. Glenn Seaborg, then the Chairman of the Atomic Energy Commission, later wrote that "I regard the failure to achieve a comprehensive test ban as a world tragedy of the first magnitude," and Ambassador Harriman said that "[w]hen you stop to think of what the advantages were to us of stopping all testing in the early 1960s when we were still ahead of the Soviets it's really appalling to realize what a missed opportunity we had." G. Seaborg, supra note 41, at 242.

45. Id. at 288.

46. The 1974 negotiations were initiated not because of environmental concerns or strong political demand in the United States or in other nations, but because President Nixon, bedeviled by the Watergate scandal and unable to complete the SALT II Treaty in time for a long-scheduled summit, wanted to conclude quickly an arms control treaty that would not be controversial. NAS, supra note 31, at 197.


48. Threshold Test Ban and Peaceful Nuclear Explosion Treaties: Hearings on Executive N Before the Senate Comm. on Foreign Relations, 95th Cong., 1st Sess. 49 (1977) [hereinafter Hearings/Exec N/95] (testimony of Vice Admiral Patrick J. Hannifin on behalf of the Joint Chiefs of Staff).

49. Threshold Test Ban Treaty, supra note 47, Art. II(1).
nuclear test sites and that it would provide the yield, time, depth, and coordinates for two nuclear weapon tests at each test site. A companion Peaceful Nuclear Explosions Treaty concluded by the Ford Administration in 1976 (PNE Treaty) similarly banned underground explosions for “peaceful” purposes at yields greater than 150 kt. This second treaty was necessary to reinforce the TTB Treaty since weapons information can be obtained from tests at a given magnitude regardless of their purpose.

By the time of the NRDC initiative, twelve years after the TTB Treaty was signed, these Treaties had still not been ratified. The Ford Administration did not want them debated in the middle of a Presidential election campaign, the Carter Administration gave them low priority because it was trying to negotiate more important strategic arms and CTB treaties, and the Reagan Administration took the view that reliance on teleseismic verification of compliance with the threshold was inadequate.

Both sides stated that they were complying with the threshold limit during this long hiatus despite President Reagan’s allegations, in a statement to Congress (disputed by the Director of Livermore National Laboratory which designs approximately one-half of the U.S. nuclear weapons), that the Soviets had “likely” exceeded the limit on several occasions.

50. Specifically, each would provide information on “the rock characteristics of geological formations and the basic physical properties of the rock; i.e., density, seismic velocity, water saturation, porosity and the depth of the water table.” Protocol to the Threshold Test Ban Treaty, supra note 47, at 169.

51. Id.


55. REPORT, supra note 54, at 4.


57. Id. at 4.
The Carter Administration revived President Kennedy's effort to negotiate a ban on all nuclear testing. During two years of negotiations at Geneva, delegates of the United States, Britain, and the Soviet Union made significant progress on many issues, including two critical verification questions. The three nations agreed that ten unmanned stations with specified high-quality seismic equipment and "sophisticated encryption devices to ensure authenticity of data" would be emplaced at designated locations in the United States and the Soviet Union. They also concluded that onsite inspections could be handled by "challenges," without quotas. Any request for an inspection that was denied by the suspected party would "have to be taken into account in assessing the probability that an alleged test had occurred." But the CTB Treaty was not concluded. The Carter Administration's SALT II (Strategic Arms Limitation) Treaty proved unexpectedly controversial, and the Administration did not want to complicate its already problematic ratification process by concluding another nuclear arms control agreement at the same time. In addition, although the Joint Chiefs of Staff had concluded, at least for the public record, that it could "with some less efficiency" accept a CTB Treaty, "senior military officers, whose support was critical to the ratification of SALT II, were known to be concerned about the consequences of a ban."

After the election of President Reagan, the U.S. Government chose not to resume CTB negotiations. The Government took the view that "as long as the United States... must rely upon nuclear weapons to deter aggression... some level of nuclear testing will continue to be required." As a senior Reagan administration official stated, "it is difficult..."


59. NAS, supra note 31, at 201.

60. Hearings/Exec. N/95, supra note 48, at 46 (testimony of Admiral Hannifin).

61. NAS, supra note 31, at 199-200.

cult to envision circumstances where some level of testing would not be necessary to insure the safety, reliability, effectiveness, and survivability of our nuclear weapons." In response to the argument that a CTB would cause the Soviets to have the same weapons degradation that the United States experienced, the Administration suggested, in 1985, that because verification could not be perfected, the Soviets could cheat:

We cannot be certain that a CTB would equally constrain the Soviets. . . . [I]t is quite possible that the Soviet military nuclear technology base and most of their nuclear stockpile could be preserved and maintained indefinitely with tests of a few tens of kilotons in violation of a total testing ban. Equally important, or perhaps more important in this context, are verification uncertainties. . . . Even with monitors on Soviet soil and on-site inspections, verification of a CTB would involve considerable uncertainties . . . especially if we were largely dependent upon remote teleseismic monitoring. All experts agree that there is some lower limit below which nuclear tests in hard rock cannot be detected with remote seismic monitors; the usual figures cited are one, two, or at most a few kilotons. . . . By exploding a device inside a hollow underground cavity [larger tests can be made to appear smaller], a militarily significant nuclear test program conducted in this way could be unrecognized by a network of remote teleseismic monitoring stations.

In addition, the Reagan Administration also concluded that even the 1974 Threshold Test Ban Treaty should not be ratified because the verification provisions negotiated by the Nixon Administration were not adequate. "[W]e cannot effectively verify Soviet compliance with the 150-kiloton

63. Nuclear Testing Issues: Hearings Before the Senate Foreign Relations Committee, 99th Cong., 2d Sess. 6 (1986) (testimony of H. Allen Holmes, Director, Office of Politico-Military Affairs, Department of State). Mr. Holmes added that "the United States sees objective security risks" even in resuming the negotiations. Id. at 8.
threshold. The remote seismic techniques we must rely on today to monitor Soviet tests do not provide yield estimates with the accuracy required for effective verification of compliance."®

The issue of nuclear testing restraints stood at this juncture at the end of 1985. Reversing nearly 30 years of stated policy, the Reagan Administration was refusing even to try to negotiate a CTB, and it was citing verification concerns as one basis for its opposition to a CTB and as the sole basis for its opposition to the decade-old TTB Treaty. In the context of the Reagan policy, the NRDC took action.

B. NRDC's Initiative

The Natural Resources Defense Council has the largest staff of lawyers and scientists of any American environmental organization.®® During the nuclear arms buildup of the Reagan Administration, NRDC became directly involved in issues related to nuclear weapons. In 1981, the NRDC began publishing a series of Nuclear Weapon Databooks®® and Working Papers®® compiling from available technical literature what is known about American and Soviet nuclear weapons and their testing. In 1983, it co-sponsored the conference at which scientists first discussed the concept of a postwar "nuclear winter."®®

Thomas B. Cochran, a physicist on the NRDC staff, stood at the center of the organization's projects related to nuclear energy and nuclear weapons. The idea of installing

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®5. SPECIAL REPORT No. 150, supra note 62, at 2.
®®. NRDC, supra note 66, at 18.
seismic stations around the U.S. and Soviet test sites evolved out of efforts by Cochran and his colleagues to publish databooks listing the sizes and dates of all Soviet and American nuclear tests. The Government announced many tests, and the U.S. Geological Survey reported others, but it became clear that some classified tests at low yields (one to two kilotons) had taken place without detection by any independent sensors. Cochran's colleague William Arkin jokingly suggested that NRDC install its own seismic station in Nevada to monitor these low-level tests. The idea remained only a joke because it seemed somehow unpatriotic for NRDC unilaterally to release information which the U.S. Government was, for some reason, keeping secret, but then another colleague suggested monitoring Soviet tests as well.70

In February 1986, Cochran conceived of the idea of writing letters to President Reagan and Soviet General Secretary Gorbachev, in which the NRDC would ask the "approval" of each government to set up, near each country's test site, seismic stations which would be "manned jointly by a limited number of U.S. and Soviet seismologists, other scientists, and technicians who are not affiliated with the nuclear weapons programs" of the two countries.71 But Cochran scrapped this version of the idea when a Soviet embassy official in the United States unofficially advised him that Gorbachev was unlikely to be receptive, since the proposal would require Soviet governmental approval of a verification plan that had no limits on testing.72

Jeremy Stone of the Federation of American Scientists suggested, as an alternative, that NRDC work with the Soviet Academy of Sciences rather than with the Soviet embassy. Shortly thereafter, Professor Frank von Hippel of Princeton University discussed the idea with Yevgeny P. Velikhov, a vice-president of the SAS and Gorbachev's unofficial science advisor. Velikhov agreed to host an SAS symposium on test ban verification in May 1986, and von Hippel proposed that

71. Undated draft letters to President Reagan and General Secretary Gorbachev, in files of NRDC.
Velikhov invite Cochran, NRDC Board Chairman Adrian DeWind (a New York attorney), and Professor Charles Archambeau, a University of Colorado seismologist who had been advising Cochran about the idea of mutual seismic monitoring.\(^{73}\)

The SAS indeed extended the invitations to Moscow. After two days of discussions between the Americans and Soviet Academy members, the Soviets agreed to the NRDC proposal. DeWind and Cochran quickly drafted a two-page agreement providing that NRDC and SAS would establish “three seismic stations adjacent to each of the principal nuclear weapons testing sites in the two countries” which would be “manned and operated jointly” by the two organizations. The document stated that the parties agreed that “the current state of geophysical knowledge gives reasonable confidence in the detectability, using practical seismic networks, of nuclear weapons tests down to yields at, or below, one kiloton.” It also stated that the findings of the project would help to demonstrate “verification procedures to be used during a test moratorium or under a nuclear test ban treaty.” The Soviets insisted on writing into the agreement, that commencement of the project was to begin before the end of June “if possible.”\(^{74}\) Why the Soviets insisted on so much speed is not clear, but the Soviet Government’s one-year self-imposed moratorium on nuclear testing was due to expire on August 6th, and those in the Soviet hierarchy who favored extending the moratorium, together with those who hoped to put pressure on the U.S. Government to join it before it expired, may have wanted to demonstrate some progress before that date.

The one-month provision for commencing the project put enormous pressure on the NRDC. The Council had to select the equipment to install in the Soviet Union, put together a team of scientists willing to live in a remote area of the Soviet countryside while operating the stations, raise hundreds of thousands of dollars to obtain the equipment,

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\(^{73}\) Lin, supra note 70, at 34.

and obtain from the U.S. Government any licenses necessary to take the equipment to Kazakhstan, near the Soviet test site at Semipalatinsk. Once those licenses were granted, the NRDC would also have to prepare for the Soviet's reciprocal enterprise in Nevada, by helping the Soviet scientists obtain visas, scouting appropriate sites for seismic stations near the Nevada Test Site, and obtaining any permits necessary for the establishment of the Soviet stations.

The agreement between the two groups was treated as significant news by the U.S. press. The New York Times covered it on page three the next day, and other major magazines and newspapers gave the story prominent attention. Prestigious foundations supported the project by speedily providing one million dollars. The Council assembled a seismological team and, in one of the events examined in detail in this study, the U.S. Government granted the necessary export licenses before June 30th, enabling the NRDC to meet its contractual obligation to the Soviet Academy.

The U.S. team of nine scientists arrived in Moscow on July 4th, and two days later, it established its first station near Karkaralinsk, just 120 miles west of the Semipalatinsk test site. In this first phase of the project, the team brought


77. The team included Dr. Charles Archambeau, a University of Colorado expert on seismic monitoring of nuclear explosions, and Drs. John Berger and James Brune of the Scripps Institute of Oceanography at the University of California-San Diego. Natural Resources Defense Council, Nuclear Test Ban Verification Project Slide Show Script, December 16, 1986 [hereinafter NRDC Slide Script]. See also telephone interview with S. Jacob Scherr (Sept. 21, 1988).

78. Despite their pressure on NRDC to begin the project by the end of June, the Soviets needed a few extra days to prepare to host the Americans. Presentation by S. Jacob Scherr, Senior Attorney, NRDC, to a meeting of the Lawyers Alliance for Nuclear Arms Control, Washington, D.C. (Dec. 15, 1986) [hereinafter Presentation by Scherr]. See also telephone interview with S. Jacob Scherr (Sept. 21, 1988).
relatively unsophisticated surface seismometers. But in the second phase, it substituted extremely sensitive equipment that had to be installed in boreholes drilled three hundred feet into the earth's surface and that could record waves at several different frequencies simultaneously. The team installed the first surface seismometers and took its first recordings—of earthquakes—on its first day at the site. U.S. scientists remained in the Soviet Union for the next year, and by the end of the first summer, they had selected the locations for all three sites and had monitored nuclear explosions detonated in Nevada.

Meanwhile, the NRDC prepared to receive the Soviet scientists who would establish three similar stations near the Nevada Test Site. The NRDC identified some potential locations from which the Soviets might choose. It prepared scientific briefings and meetings for the Soviets similar to those the Americans had attended in Moscow. Additionally, the NRDC intervened with the State Department regarding acquisition of the necessary visas for the Soviet scientists.

In another aspect of the project analyzed in this article, the U.S. Government did not grant the Soviets the visas they requested that would have permitted the Soviet scientists to

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79. A seismometer is a mechanical device consisting of a casing on the outside and a heavy mass on the inside which is supported by springs. When the earth vibrates, the casing and the mass move relative to one another, and electronic instruments measure the differential movement. That movement provides a measure of the earth's motion. Broad, U.S. Group Checks Soviet Atom Site, N.Y. Times, July 14, 1986, at A1, col. 5.

80. NRDC Slide Script, supra note 77.

81. The Soviets continued their moratorium on nuclear tests until early 1987. As a result, no Soviet tests were recorded in 1986, and when Soviet testing resumed, the Soviets required NRDC temporarily to turn off its equipment. At the time the agreement was signed, the Soviets had given no assurances that NRDC would be allowed to monitor tests in the event that testing was resumed. Presentation by Scherr, supra note 78. See also telephone interview with S. Jacob Scherr (Sept. 21, 1988). In June 1987, NRDC and SAS reached a new agreement under which more stations would be built that would be allowed to record Soviet nuclear tests, but these stations would have to be operated by Soviet scientists and moved further from the Soviet test site. Natural Resources Defense Council and Academy of Sciences of the USSR, USA-USSR Nuclear Test Ban Verification Project Agreement (June 25, 1987).

visit the proposed sites. Instead, the United States gave the Soviets two choices. The scientists could travel to the United States under U.S. Government (rather than NRDC) auspices, in which case they would be required to visit the Nevada Test Site, observe a nuclear weapon test, and either observe a demonstration of a yield-measurement device known as CORRTEX or measure the yield of the blast with similar equipment of Soviet origin. If the Soviets selected this option, they could go anywhere else they wanted, including the potential seismic site locations. Alternatively, the Soviet scientists could travel as private citizens invited by NRDC, but in that case they could stay for only one week, and could go only to New York, Washington, La Jolla (site of the Scripps Institution of the University of California), and Dallas (where the seismometers are manufactured).

The Soviets accepted the second option. At La Jolla, their NRDC hosts presented them with rock samples and geological maps from which the Soviets selected three potential locations for seismic stations. After one week, however, the Soviets left, never having seen the station sites, much less set up camp as the American team had done in Kazakhstan. A subsequent request to visit the selected sites was similarly conditioned by the State Department in February 1987. The Soviets were given only the choices of an unrestricted visit under government auspices including observation of a nuclear test, or a seven-day trip during which they would again be barred from the proposed sites. They elected to stay home.

Despite this development, the Soviets did not terminate the project, and NRDC sought to establish stations for the Soviets at the locations they had selected. Even if the Soviet scientists were never permitted at the sites, if permission could be obtained to establish the stations near the Nevada Test Site, the U.S. scientists could make the seismic recordings and send the recordings to Moscow either by mailing

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83. U.S. Department of State, Outgoing Telegram No. 305164 from Secretary George Schultz to European and other Embassies (Sept. 27, 1986).
84. Id.
86. Telephone interview with S. Jacob Scherr (Sept. 21, 1988).
the computer tapes or by transmitting the data via satellite.\textsuperscript{87} But all three of the sites were on federally owned land.\textsuperscript{88} Consequently, the stations could not be constructed\textsuperscript{89} without U.S. Government permission. In the third of the aspects of this project considered in greater detail below, the United States granted the requisite authorization.

In summary, the U.S. Government had to respond to NRDC requests for export licenses, travel visas, and permits to set up stations on federal land near the Nevada Test Site. The United States granted the export licenses very quickly, conditioned the visas in a manner so unacceptable to the Soviets that they never went to the potential station sites, and granted the station permits. The Allison framework may help to explain this apparently inconsistent government reaction.

\textbf{III. Model I}

Model I,\textsuperscript{90} embodying the "central tradition in the social sciences," is the domain of the armchair analyst. The student of governmental policy begins with observed outcomes and reasons backwards to discover explanations for those outcomes. In so doing, the observer makes three critical assumptions. First, the relevant unit to observe is the nation,
or, in a variant of Model I, a nation's ruling clique. Second, nations have goals, and they act rationally to achieve them. Events do not just happen nor do they emerge chaotically from other events. Rather, "[t]he nation . . . conceived as a rational, unitary decisionmaker, is the agent . . . [and the] agent selects the alternative whose consequences rank highest in terms of his goals and objectives." Third, the nation makes its rational decisions not incrementally but at a particular time.

Thus, the actors in the international arena are both national and rational, and they make unitary decisions to maximize value, not unlike the utilitarian concept of individual human choice. The analyst of a policy decision, then, has a clear task: "[i]f a nation performed a particular action, that nation must have had ends toward which the action constituted a maximizing means. . . . The puzzle is solved by finding the purposive pattern within which the occurrence can be located as a value-maximizing means." Applying this model to the Cuban Missile Crisis, Allison constructs rational responses that may answer the major questions raised by that set of events. Why did the Soviet Union install nuclear missiles in Cuba? The Soviet Union's motive may have been to force U.S. missiles out of Turkey, or to provoke the United States into attacking Cuba so that the Soviets could attack Berlin, or to defend Cuba, or to show the world that the United States was "too liberal to fight," or to double Soviet offensive missile power. Why did the United States respond with a blockade? Allison concludes that the blockade was a "middle course" between a diplomatic response and an air strike or ground invasion, it forced the Soviets to make the first warlike move, it took advantage of U.S. naval strength, and it kept the confrontation non-nuclear.

From the perspective of Model I, the United States (or the Reagan Administration) must have made a rational deci-

92. "Happenings in foreign affairs are conceived as actions chosen by the nation or national government." Id. at 32, 37.
93. Id. at 32-33.
94. Id. at 33.
95. Id.
96. Id. at 43-54.
97. See id. at 61.
sion about how to respond to the NRDC’s test ban verification project. We should now be able to deduce why the United States acted as it did by concentrating on the outcome and asking what values were thereby maximized.

A first pass at such an analysis is simple enough. The United States quickly granted the NRDC’s export license application in order to obtain unique seismological data that would supplement U.S. intelligence activities. Neither the U.S. Government nor any U.S. citizen had ever been able to install seismic sensors near the Soviet test site. The NRDC project could yield several types of valuable information.

First, if the Soviets continued their announced testing moratorium (which in fact lasted until February 26, 1987),98 the United States would have a powerful resource with which to detect noncompliance with the Soviets’ stated policy.99 While the precise abilities of the three NRDC stations would depend on the “noise level” (i.e. ground noise) at the station locations, “such a network, if well-sited and stringently operated, could reduce the detection threshold at the Semipalatinsk test site and environs during the period of operation.”100 More particularly, the United States realized that the “network should be able to detect well-coupled events considerably below a kiloton at the Soviet test site.”101


99. Indeed, the President was concerned that the Soviets might not be living up to their proclaimed suspension of testing, for he later said that “there were numerous ambiguous events during this period [the Soviet moratorium] that can neither be associated with, nor disassociated from, observed Soviet nuclear test-related activities.” President’s Message to the Congress and the President’s Report on Soviet Noncompliance with Arms Control Agreements, 23 WEEKLY COMP. PRES. DOC. 239, 242 (Mar. 10, 1987). Of course, distant seismic sensors could detect large Soviet tests at Semipalatinsk, but the NRDC instruments would be able to detect tests at much smaller yields.


Second, if the Soviets announced an end to their moratorium and allowed NRDC to monitor its tests, the United States would reap two benefits. To begin with, the United States would learn a great deal about close-in monitoring near Semipalatinsk which would be relevant if the United States and the Soviets eventually negotiated a CTB Treaty which included in-country seismic monitoring. At the very least, the NRDC experience would help the United States to formulate its negotiating position in those negotiations, because the Government would know much more about the problems of monitoring seismic events in that area. Perhaps more importantly, such monitoring could help to end the considerable uncertainty surrounding Soviet adherence to their pledge to abide by the TTB Treaty during the extended pendency of its ratification. Consideration of this last possible advantage requires an explanation of the "bias" problem.

Compliance with the TTB Treaty's yield limit of 150 kt was never possible to verify by examining the designs of the weapons exploded. Weapons design remains, for each side, a closely guarded secret. The yields of nuclear explosions can only be measured indirectly. Certain cooperative measures might make this task easier. For example, the Soviets might allow U.S. scientists to visit the Soviet test site during weapons tests and take samples of the radioactive debris left behind. The 1974 treaty provided, however, that each side would rely on verification by "national technical means," which includes all available intelligence sources

102. The United States would obtain "measurements of seismic noise levels, data to evaluate propagation and attenuation of seismic waves at regional distances, and data applicable to research on discrimination between earthquakes and explosions.” DARPA Memorandum, supra note 100, at 4.

103. This debris would enable the U.S. scientists to make quite accurate measurements of yield, and would also enable them to obtain considerable information about the nature of the weapons and the purposes of the tests, and for this reason neither the U.S. nor the U.S.S.R. has ever proposed this type of sampling for purposes of TTB verification. See Threshold Test Ban Treaty and Peaceful Nuclear Explosions Treaty: Hearings Before the Senate Comm. on Foreign Relations, 100th Cong., 1st Sess. (testimony of Lt. Gen. Dale A. Vesser, Director for Strategic Plans and Policy of the Joint Staff, on behalf of the Joint Chiefs of Staff).

104. Threshold Test Ban Treaty, supra note 47, Article II(1).
but in this case refers primarily to the monitoring of the waves from an explosion at seismic stations beyond the borders of the country being monitored.105

Yields of nuclear explosions detected by teleseismic means are estimated by comparing the observed amplitudes of certain seismic waves with a calibrating ratio. This ratio is obtained by correlating the known yields of U.S. tests with the amplitudes of the waves the tests produce at teleseismic distances.106 The validity of the comparison using the yield/magnitude ratio based on results emanating from the Nevada Test Site rests on the assumption that the seismic waves from Nevada propagate in a manner similar to the ones from Semipalatinsk. In fact, they do not. Soviet explosions detected on seismic monitors appear to be larger than U.S. explosions of the same yield.107 This difference is called the systematic "bias" in measuring Soviet yields, and it appears that using the Nevada calibration curve exaggerates the yield of Soviet tests by 40 to 50%.108 But experts disagree about the precise degree of this bias.109 In addition, the peculiar

105. In the hard rock of the Semipalatinsk test site, explosions can reliably be teleseismically detected and identified at yields down to 1 kt without any seismic measurements from Soviet stations. Nuclear Testing Hearings, supra note 74, at 249 (prepared statement of Lynn R. Sykes, Higgins Professor of Geological Sciences, Columbia University).


107. Hearings/Exec N/100, supra note 106, at 68 (testimony of Dr. Nordyke).

108. Id.


This difference of opinion has also had important political ramifica-
geophysical aspects of any particular test can cause the deviation to be greater or smaller than average, leading to a random bias on top of the systematic bias. Not surprisingly, soon after U.S. and Soviet observance of the TTB Treaty limits began, certain Soviet tests raised questions about whether the Soviets were observing the 150 kt limit, and that with the passage of time, charges were heard that the Soviets were engaged in massive cheating on their commitment.

If the Soviets allowed the NRDC to monitor nuclear tests from the Project stations near Semipalatinsk, some of the uncertainty about Soviet yields might be resolved, and the charges of Soviet cheating, which tend to inhibit further progress toward arms control agreements, might abate. Even if the Soviets did not test, however, NRDC's recordings from Kazakhstan might help to resolve the question of bias. The NRDC stations in the Soviet Union would record

110. Id. at 67-68. Furthermore, a previously untested type of nuclear device designed to produce a yield of exactly 150 kt might actually produce a larger yield, due to miscalculation. To permit each country to design tests to produce yields as large as 150 kt, the parties to the TTB Treaty agreed that "one or two slight, unintended breaches per year would not be considered a violation of the Treaty," although they would be a cause for concern. U.S. ARMS CONTROL AND DISARMAMENT AGENCY, supra note 43, at 166.


112. Specifically, the thought was that "[i]f Soviet testing resumes and the stations are allowed to record, the data may provide a means of calibrating the site using Lg waves [one of several types of waves observable on seismographs] and comparing these relatively close in measurements with more distant ones. These close-in stations with their probable azimuthal distribution may provide useful information about the mechanisms affecting surface wave yield estimates." DOE Memorandum, supra note 101, at 6. The DARPA Memorandum, supra note 100, at 6, suggests several technical reasons that the results might remain ambiguous despite NRDC monitoring.
clear explosions of known yield at the Nevada Test Site. Scientists might be able to use the amplitude of signals from Nevada, as recorded in Kazakhstan, to compute how well signals are transmitted between those places, and might, therefore, be able to estimate with greater reliability the degree of attenuation of explosion-generated seismic waves originating in Kazakhstan and recorded in Nevada.¹¹³

A further possible advantage to the United States of the NRDC project was one that NRDC itself claimed for its work. U.S. and Soviet negotiators in 1978 had discussed at length the idea of establishing reciprocal seismic monitoring stations. No treaty resulted, however, and no one had ever tested whether the Soviets would actually allow Americans to establish seismic stations in the Soviet Union.¹¹⁴ The NRDC project could help to pave the way for further restraints on nuclear testing by demonstrating that the Soviets really

¹¹³. As DARPA stated, “[d]ata could be useful . . . to promote general understanding of geological structure and seismic wave propagation in the area” of Semipalatinsk. DARPA Memorandum, supra note 100, at 5. “Some estimate of regional bias (as opposed to test site bias) may be formed but extrapolating it to the test site will introduce additional uncertainty over and above that which may exist due to the variations among the three stations.” DOE Memorandum, supra note 101, at 6. Indeed, a group of University of Nevada scientists who studied the first recordings from the NRDC-SAS stations in Kazakhstan found that the apparent magnitudes of distant earthquakes recorded at those sites were considerably greater than the apparent magnitudes of the same events as recorded at other locations. They concluded that the total bias of the Kazakhstan sites was twice as great as the bias assumed in the U.S. Government’s official estimates of Soviet test yields. “[T]he low bias estimate could inflate yield estimates of 150-kiloton explosions by about 100 kilotons.” Kerr, Geophysics Smorgasbord was Spread in Baltimore, 236 Sci. 1425, 1426 (1987).

¹¹⁴. Despite the Reagan Administration’s coolness toward resuming negotiations, the Soviets had remained publicly committed both to negotiating a comprehensive test ban treaty and to monitoring compliance by using, among other devices, in-country seismic monitoring stations. See, e.g., Press Release of the Soviet Embassy to the United States (June 23, 1987). The press release contains the text of a Soviet draft CTB Treaty which includes, among other verification provisions, a clause providing that “a network of seismic stations with standard specifications shall be established on the territory under the jurisdiction or control of the States-Parties to the Treaty, to ensure the continuous international exchanges of level II seismic data in accordance with agreed guidelines which will form an integral part of the Treaty. These stations shall operate with the participation of observers from among the members of an international inspectorate.” Id.
would allow the necessary in-country monitoring. Furthermore, this instance would be the first occasion on which U.S. scientists would develop working relationships with their Soviet counterparts in the installation and staffing of such stations and the collection and distribution of the data.\textsuperscript{115}

While the foregoing discussion illustrates why the U.S. Government might have wanted to encourage the NRDC project, at least by expeditiously granting a license to export the seismometers, there are also reasons why the United States might have wanted to obstruct the project.

First, improved monitoring of Soviet tests might succeed too well. For example, marginal gains in reducing the degree of uncertainty about yield bias might mislead the American public into thinking that the bias problem had been solved.\textsuperscript{116} Worse, the public might erroneously think that all nuclear test verification problems had been solved and that the United States should, therefore, be willing to sign a CTB Treaty that included provisions for in-country seismic verification. The project "may increase international perceptions that the Soviets will be reasonable or cooperative in permitting adequate verification of a CTB" Treaty,\textsuperscript{116}

\textsuperscript{115} The Reagan Administration recognized the value of joint U.S.-Soviet research projects in nuclear test detection and identification. "Upon review of a number of possible scientific disciplines, it was concluded that . . . nuclear testing issues appear to offer the most promising avenues for . . . 'scientific' cooperation and data exchange." U.S. DEPT. OF STATE, VERIFYING NUCLEAR TESTING LIMITATIONS: POSSIBLE US-SOVET COOPERATION 1986 (Special Report No. 152), reprinted in REPORT, supra note 54, at 44. The Administration's report gives the following example of cooperation: "Joint Soviet-US efforts could resume on the criteria for the location and operation of [remotely operated seismic] stations to include characterization of the sites which would have to be available to ensure accurate instrument operation. Such an effort would have to include data gathering from potential sites for remote stations in the Soviet Union and should include installation of research instruments to validate that such instruments can operate reliably, to include data transmission, throughout the broad range of environmental conditions within the Soviet Union." \textit{Id.} at 56. While the NRDC project does not have these precise aims or requirements, it is an effort along the lines the Administration was suggesting.

\textsuperscript{116} "[D]ata will likely be used, regardless of other scientific interpretations, to support argument that seismic waves from STS [Semipalatinsk] are biased to produce larger signals for a given yield than those from U.S. calibration explosions at NTS [Nevada]." DARPA Memorandum, \textit{supra} note 100, at 6.
and it "will be exploited to increase international pressure for [a] moratorium. . . . Ambiguities and normal scatter in data will likely permit selection of data to portray easy monitoring of U.S.S.R."117

In addition, the reciprocal aspect of the project—the stations near the Nevada Test Site—threatened to reveal the full degree of U.S. testing. The United States apparently sought to deny the Soviets easy access to information about some low-level U.S. tests.118 The Soviets would not necessarily pick up data regarding these tests through teleseismic monitoring, but sophisticated NRDC-SAS stations ringing the Nevada Test Site would end this secrecy and probably give the Soviets information not only about the existence of such tests,119 but about test yields as well.

With this information in mind, the Model I analyst can explain why the U.S. Government quickly granted the NRDC export license application, but denied the Soviets permission to go to Nevada under the terms they sought. On balance, the United States wanted seismic data from Kazakhstan—data to confirm Soviet adherence to the moratorium and perhaps to help resolve the bias issue—more than it feared that such data would be misinterpreted. But the United States

117. Id. at 4. Indeed, the Soviets might even deliberately try to cause NRDC to report false seismic data, thereby misleading the technical community with respect to the ability of such stations to detect and identify tests. "Opportunities to alter (falsify) [sic] technical data would depend upon preventive measures such as procedural and technical controls. We do not know enough about the NRDC/SAS operational plans and equipment to speak definitively to this point." DOE Memorandum, supra note 101, at cover letter.

118. According to "one federal official," the Government now classifies tests with yields less than five kt. Broad, Some Atomic Tests Being Kept Secret by Administration, N.Y. Times, Jan. 29, 1984, at 1, col. 3. In January 1988, an NRDC study revealed that the U.S. had concealed at least 117 nuclear explosions at the Nevada Test Site, 20% of the total number of tests, and that nearly all of the secret tests had yields smaller than 1 kiloton. Broad, Seismic Data Show 117 Secret U.S. Atom Tests, N.Y. Times, Jan. 13, 1988, at 1, col. 3.

119. An official at Livermore National Laboratory has suggested that the Soviets already know about the existence of every U.S. test because each one requires the movement of hundreds of technicians and many vans, and the Soviets can observe these movements through satellite photography. Broad, Some Atomic Tests Being Kept Secret by Administration, supra note 118.
did not want the Soviets to have stations at the Nevada Test Site. The Soviets had urged NRDC to install equipment in Kazakhstan right away, but were not planning a reciprocal visit until three months later. By expediting the export license, the United States could obtain data from the Soviet Union for three months, including recordings of tests in Nevada, before having to tip its hand regarding the Soviet visas. Then the United States could deny the visas (or impose conditions likely to be unacceptable) so that the stations in Nevada would never be established. The Soviets might close down the Kazakhstan stations in retaliation, but the United States would already have data from those stations.

This “first pass” Model I explanation, however, does not withstand closer analysis. First, the Soviets did not have the same need for the Nevada data that the United States had for the Kazakhstan data. The U.S. Geological Survey maintains a network of unclassified seismic stations throughout the country and publishes the data it collects. Some of these stations are closer to the Nevada Test Site than the NRDC stations are to the Semipalatinsk test site. Even if the Soviets wanted data on the number and yields of all U.S. tests and were not able to get such information from published sources, denying or conditioning the Soviet visas would not effectively deny them the information. The NRDC would be able to set up the stations on its own and simply provide the data to the Soviets.

120. Telephone interview with Walter Nicks, Research and Design Engineer, Seismological Laboratory, University of Nevada-Reno (April 21, 1987). These stations pick up most U.S. tests, whether announced or unannounced. The stations do not, however, detect the very smallest tests that the more sophisticated NRDC-SAS equipment would surely register. From 1980 to 1984, the United States conducted between four and eleven unannounced tests which were not detected by any unclassified monitoring system. T. Cochran, R. Norris, W. Arkin & M. Hoenig, Unannounced U.S. Nuclear Weapons Tests, 1980-1984 (Nuclear Weapons Databook Working Paper 86-1, January 1986).

121. The NRDC might have chosen not to do so. After all, the discomfort with the appearance of unilaterally aiding the Soviets led Cochran to a seismology exchange rather than a Nevada Test Site monitoring project in the first place. The fact that the Soviets were supplying data to the NRDC, however, meant that it did not seem unpatriotic for the NRDC to supply data to the Soviets, and the NRDC did in fact plan to operate the stations without the Soviets after the visa incident.
In addition, since the United States did offer to let the Soviets go to Nevada if they also observed a U.S. test and measured its yield, the United States could not have been very fearful of Soviet monitoring of the Nevada site. The Soviets might have accepted the condition and established their Nevada stations while also obtaining additional nonseismic information. This additional unsought-after data would in no way reduce the quality of the seismic information they later obtained. Finally, the "first pass" explanation cannot account for the granting of the station permits, enabling NRDC to emplace the seismic stations on federal land so that it could provide the Soviets with the data.

A second, somewhat different version of this explanation of the U.S. response takes public opinion into account. The dealings among NRDC, the Soviet Academy, and the U.S. Government were hardly taking place in a sealed chamber. Indeed, the negotiations were widely reported in the press. All facts considered, it is reasonable to posit that the United States preferred that the NRDC project not be carried out (because the disadvantages of obtaining misleading data, generating unwarranted public enthusiasm for a CTB, and exposing secret U.S. tests outweighed the intelligence value of the data that would be collected from the Soviet Union). Nevertheless, the United States wanted the Soviet Government, rather than the U.S. Government, to be blamed in the court of world opinion for the failure of the NRDC effort. In that event, a good U.S. strategy might have been to appear to be fully cooperative with the venture, by granting the export licenses, imposing only reasonable conditions on the Soviet visas, and granting the station permits. Regarding the visas, the United States might even have offered the Soviets an invitation that appeared to give them more access to Nevada than the Soviets originally sought, so that the Soviets could not persuasively claim that the United States was denying them the right to participate in the seismology exchange. If the United States could be confident that the Soviets would reject both sets of conditions imposed upon them, at least one of which appeared reasonable, the United States could torpedo the project without taking the public heat for doing so.

122. See supra text accompanying notes 75-76.
The attractiveness of this explanation depends, however, on U.S. confidence that the Soviets would in fact reject both offers, and if they did reject the offers, they could not successfully characterize the U.S. response as a thinly disguised refusal of the visas. Both assumptions are sufficiently weak as to cast doubt on this theory of U.S. motivation. While dependence on NRDC to provide the seismic data was obviously less attractive to the Soviets than being able to operate stations in Nevada, the dependence was nevertheless better than nothing. The Soviets had no reason to think that NRDC would provide less than full and accurate data (particularly since simultaneously recorded U.S. Geological Survey data might reveal any gaps). Furthermore, the Soviets under General Secretary Gorbachev had proved particularly adept at test ban public relations, and the United States could not confidently have counted on packaging a rejection as a generous offer.

A third and somewhat more sophisticated variant of the Model I analysis focuses on the CORRTEX issue. By 1976, when the PNE Treaty was signed, U.S. scientists had developed an electronic sensing device that would be used as one step in a process to measure the yields of Soviet peaceful explosions which qualified for U.S. monitoring under the Protocol to that treaty.\textsuperscript{123} Between 1976 and 1981, scientists at

\textsuperscript{123}. Hearings/Exec N/95, supra note 48, at 92 (testimony of Alfred D. Starbird, Assistant Administrator for National Security, Energy Research and Development Administration). The Protocol provided that for any "peaceful" nuclear explosion (one conducted away from a designated weapons test site) consisting of individual blasts, each of which was below 150 kt in yield but which, in the aggregate, exceeded 150 kt, the party carrying out the explosion had to notify the other party in advance and to permit it to make its own on-site measurements of yield. Protocol to the Peaceful Nuclear Explosions Treaty, art. VI, reprinted in U.S. ARMS CONTROL AND DISARMSAMENT AGENCY, supra note 43, at 179-87. No such requirements were imposed under the Threshold Test Ban Treaty. Possible explanations for the different approaches to verification in these two companion treaties are (1) that tests at designated test sites could easily be the subject of focused intelligence efforts, such as satellite photography, whereas tests at other locations in the Soviet Union require special verification techniques, and (2) that the detailed procedures of the Peaceful Nuclear Explosions Treaty's Protocol took two years to negotiate, whereas President Nixon, in the midst of the Watergate crisis, wanted a treaty with the Soviet Union which could be negotiated quickly. The procedures of the PNE Treaty were never used because the Threshold Test Ban Treaty,
Los Alamos National Laboratory refined this device into a system called CORRTEX.\textsuperscript{124} National technical means of verification were initially considered adequate with regard to both the TTB Treaty and explosions under 150 kt carried out within the PNE Treaty. The Reagan Administration, however, decided in 1982 that the TTB and PNE Protocols were inadequate, and that the two treaties should not be ratified unless the Soviets agreed to modify them to provide for "direct, accurate" measurements of the yields of tests even at nuclear test sites.\textsuperscript{125} The Soviets, however, showed no interest in renegotiating the treaties they had signed in the 1970's.

In 1984, President Reagan attempted to edge the Soviets closer to accepting a modification of the treaties to allow CORRTEX measurements by proposing that the United States and the Soviet Union observe a nuclear test at each other's test site.\textsuperscript{126} When the Soviets did not respond to this overture, the President in 1985 offered the Soviets a unilat-

\textsuperscript{124} The acronym stands for Continuous Reflectometry for Radius versus Time Experiments. These experiments consist of an electronic unit, a small computer, and one or more coaxial cables. The cables are lowered into a hole drilled into the earth relatively near the hole through which the explosive device was placed. The device sends a rapid series of electronic pulses through the cable. As the shock wave produced by the explosion travels the length of the cable, it short circuits the cable at distances progressively closer to the electronic device. These distances are measured by the speed with which the pulses are reflected by the short-circuit and return to the electronic device. The faster the cable is destroyed, the greater the yield of the explosion. The computer quickly shows the rate of disintegration of the cable and the approximate yield of the blast. U.S. DEPT. OF ENERGY, NEVADA OPERATIONS OFFICE & LOS ALAMOS NATIONAL LABORATORY, CORRTEX (1986) [hereinafter U.S. DEP'T OF ENERGY, NEVADA OPERATIONS OFFICE] (brochure). The brochure adds that "[a]ll equipment for power, recording, and data reduction can easily fit into a small trailer." For a more technical description, see Deupree, Eilers, McKown & Storey, CORRTEX: A Compact and Versatile System for Time Domain Reflectometry, in INSTRUMENTATION IN THE AEROSPACE INDUSTRY & ADVANCES IN TEST MEASUREMENT: PROCEEDINGS OF THE 26TH INTERNATIONAL INSTRUMENTATION SYMPOSIUM (1981).

\textsuperscript{125} Report, supra note 54, at 6, 8.

\textsuperscript{126} SPECIAL REPORT No. 150, supra note 62.
eral visit to the U.S. test site in Nevada to observe a CORRTEX demonstration.\textsuperscript{127} Still the Soviets did not respond. In early 1986, however, the Soviets did agree to a series of meetings in Geneva to discuss test ban issues. These meetings gave the United States another forum in which to try to interest the Soviets in CORRTEX, “but it was clear the two sides had conflicting purposes—the United States wanted to deal with verification proposals and the Soviets wanted to talk about a complete ban.”\textsuperscript{128}

This frustrating effort by the United States to persuade the Soviets to modify the TTB Treaty suggests a CORRTEX-related theory of why the United States quickly granted the NRDC its requested export licenses but conditioned the visas of the Soviet scientists. The U.S. Government may have wanted the NRDC project to fail (because the costs in terms of optimistic interpretations of data and revelation of U.S. testing outweighed the benefits of seismic data collection), but the value of moving the Soviets a step closer to accepting CORRTEX would have been very great—great enough, at least, to make attractive to the United States a package that included both the NRDC project and Soviet participation in a CORRTEX demonstration.\textsuperscript{129}

But this explanation, too, has its gaps. If the United States really wanted to use Soviet interest in the NRDC project to impose pressure to observe a nuclear test and CORRTEX demonstration, it could have focused the pressure more clearly by stating as a policy that the entire NRDC

\textsuperscript{127} Id. Technically, the President did not insist that the Soviets observe CORRTEX. He offered to let them watch a CORRTEX demonstration or to use a non-seismic method of their own choosing to make direct yield measurements of a U.S. nuclear test. Id.

\textsuperscript{128} REPORT, supra note 54, at 6.

\textsuperscript{129} This participation might not only lead, eventually, to better verification of the TTB Treaty, but it might tarnish the image the Soviets had tried to create during their self-proclaimed moratorium, an image of not wanting to dirty their hands by having anything to do with nuclear tests. Observing a U.S. test might not appear to third world countries to be as negative an act as ending their moratorium, but to countries that perceived the world in terms of a North-South struggle, superpower cooperation in nuclear weapons testing might tend to discredit the observer along with the observed. This problem of public relations could, of course, be one of the reasons why the Soviets showed so little interest in President Reagan’s repeated offers to observe a U.S. nuclear weapon test.
project would only be allowed to go forward in the context of Soviet acceptance of President Reagan's standing offer. To have conditioned all three necessary ingredients—the export license, the visas, and the station permits—on Soviet acceptance of the package would have been more logical. In that case, the United States would neither have expedited the export licenses unconditionally nor offered the Soviets the option of working with NRDC on the project in states other than Nevada.\footnote{130}

This explanation is hard pressed to account for the speed with which the export license was granted, and like all\footnote{130} Furthermore, a policy of using the NRDC project to force the Soviets to observe a U.S. test created a significant public relations risk. The Soviets might accept the offer to view a test in a way that made the United States appear to be interested in creating nuclear explosions and the Soviet government interested in ending them. For example, the Soviets might announce that they were visiting the test site most reluctantly, because they opposed continued nuclear testing and were only doing so because the United States had forced them to observe a weapons test as a condition of being allowed to participate in a scientific exchange designed to demonstrate the feasibility of banning all nuclear tests. From a U.S. point of view, any such short-term propaganda victory for the Soviets might be outweighed by the verification gains if the Soviets, having seen CORRTEX in operation, embraced it. But that a demonstration would make a significant difference in the Soviet attitude toward CORRTEX seems unlikely; after all, Soviet scientists had already had ample opportunity to learn about it by reading the open literature on the device.

The reason the Soviets were so negative regarding this device is unclear, but two possible explanations exist. First, they may have felt insulted that the United States demanded additional verification measures (particularly in a climate of U.S. accusations about "likely" violations) after both countries had long ago signed a treaty which did not provide for such measures. Second, the use of CORRTEX to measure the yields of Soviet nuclear tests would require a team of fifteen Americans drilling holes and operating electronic equipment on the Soviet nuclear test site ("a few tens of feet from the emplacement hole") before, during, and immediately after Soviet tests. In many ways, "onsite" CORRTEX inspections would be far more intrusive than onsite inspections under a CTB, because under a CTB regime, no testing would be legitimate, and an inspecting country would only look at a wilderness area where a suspicious event had occurred, not at a nuclear weapons test itself. The Soviets may not have had confidence that their counter-intelligence equipment and procedures could insure that CORRTEX observers and equipment monitored only yields and not radioactive by-products or other indications of the purpose or nature of nuclear tests. \textit{Hearings/Exec N/100, supra} note 106, at 20 (testimony of Robert B. Barker, Assistant to the Secretary of Defense (Atomic Energy)); \textit{U.S. Dep't of Energy, Nevada Operations Office, supra} note 124, at 2.
of the other Model I explanations, it cannot begin to account for the granting of the station permits. If governments are rational actors, the Soviets had some reasons for wanting to establish seismic stations in Nevada. If it were also in the U.S. interest to let the Soviets do so, unconditional grants of visas would have seemed in order. If, on the other hand, letting the Soviets have stations in Nevada were not in the U.S. interest, or were in the U.S. interest only if the Soviets also observed a CORRTEX demonstration, denying or conditioning the station permits would have made more sense than denying or conditioning the visas. With NRDC help, the Soviets would be able to select sites and obtain data without physically setting foot in Nevada, but if permission to construct the stations had been denied, neither NRDC nor the Soviets could have continued to pursue the Nevada end of the seismic verification project.

IV. Model II

To the analyst using Model II, the "U.S. Government" barely exists. A "government consists of a conglomerate of semi-feudal, loosely allied organizations, each with a substantial life of its own." Each of these organizations works, to a large extent, independently of the others, although their outputs are "partially coordinated by government leaders." The behavior of each organization is determined primarily by pre-established routines, and explanation of governmental behavior "starts from this base line, noting incremental deviations." Thus, national governments are not in fact "national," and their conduct cannot be well understood without penetrating the veneer of governmental unity and looking at the conduct of particular agen-
cies or departments. Consideration of more than one such agency is usually necessary. The various aspects of a problem must be delegated to particular offices which were previously given primary responsibility for, and "primary power" over, an area of life (such as diplomacy, or military readiness, or intelligence).\footnote{Id. at 80.}

Governmental behavior is not necessarily "rational," either. The organizations that are the true decision-makers do not look at all aspects of a problem and then carefully canvass all available options in order to maximize utility according to a long-range plan for achieving considered and agreed goals. Instead, these organizations tend to focus primarily on only those aspects of the problem for which they have responsibility, and even when an agency considers more than one piece of a problem, it looks at the pieces one by one. Agencies also tend to attempt solutions that are "good enough" rather than those that are necessarily the best. These solutions may be directed not to the "national interest" or even to the goals of the highest leaders of government. An agency's central concerns may be oriented around maintaining "organizational health" by avoiding decreases in budgets, limitations on personnel, or encroachments by other agencies on the agency's mission.\footnote{Id. at 71-72, 82.} Perhaps most importantly, the organizations operate almost exclusively by "standard operating procedures" (SOPs) rather than by tailoring action to the needs of each situation, because SOPs "permit concerted action by large numbers of individuals, each responding to basic cues."\footnote{Id. at 83.}

To the Model II analyst, leaders appear to play only specialized, severely bounded roles. Leadership decisions are confined by the bureaucratic outputs of various organizations, which are themselves limited by those organizations' own constraints, capabilities, and SOPs. In Model II, "existing organizational routines for employing present physical capabilities constitute the range of effective choice open to

\footnote{Id. at 83. Although Allison does not make the point, a positive feature of governmental use of SOPs is that in situations affecting individuals or corporations, standard responses are consistent with the notion of "equal protection under law"; that is, of like cases receiving similar treatment.}
government leaders confronted with any problem.”

Given this system, the “organizational outputs structure the situation within the narrow constraints of which leaders must make their ‘decisions’. . . . the formal choice of the leaders is frequently anti-climactic.”

In Allison’s characterization of Model II, law plays only a minor role. Allison mentions the law only once in his paradigm for Model II, when he says that the “set of constraints [affecting an organization’s goals] emerges from a mix of the expectations and demands of other organizations in the government, statutory authority, demands from citizens and special interest groups, and bargaining within the organization.” That the law must, at least some of the time, significantly affect SOPs and, as a result, significantly influence decisional outcomes, seems evident.

Allison’s evidence for the validity of Model II analysis, based on his study of the Cuban Missile Crisis, is striking, for Model II resolves some riddles of that event that Model I cannot begin to answer. For example, given the fact that the Soviets were trying to deploy nuclear missiles in Cuba secretly, before the United States could discover their presence, Model I has a difficult time explaining why, after the missiles were delivered to Cuba in a clandestine manner, their sites were set up in a way that virtually advertised their presence. The surface-to-air missiles defending each site were positioned in the same trapezoidal pattern in which surface-to-air missiles were arrayed around strategic missiles in the Soviet Union. Each site had four rocket launchers, as in the Soviet Union. The sites were not camouflaged until after the United States announced it had discovered the missiles. The Russian troops wore civilian clothing when they arrived at Cuban docks, but they formed in ranks of four to go to their truck convoys and decorated their barrack areas with insignia including the Red Army Star.

Model II can account for this “irrational” behavior. The equipment was transported to Cuban shores by a Soviet mili-

138. Id. at 79.
139. Id. This statement is a somewhat oversimplified summary of Allison’s paradigm. For the complete statement, see id. at 78-96.
140. Id. at 82 (emphasis added).
141. Id. at 106-09.
tary intelligence agency which was accustomed to secretive procedures. Upon delivery, however, the equipment became the responsibility of the Soviet Air Defense Command and the Strategic Rocket Forces, which had no SOPs for secret operations. The Air Defense Command constructed surface-to-air missile emplacements just as it had always done—in a trapezoidal pattern. The Strategic Rocket Forces put four launchers on a site because "literally according to the book" a strategic rocket site is supposed to have four launchers. Missile sites were not camouflaged because they were not camouflaged in the Soviet Union. The regiments of soldiers behaved exactly as they had been trained.  

U.S. Governmental conduct is also clarified by Model II analysis. On October 4, 1962, after the Kennedy Administration learned that a CIA agent had seen what looked like a strategic missile in Cuba, the Committee on Overhead Reconnaissance, which had responsibility for U-2 overflights, decided to send a plane over the island. But the flight did not take place for ten more days. The delay cannot be explained in terms of maximizing national utility. The delay can be understood, however, in terms of a battle between the Air Force and the CIA over whose pilots would fly the mission. For the Air Force to win the fight (arguing that if a plane were shot down, the pilot would be safer in uniform) took five days. A second five days were lost apparently because the Air Force pilot had to be trained to fly the CIA's modified version of the U-2 plane.  

Applying this model of organizational processes to the U.S. Government's response to the NRDC seismic verification project, the first step is to note that there was no unified

142. Id. at 110-12.  
143. Id. at 122-23. Allison offers many other examples showing the influence of turf battles and standard operating procedures having more influence than leadership decisions on governmental behavior during the crisis. A few months earlier, for instance, Secretary of Defense McNamara had stated that in a nuclear war, the United States would launch its weapons at Soviet military sites, rather than cities, to encourage the Soviet Union to do likewise. Yet at the height of the Cuban Missile Crisis, following that organization's SOPs, the head of the Strategic Air Command dispersed his B-47 bombers with nuclear weapons to civilian airports across the country, even to southeastern cities within the range of Soviet missiles in Cuba that had already become operational. Id. at 138-39.
“U.S. Government response,” but only responses of particular agencies or groups of agencies, linked loosely by liaison mechanisms. Furthermore, the responses that occurred were not reactions to “the NRDC project,” but only to particular aspects of that project—export, visas, or construction of the stations. Although NRDC initially described the overall nature of its project to a senior government official, the "government" never planned a unified, coherent policy approach to all aspects of the NRDC project. The Government’s “response” was easily split, partly because, depending on the stage of the project, different agencies had primary responsibility for dealing with the NRDC, and partly because the NRDC’s project calendar required it to apply for the various government licenses at separate times, months apart. Looking at each aspect of the project as an isolated part then becomes necessary.

A. The Export License

In June, 1986, expected waiting time for a license to export controlled goods to the Soviet Union was sixty days even when the level of technology was relatively low. The NRDC application was granted on June 24, a mere four working days after it was filed. Several questions arise regarding this license. Why was it granted at all? Why did it

144. NRDC project co-director Dr. Thomas Cochran met with Deputy Secretary of State John Whitehead on February 20, 1986, and again on June 3, 1986 (immediately upon returning from Moscow), to brief him on the project. Interview with Dr. Thomas Cochran in Washington, D.C. (Mar. 5, 1987).

145. Estimate of Paul Freedenberg, Assistant Secretary of Commerce for Trade Administration, quoted in Siligoi, Government Export License Proposal to Reduce Response Time by Half, AMERICAN METAL MARKET/METALWORKING NEWS, June 23, 1986, at 5, 38. Secretary Freedenberg’s estimate may have been low; a 1986 law review note puts the average East-East processing time at 192 working days. Note, Trade Regulation—Export Controls, 16 GA. J. INT’L & COMP. L. 197, 202 (1986). But the Note cites a 1983 monograph as its authority, and Commerce probably improved its performance between 1983 and 1986. The Freedenberg estimate is supported by a Commerce Department official who works in the lower ranks of the Office of Export Administration. Interview with Donald Hammond, Office of Technology and Policy Analysis, International Trade Administration, Department of Commerce, in Washington, D.C. (April 27, 1987) (estimating 60 days as normal processing time for the level of technology involved in the first NRDC export).
take as much as four working days? Why did it take only four working days?

Exports of U.S. equipment to foreign countries are governed by the Export Administration Act of 1979, as amended.\textsuperscript{146} The Act has multiple, sometimes contradictory purposes—to facilitate exports by U.S. businesses, to further U.S. foreign policy, and to protect national security.\textsuperscript{147} The Act assigns to the Department of Commerce principal responsibility for achieving these objectives, and it provides for a licensing scheme as the primary device for regulating the export of sensitive technology.\textsuperscript{148} The Department maintains a "control list" of types of goods and information which cannot be exported to other countries without a license.\textsuperscript{149} If an item appears on the list, no person in the United States may take the item to another country without a license from the Department—either a "general license" (permission under regulations to send the item to certain countries but not others) or a "validated license" (a piece of paper authorizing a particular export).\textsuperscript{150} As a practical matter, with only a "few minor exceptions," all exports of U.S. goods and technology require one type of license or the other.\textsuperscript{151}

Certain types of equipment could be of some military or intelligence value to a potential enemy of the United States. These items, selected jointly by the Defense and Commerce Departments, are designated on the control list as subject to national security controls.\textsuperscript{152} In addition, the Act permits the President to "prohibit or curtail the exportation of any

\textsuperscript{147} Id. §§ 2401, 2402, 2404, 2405.
\textsuperscript{148} Id. §§ 2403, 2409(a)(1), 2415(b).
\textsuperscript{149} Id. § 2403(b).
\textsuperscript{151} Flowe, \textit{Export Licensing of Computer Equipment and Technology—A Practitioner's Perspective}, 10 N.C.J. Int'l L. & Com. Reg. 633, 635 (1985). Thus, even the baggage that a tourist takes on a Western European vacation must be licensed, although in this case, the "exporter" need not apply for a particular "validated license" because ordinary baggage is covered under a General License called, appropriately enough, "BAGGAGE." 15 C.F.R. § 371.6 (1988).
\textsuperscript{152} 50 U.S.C.A. app. § 2404 (West Supp. 1985).
goods . . . to the extent necessary to further significantly the foreign policy of the United States," subject to certain procedural constraints. These "foreign policy controls" can only be imposed if the President (or an appropriate official exercising delegated power) consults "at the earliest possible opportunity" with other countries "with which the United States maintains export controls cooperatively," and with two statutorily designated Congressional committees. Further, foreign policy controls may not be imposed until after Congress has been sent a written report indicating, among other things, how they will further U.S. foreign policy. The written report must be followed, within a year, by oral testimony about those controls to the two committees which had to be consulted in advance. In addition, foreign policy controls must be indicated on the control list.

Numerous government offices deal with the export license process. In the Department of Commerce, the Office of Export Administration (OEA) includes twenty-four offices staffed by "230 licensing officers and other professionals." The Department receives about 140,000 applications a year, requiring a high degree of standardization in processing. The applications are screened to determine whether they must be referred to other agencies. If an application pertains to an item and destination controlled for purposes of national security, OEA refers it to the Department of Defense. Similarly, if an item is subject to foreign policy controls, it is reviewed by the Department of State, and the State Department additionally has a statutory right to review "any" application. If other agencies are entitled to or ask to review an application, the referrals must take place within twenty days, and the other agencies have twenty days after receipt in which to respond, although they may, at the end of that time, routinely request a further twenty-day ex-

153. Id. § 2405(a)(1).
154. Id. § 2405(d), (f).
155. Id. § 2405(i).
157. Id. at 15.
158. Flowe, supra note 151, at 638.
159. 50 U.S.C.A. app. § 2405(a)(1), (a)(5).
Then, within sixty days after receiving the recommendations of other agencies, OEA must grant or deny the license, subject to appeal. Thus, under the statutory plan, OEA must grant or deny licenses within five months after application is made.

Although, in practice, these “time limits are often not adhered to,” OEA does manage to process most cases within five months. In fact, by 1986 the processing time for West-East transfers had been reduced to sixty days. Typically much of the delay in processing time is due to the internal procedures of the agencies to which the OEA refers applications for comment. For example, at the Department of Defense, applications referred by OEA are received at the Defense Technology Security Administration (DTSA), an agency with seven “directorates” of its own. Upon receipt, the application is logged into a computer system and then assigned to a technical expert who assesses the impact of the proposed export on national security.

The export regulations[, ... technical data, personal knowledge, recommendations on previous cases, intelligence reports, and consultations with the military services and/or the applicant are all used in this assessment. ... The case then undergoes a policy review which considers the technical assessment as well as other pertinent information on which a final DOD position is based.

If DTSA, speaking for the Department of Defense, disagrees with the conclusions of the OEA staff, an interagency meeting must be held to resolve the differences. According to the Department of Defense, in such meetings it “frequently finds itself advocating its position ... in isolation. Often the other participating agencies will challenge DoD’s national security-based objections with arguments of foreign policy or com-

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160. Id. § 2409(e).
161. Id. § 2409(f).
162. Flowe, supra note 151, at 658.
163. See supra note 146.
165. Id. at 34.
mercial competitiveness." ¹⁶⁶

When the NRDC applied for its export license in June 1986, OEA had primary responsibility for evaluating the request. In addition, if any of the items to be exported to the Soviet Union were listed on the control list for national security reasons, DTSA would also contribute to this review.

The NRDC's license application listed eleven models of equipment that it wanted to install in Kazakhstan.¹⁶⁷ Eight of the eleven models consisted of seismometers, a drum recorder, an oscilloscope, a frequency counter, and a sweep function generator. The control list included a listing for "electronic and precision instruments specially designed or modified for geophysical or mineral prospecting,"¹⁶⁸ but this listing did not apply to the seismometers the NRDC proposed to export. These particular instruments were "off the shelf items designed for multiple purposes (including earthquake monitoring)" and had not been "specially designed" for prospecting.¹⁶⁹ This category did not fit the seismometers, and no listing covered drum recorders, oscilloscopes, frequency counters, or sweep function generators.¹⁷⁰ Therefore, these eight models of equipment were all swept up in a catch-all category, numbered "6599G," entitled "other electronic and precision instruments, including photographic equipment and film." For items in this category, individually validated licenses are necessary only for exports to country groups "S" and "Z"; Libya, Cuba, Kampuchea, North Korea, and Viet Nam, and for exports to military or police entities in

¹⁶⁶. Id. at 38.

¹⁶⁷. Rider A to NRDC Export License Application 001 (June 16, 1986). The application covered 33 pieces of equipment, but there were several multiples of the same model.

¹⁶⁸. International Trade Admin. Commodity Control List, 15 C.F.R. § 399.1, Supp. 1, sec. 6598F (1986) [hereinafter ITA Control List] (amended by 15 C.F.R. § 399.1, Supp. 1, sec. 6598F (1988), which removes such electronic equipment from control). Exports to the Soviet Union of goods fitting within this listing were subject to "foreign policy" controls. Id. If the seismometers had fit this description, the State Department would have had to pass on the application, and the government might have had discretion to deny it.

¹⁶⁹. Telephone interview with John Verna, Office of Export Licensing, Department of Commerce (June 15, 1987). Mr. Verna processed the NRDC application.

¹⁷⁰. See ITA Control List, supra note 168, § 399.1, Supp. 1.
South Africa and Namibia. For these eight types of equipment, therefore, the NRDC was not required to apply for explicit permission at all.

The three other types of items were a "DCS-302 Event Recorder," an "SMR-104 lab playback system," and an "SMR-102 field playback system," all manufactured by Terra Technology Corporation. These items use cassette tapes to receive and record information from seismometers and to plot the data on special paper; the information can also be played from the tapes into a computer for further analysis.

They are therefore "recording or reproducing equipment," within the meaning of Section 1572A of the Control List. A digital tape recorder is exempt from export licensing if it uses a "tape width not exceeding 1/4 inch" and packs its data at a "density not exceeding 800 [bits per inch]." But the DCS-302 event recorder the NRDC wanted to employ, while using quarter-inch tape, was able to record 1200 bits per inch, and was therefore subject to controls. On the other hand, the regulations also provide that for exports to "Country Group Y" (which includes the Soviet Union), "[l]icenses are likely to be approved for export to satisfactory end-users . . . [of d]igital magnetic recorders specially designed for seismic/geophysical applications and operating in the frequency range of 5 to 800 Hz." The DCS-302 records at 50 to 600 Hz, so while a license was required, it would be granted for exports to the Soviet Union as long as

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171. ITA Control List, supra note 168, § 399.1, Supp. 1, sec. 6599G.
172. NRDC Export Application 001, Rider A, supra note 164.
174. ITA Control List, supra note 168, § 399.1, Supp. 1, sec. 1572A. The Control List defines this category to include all such equipment, subject to a few specific exceptions such as non digital tape recorders designed for voice or music. Id. § 399.1, Supp. 1, sec. 1572A(a)(i).
175. ITA Control List, supra note 168, § 399.1, Supp. 1, sec. 1572A, Note 2(c)(6).
176. Handwritten, undated notes of Donald Hammond, OEA, supplied to the author by NRDC attorney David Wirth.
the end-user was acceptable. In this case, the end-user was the NRDC itself, and the license application specified that "this equipment will remain under the ownership and control of U.S. citizens at all times [and] will not be consigned or sold."

In light of Model II two questions can be answered about the NRDC license: why it was granted, and why it took as long as six days. The license application was filed with OEA in the Department of Commerce, and there it underwent a point-by-point comparison with the control list. OEA learned from this review that most of the items on the application were ones for which no approval was needed, and that with respect to the items for which a license was needed under Section 1572A, the regulations mandated that for an American end-user who proposed to bring the equipment back to the United States when the work was done, an export license should be granted. NRDC got its license because, for this equipment, a license would have been granted to any American proposing to use it in the Soviet Union. The control list established the standard routines of OEA and of the other agencies that advised it, routines that were used thousands of times a year. These regulations and routines did not distinguish between exports that advanced verification of nuclear test ban treaties and those that did not, or between those that encouraged investigation of CORRTEX and those that did not. Indeed, to the standard procedures of OEA and the other relevant agencies, the fact that this exporter's purpose was to demonstrate seismic verification of restraints on nuclear testing was profoundly irrelevant.

While the Secretary of State can review any export license application, the law apparently provides that foreign policy control may only be exercised if it is made part of the regulations. The ITA Control List describes the controls on the recording equipment NRDC wanted to use as for national security rather than foreign policy purposes, rendering the Secretary of State powerless to block an export.

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179. See supra note 153 and accompanying text.
180. "The Secretary shall clearly identify on the control list which goods
The granting of the license was fairly routine, and the reason why six days (four working days) were needed is apparent. Under the national security controls of Section 1572, DTSA must review the application and Commerce could not have granted the license instantly. Six days is barely time to get the application from the Commerce Department's headquarters over to the Defense Department in Virginia, have it logged in and reviewed by the proper people and return it to the OEA.

The more interesting question, is not why the licensing took as many as six days, but why it was achieved in such a short time, when OEA is given by statute five months to make a determination and usually takes sixty days, even for a relatively simple West-to-East export.\textsuperscript{181}

The statutes do not explain the result, but the regulations are helpful, and the actual operating practices of OEA...
are of great significance.\textsuperscript{182} Over the years, American exporters have complained bitterly about the slow treatment that their applications have received from the Department of Commerce.\textsuperscript{183} In response, OEA has quietly adopted a two-track processing system, in which approximately 98\% of applications are handled through the usual routines, and the other 2\% are expedited on a special fast track, known as “special processing” or “emergency clearance.”\textsuperscript{184}

Formal authority for the fast track derives from a federal regulation\textsuperscript{185} which is extremely vague. According to the regulation, an exporter may apply for emergency clearance, and if emergency handling is warranted (the regulation specifies no standards), the exporter will be notified by telephone when a license is granted. The regulation further provides

\textsuperscript{182}These operating practices have been committed to writing in an informal operating manual of the Exporters Assistance Division of OEA, but the manual is not shown to the public. Part of the reason that the manual is not public is that it is still, after more than a year, in a process of development, but in addition, the Division prefers to keep it private because “if you put everything out on the table, everyone will try to use it to push his case through.” Interview with James Truske, Exporters Assistance Division, OEA (May 28, 1987).


\textsuperscript{184}Interview with James Truske, \textit{supra} note 182. The 2\% figure applies to cases handled from their inception on the fast track; another 3\% are placed on the fast track after they are the subject of such delay within the Department that the statutory deadlines for action will soon be triggered. \textit{id.}

that a such license will expire in one to two months rather than the customary one year period.

In practice, cases get onto the fast track if, as a result of an event beyond the exporter's control, quick licensing is needed. For example, if a production line in another country breaks down and an American part is needed to repair it, emergency clearance is warranted. However, if an exporter contracts to deliver merchandise at an early date, sooner than export licensing on the normal track would occur, emergency handling is not considered warranted. The agency takes the position that the exporter "got himself into it."\textsuperscript{186} The decision to put a case on the fast track is made or implemented by an "emergency handling officer of the day,"\textsuperscript{187} one of fifteen rotating entry-level civil servants who form part of the staff of the Exporters Assistance Division of OEA. If the officer of the day believes the case to be among the 2% qualifying for emergency handling (a decision which can be overridden by the head of the Division), he or she gives the file a special cover page, called a Special Processing Control Record.\textsuperscript{188} This record alerts those who handle the file, both in the Department of Commerce and in any agencies to which the matter is referred, to take the case out of the usual order and to expedite it as much as possible. Normally, export license cases are sent from office to office in OEA in batches of three to four hundred cases, every few days, and

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\textsuperscript{186} Interview with James Truske, supra note 182. Getting export license cases expedited requires mastery of intricate regulations, but understanding the bureaucrats and the bureaucracy is important as well. Exporters who need quick treatment may hire as a consultant a Washington attorney or other specialist who knows the OEA bureaucrats by name and is deeply familiar with their regulations and written and unwritten operating procedures. The D.C. bar includes a specialized group of lawyers whose work is to try to expedite the export license applications of firms from all over the United States. They make telephone calls and personal visits to focus the attention of OEA personnel on the cases for their clients and to argue the substantive case in favor of granting the license, where necessary. Telephone interview with Martin Kalin, one such specialist (Mar. 30, 1987).

\textsuperscript{187} Telephone interview with Pam Vigness, Exporters Assistance Division, OEA (May 26, 1987).

are reviewed within each office on a first-come, first-served basis. If a case has the Special Processing cover page, however, it is individually hand-carried to the licensing officer, and that officer reviews it within a day, rather than letting it work up through the pile of applications awaiting consideration. The Exporters Assistance Staff checks with the office of the licensing officer two to three times a day so that as soon as that officer has approved the application, it can be taken to the next office (often the Review and Referral Unit, which sends copies to any other agencies that must be consulted). The application is, again, hand carried to this Unit if it is covered by a Special Processing form.189

The NRDC application moved as quickly as it did because it was assigned to the fast track. On June 16, it was given Emergency Control Number 4001, and the file was covered by a Special Processing Control Record.190 The file was moved quickly among offices. The file originated in the Exporters Assistance Division, where the Special Processing Control record was assigned, and it was immediately sent to the Electronic Components Division of OEA for review. Then the file was transmitted to the Review and Referral Unit which within two days of the original filing, sent it for concurrent review to the Department of Defense and the Department of Energy.191 These offices also expedited consideration. For example, the Defense Technology Security Administration marked its own file “Urgent,”192 and, after completing its review in two working days, DTSA received the application from the Review and Referral Unit of the Department of Commerce on June 20, a Friday, and notified Commerce of its approval on Tuesday, June 24.193 DTSA used its own “fast track” procedure for notifying the Department of

189. Interview with James Truske, supra note 182.
191. Telephone interview with Pam Vigness, Exporters Assistance Division, OEA (May 26, 1987).
Commerce of its favorable recommendation. Usually, DTSA collects its recommendations on export license cases in "batches," and transmits these batches to OEA periodically. This application fell into batch number 705, the recommendations for which went in writing to the Department of Commerce on July 2, after the date by which the Soviets had told the NRDC it needed to have the shipments underway. But a DTSA official followed the standard procedure for emergency cases, telephoning OEA of DTSA’s decision on June 24. That very day, OEA notified the NRDC by telephone that its application had been granted. Similarly, the Department of Energy received its copy of the application on June 23 and notified OEA of its approval on June 24.

Although an examination of the U.S. Government’s procedures for processing export license applications reveals that NRDC’s application moved quickly because it was scooped up into the “fast track” procedures of the Department of Commerce and other agencies, the documents raise four questions that Model II, with its focus on organizational routines, can not answer. First, the Special Processing Control Record is hand-dated June 16, two days before NRDC filed its application for a license. How can even “special” processing begin to deal with an application that had not yet been filed? Second, although attachment of a Special Processing Control Record can predictably lead to expedited consideration, we do not yet know how the NRDC project qualified for the fast track rather than routine treatment. Indeed, the NRDC-SAS agreement seems to be a contractual arrangement of the very sort that OEA does not usually regard as a legitimate case warranting expedition. Third, the regulations specify that if emergency treatment is given to an application, the validity period of the license “will end no later than the last day of the calendar month following the

194. Id.
195. Id.
196. Daily Journal of Dr. Thomas Cochran (June 24, 1986) (entry for 2:32 p.m.).
197. Telephone conversation between Dr. Thomas Cochran, NRDC, and Kathleen Vial, Department of Commerce, reflected in Daily Journal of Dr. Thomas Cochran (June 24, 1986).
198. See supra note 188 and accompanying text.
month in which the license is issued unless a longer validity period can be justified.” 199 In this case, although NRDC did not request nor desire a “longer validity period” the license that was granted was valid for a full thirteen months. 200

Fourth, even if we consider the Department of Commerce’s special processing to be normal, it does not satisfactorily explain why the case moved so swiftly through DTSA in the Defense Department as well, since “‘other agencies will pay no attention to the EC [Emergency Clearance] status of the application, whatsoever.’” 201

The Department of Commerce Special Processing Record itself contains a clue to at least the first three of these oddities; in the “remarks” column are two handwritten notations: “RUSH STATE DEPT. REQUEST NEED BY JUNE 24” and “Expedite per [Secretary of Commerce] Baldrige Request.” 202 But an explanation of these notations, and of what happened when the application arrived at the Defense Department, must await consideration of Model III, in which the discretion of individual policy makers is seen to affect the decisions of their government.

B. The Visas

As in the case of the export licensing, our question about the Soviet scientists’ visa applications may be broken down into three parts. First, why was there an issue about the entry of the Soviet scientists? That is, was the issuance of visas more complicated than ministerially stamping their passports and, if so, how? Second, assuming that their admission was not automatic, and given the fact that their mission would tend to advance the cause of a nuclear test ban which the U.S. Administration did not support, why were they admitted at all? Finally, why was their admission subject to their having to choose one of two sets of conditions—observation of a CORRTEX demonstration or exclusion from

199. ITA Individual Licenses, supra note 185, at (h)(5).
201. Berlack, supra note 188, at 278.
the areas to which they needed to go for on-site selection of seismic station locations?

Like export licensing, visa issuance is heavily regulated by federal statutes and regulations; these statutes and regulations strongly influence the day-to-day operating procedures of the State Department and the Justice Department, the agencies with primary responsibilities for admitting foreign nationals to the United States. People (other than Canadian or certain Mexican nationals) who desire to enter the United States must have valid visas. The law distinguishes between immigrant visas (for those desiring to take up permanent residence in the United States) and nonimmigrant visas (for temporary visitors). Since the Soviet scientists who proposed to visit Nevada in connection with the NRDC-SAS project were to be temporary visitors, they applied for nonimmigrant visas.

The State Department controls visas and therefore has primary regulatory authority. By statute, the State Department includes a Visa Office within the Bureau of Consular Affairs. Consular officers of the U.S. Embassies abroad perform the day-to-day work of reviewing applications for nonimmigrant visas.

A nonimmigrant seeking to enter the United States must apply for one of thirteen categories of visa. Many of these categories were unsuitable for the NRDC project, but three categories might have been considered: the A-2 visa, the J-1 visa and the B-1 visa. An "A-2" visa can be granted to employees of a foreign government (other than diplomatic officers, who come within the scope of the "A-1" visa category) "who are accepted by the Secretary of State." Had the Soviets applied in this visa category, the

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207. Id. § 1201(a)(2).
208. Id. §§ 1101(a)(15), 1201(1)(2).
210. Id. § 1101(a)(15)(A)(ii).
211. Id.
Department of State, exercising the power of the Secretary, would have had unlimited discretion to "accept" them; that is, to accept or refuse the application. But if the Soviet scientists, who were employed by the Institute of the Physics of the Earth, had elected this option, they would have had to say that they were employees of the Soviet government. Although the Institute, like other Soviet scientific establishments, obtains its budget from the Soviet state, its scientists do not regard themselves as government employees. To apply for A-2 visas, they would have had to characterize themselves in a disagreeable way.

The Soviets might have considered applying for a "J-1" visa, the type of visa often used for scientific exchanges. This type of visa is given to scholars with specialized skills coming to the United States "for the purpose of . . . studying, observing, [or] conducting research." But a visa can be granted under this section only if the program under which the scholar is coming to the United States has been "designated" by the Director of the United States Information Agency. The NRDC-SAS program had not been so designated, and no application for designation had been made.

The Soviet scientists therefore applied for "B-1" visas. B-1 visas are granted to aliens having permanent residences in foreign countries who are visiting the United States temporarily. An alien in this category is entitled to a visa, however, only if he is not rendered ineligible by the McCarran-Walter Act. This controversial law, passed over

212. Cf. Interview with Dr. Thomas Cochran, NRDC, in Washington, D.C. (Mar. 5, 1987). Cochran's knowledge of how Institute scientists regarded themselves was based on conversations with Soviet scientists over the course of a year.


214. Id. § 1101(a)(15)(B).


President Truman’s veto in 1952, makes prospective visitors ineligible to receive nonimmigrant visas if they:

are members of or affiliated with . . . the Communist or any other totalitarian party of any . . . foreign state [or if they] advocate the economic, international, and governmental doctrines of world communism . . . or [if they] are members of or [are] affiliated with any organization that advocates the economic, international, and governmental doctrines of world communism . . . 217

A consular officer in the State Department post (embassy or consulate) at which the application is presented218 makes the determination of whether an applicant for a visa fits this or any other category of excludable alien.219 In the case of a person applying for a B-1 visa, the consular officer’s determination is based on the information disclosed in required State Department Form 156, any information that U.S. Government agencies happen to have about the applicant, and such information as may be obtained in a personal interview with the applicant.220

In principle, the consular officer’s decision as to the alien’s admissibility is final, and not subject to review by the Secretary of State.221 In practice, however, the State Department has circumscribed its consular officers’ discretion by issuing an extensive body of regulations222 and supplementing

220. Although interviews are required of almost every applicant for a nonimmigrant visa, 22 C.F.R. § 41.114(a) (1986), they play only a small role in the process. In the routine case, the interview lasts only five to ten minutes even for those applying to immigrate rather than to visit. Note, Consular Discretion in the Immigrant Visa-Issuing Process, 16 SAN DIEGO L. REV. 87, 100 n.63 (1978).
the discretion with an even longer volume of formal administrative requirements, embodied in the Department's Foreign Affairs Manual. The regulations make the issuance of most nonimmigrant visas a matter of law rather than discretion.

Some of these provisions are relevant to the applications of the Soviet scientists. The regulations require a consular officer to issue a visa to an applicant unless there is a statutory or regulatory basis for denial. In the case of an applicant from a communist country, a person who has served volun­tarily "in a political capacity" with the "organization in power" is deemed to be affiliated with a proscribed organization, rendering the applicant ineligible for admission under the communist-exclusion provision of the McCarran-Walter Act. The Foreign Affairs Manual adds that "an alien who is or was employed in a responsible position in an agency of the government of a Communist or Communist-controlled country is presumed to be ineligible" for a visa. Even though a State-funded scientific organization like the Institute of the Physics of the Earth may not technically be an "agency of the government" of the Soviet Union, as a matter of practice the State Department regards working as a scientist in such an organization as the equivalent of working for a Soviet Government agency. In addition, Form OF 156 asks applicants whether they are or have been members of

223. The sections of the Foreign Affairs Manual applicable to nonimmigrants are reprinted in 6 GORDON & ROSENFIELD, IMMIGRATION LAW AND PROCEDURE 32-1 to 32-349 (1988). The text is considerably longer than 349 pages, however, because many inserted pages are numbered with decimals.

224. 22 C.F.R. § 41.90 (1986).

225. Id. § 41.91(a)(28)(iii).


227. "Life in the Soviet Union is such that if you are involved at all in society, as opposed to being a babushka wanting to visit a relative, you can't help being affiliated in some way with the Communist Party. If you have a job, you're going to belong to some organization. All those organizations are Communist-dominated or affiliated. So unless you're what they call a parasite or a hooligan, you'll come under [subsection] 28 of the Immigration Act." Interview with Cornelius D. Scully, Director, Office of Legislation, Regulations and Advisory Assistance, Visa Office, U.S. Department of State, in Washington, D.C. (Mar. 16, 1987).
“Communist organizations and those affiliated therewith.”228 If an applicant refuses to answer this question, the refusal “may be considered an admission of affiliation in a proscribed organization.”229 Although the operative word in the Manual is “may,” the Department routinely treats failures to answer this question by Soviet applicants as admissions of affiliation.230 In these cases, too, the consular officer may refuse the visa.231

As a matter of standard practice, applicants from communist countries who seek nonimmigrant visas for non-official travel to the United States are routinely regarded by consular officers as ineligible to receive such visas if: they hold responsible positions in any sector of the Soviet establishment; admit their membership in a Communist-affiliated organization; or refuse to answer the standard questions about such membership. While it is not known for certain how the Soviet scientists who sought to visit Nevada dealt with the questions on their Form OF 156,233 the Soviet scientists would have been regarded, at least by senior of-

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230. Interview with Cornelius D. Scully, supra note 227.
231. If these guidelines do not sufficiently constrain the discretion of a consular officer, a further set of procedures may suffice to ensure that, despite the statutory bar on Secretarial intervention, the discretion exercised is really that of senior department officials, rather than the consular officer, if they have an interest in the particular application. A refusal must be reviewed by the principal consular officer at the post. 22 C.F.R. § 41.130(b). The principal officer may ask the Visa Office in Washington for an advisory opinion, or the Department may ask for a report and may issue such an opinion on its own initiative. 22 C.F.R. § 41.130(c). If the consular officer declines to follow the advisory opinion issued in Washington, he must explain the refusal to the Visa Office. Id. Furthermore, an “interpretation of law, as distinguished from an application of the law” is binding on the consular officer. Id.
232. Official governmental travel is accomplished on “A” visas, including diplomatic and official visas, rather than “B-I” and other types of visas. See supra notes 208-212 and accompanying text.
233. Since NRDC, an environmental organization, is not accustomed to obtaining visas for foreign scientists, it left the visa application process to the Soviet scientists. NRDC did not request or receive copies of the Soviets’ application forms, nor did it do any research or advise the Soviet
cials in the Visa Office, as Communist-affiliated by virtue of their connection with the Institute of the Physics of the Earth. At least equally important, is the fact that Soviet scientists, following their standard operating procedure, do not file U.S. applications with the U.S. Embassy personally, but have them submitted by the Soviet Ministry of Foreign Affairs.234 The Ministry, following its standard operating procedure, never fills out the part of the form requesting information about Communist affiliations.235 Under these circumstances, the consular officer handling the applications would have been required, under the procedures of the Foreign Affairs Manual, to regard the applicants as ineligible for entry into the United States.

But a determination of ineligibility is only the first step of a two-step process. A statute provides that the consular officer or the Secretary of State may apply to the Attorney General of the United States for a waiver of ineligibility, and that the Attorney General has discretion to grant the waiver.236 While "waiver" by the Attorney General of statutory ineligibility to enter the country might at first blush seem to be an extraordinary procedure, the volume of applications from otherwise ineligible applicants has swelled considerably over the years,237 and the granting of waivers now has its own standard operating procedure, one that has been influenced by a further legislative enactment, known as the McGovern Amendment. In 1975, the United States, Canada, and most European countries (including the Soviet Union)
signed the Final Act of the Conference on Security and Cooperation in Europe,238 in which the signatory countries undertook, among other obligations, to reduce restrictions on the free travel of foreign nationals in their countries.239

As part of its response, Congress (at the urging of Senator McGovern) provided by law in 1977 that the Secretary of State "should, within 30 days of receiving an application for a nonimmigrant visa by any alien who is excludable from the United States by reason of membership or affiliation with a proscribed organization but who is otherwise admissible to the United States, recommend that the Attorney General grant the approval necessary for the issuance of a visa."240 The Secretary may refuse to make such a recommendation only by determining that the admission of the alien would jeopardize "the security interests of the United States" and so certifies to the Speaker of the House and the Chairperson of the Senate Foreign Relations Committee.241 The McGovern Amendment established a strong Congressional policy against the exclusion of aliens on the basis of their political beliefs. The Amendment also imposed on the State Department personnel the considerable bureaucratic burden of having to justify to Congress a refusal to recommend a waiver.

As a result,242 the State Department routinely recommends waivers. In 1985, 98.3% of the 47,574 alien applicants who had been rendered ineligible for admission because of their Communist affiliations were actually admitted.243 Two collateral practices demonstrate the tenacity

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241. Id.
242. "But because of the McGovern amendment that we have mentioned earlier, in most cases automatic waivers of inadmissibility were submitted to the Immigration and Naturalization Service [of the Justice Department] . . . ." Helsinki Hearings, supra note 237, at 28 (testimony of Michael Newlin).
243. Id. In 1979, the McGovern Amendment had been amended to permit the Secretary to refuse to recommend a waiver for aliens from "signatory countries which are not in substantial compliance with the provisions of the Helsinki Final Act, particularly the human rights and humanitarian affairs provisions." Pub. L. No. 96-60, § 109(2)(d), 93 Stat. 395, 398
with which the State Department holds to its practice of recommending waivers. The law is silent with respect to whether the ineligible alien must file a form in order to trigger the waiver process, but the Department does not require this further application. Once the State Department determines that the applicant is excludable, it processes the waiver application on his or her behalf without even informing the applicant that it is doing so. In addition, in at least a substantial fraction of the two percent of cases in which waivers are denied, the Department resorts to a subterfuge so that it can avoid taking responsibility for the refusal and

(codified at 22 U.S.C. § 2691(d) (1982)). This provision pointedly referred to the Soviet Union, among other countries. See 125 Cong. Rec. 8345-47 (April 24, 1979) (statement by its sponsor, Representative Solarz). The Solarz Amendment does not prohibit the Secretary from suggesting waivers routinely; it only removes the requirement that the Secretary recommend a waiver. In actuality, the Solarz Amendment did not change the State Department practice of recommending waivers in nearly every case. Although the practice could have changed with respect to Soviet-bloc applicants after 1979, "[o]ld habits die hard. They [State Department bureaucrats] [still] act as if they had [sic] to justify a turn-down." Telephone interview with Hon. Michael Heilman, Judge, Board of Immigration Appeals and former Associate General Counsel of the Immigration and Naturalization Service (June 30, 1987). The Department's rationale for not having changed its practice is that the United States has never made a formal determination that the Soviet Union or any other country is not in substantial compliance with the Helsinki Final Act. Making such a determination "could affect other policies and interests going beyond the area of visas, so it hasn't been done." Telephone interview with Cornelius D. Scully, Director, Office of Legislation, Regulations and Advisory Assistance, Visa Office, U.S. Department of State (July 6, 1987). The standard practice of recommending waivers for Soviet applicants based on an interpretation of the Solarz amendment as requiring a formal determination is consistent with the State Department's liberal administration of the McGovern Amendment itself. The statutory language directs that the Secretary "should" recommend waivers. Solarz stresses that the language was deliberately "not mandatory." 125 Cong. Rec. 8347 (April 24, 1979) (statement of Representative Solarz). "[T]he conferees went to a good deal of trouble to use the word 'would' [sic] not 'shall,' but the fact of the matter is that the Department of State has treated it as though it were mandatory." Id. According to one Representative, in one year "well over 1000 recommendations for exclusion had been made by our intelligence agencies. Not one of them had been acceded to by the State Department. In effect, every single recommendation against the admission of an excludable alien was overturned." 125 Cong. Rec. 8346 (April 24, 1979) (statement of Representative Ashbrook).

244. Interview with Cornelius D. Scully, supra note 227.
can avoid notifying Congress that it is recommending against a waiver. Under even the most liberal reading, the McGovern Amendment only requires that State recommend a waiver, not that the Attorney General grant one. In cases in which the State Department wants to exclude the applicant but wants to avoid public responsibility, it sends a formal recommendation for a waiver to the Immigration and Naturalization Service (INS). Then, in oral communications or meetings, INS informs the Service that the State Department really wants the waiver request to be denied. "They may want the Attorney General to be the 'hard nose' while State plays the innocent party, recommending entry."245 The result is a "collusive rejection."246

Based on standard procedures two of the three questions posed at the outset of this subsection become answerable. The admission of the Soviet scientists into the United States was not a simple rubberstamping operation because, under the routines originating in the Immigration and Nationality Act of 1952 and embedded in the State Department's Foreign Affairs Manual, visa applicants who hold responsible positions in the Soviet economy, or who decline to answer the question about Communist affiliation on Form OF 156, are deemed to be affiliated with a Communist organization and therefore ineligible to enter the United States. On the other hand, the Soviets scientists were ultimately admitted because under practices originating in the McGovern Amendment of 1977, the State Department has developed a very strong presumption of not excluding applicants on the basis of their Communist affiliations.

These scientists, however, were not merely tourists or even business persons who just happened to be connected in Soviet society. They intended to carry out a project that would prove that U.S. nuclear test-ban policy was based on false premises about seismic verification. Could they not have been excluded simply on the ground that their presence in the United States was inconsistent with U.S. foreign policy? The answer to this question appears to be negative, in terms of operating procedure if not law. The State Depart-

245. Interview with Hon. Michael Heilman, supra note 243.
246. Helsinki Hearings, supra note 237, at 17 (statement of Representative Barney Frank).
ment's consistent practice, under the McGovern Amendment, has been to treat it as though it eliminated any discretion to deny visas to Communist-affiliated aliens based on generalized foreign policy concerns.247 The Department takes the position that although the text of the McGovern Amendment does not preclude it from taking foreign policy interests into account, the intent of the Amendment was to effect just such a preclusion. "The result has been that the Secretary of State is effectively precluded from acting in such cases on the basis of legitimate foreign policy factors and considerations. . . . Accordingly, for all practical purposes,

247. This is the practice under 8 U.S.C. § 1182(a)(28) (1982), dealing with those affiliated with Communist organizations. A parallel provision, 8 U.S.C. § 1182 (a)27 (1982), bars entry of any alien who (in the opinion of the consular officer) seeks to enter the United States "to engage in activities which would be prejudicial to the public interest, or endanger the welfare, safety, or security of the United States." Conceivably, this other provision could be used to deny admission to an alien applicant seeking to enter the United States to engage in a project that was at odds with U.S. foreign policy. However, such a usage of (a)(27) would not have been consistent with the Department's ordinary practices. In a typical year, only 33 people are denied admission under this provision, compared with 47,574 people denied, initially, on the basis of Communist affiliations, and most of them are individuals thought to be planning activities "harmful to national security . . . [such as] engaging in certain kinds of study in this country at the behest of or with the support of Libya [for the purpose of advancing terrorism]." Helsinki Hearings, supra note 237, at 28-30 (testimony of Michael Newlin, Deputy Assistant Secretary of State for Consular Affairs, and Cornelius D. Scully, Director, Office of Legislation, Regulations, and Advisory Assistance, U.S. Department of State). In addition, invoking subsection (a)(27) affords the State Department considerably less flexibility than subsection (a)(28) because neither the provision of the law allowing a waiver, 8 U.S.C. § 1182(d)(3) (1982), nor the provision allowing the imposition of conditions on an alien's visit applies to exclusions under (a)(27). See 8 U.S.C. § 1182(d)(3) (1982). Thus, if (a)(27) had been invoked in the case of the Soviet scientists, they could not have been admitted at all. Of course, to find that an alien's visit was consistent with "the public interest" might be theoretically possible only if the alien agreed voluntarily to certain restrictions, and therefore to use (a)(27) to exact self-imposed restrictions (e.g., geographical limitations) on a proposed visit, but the State Department never uses (a)(27) to impose conditions. Interview with Cornelius D. Scully, supra note 227. For a construction of (a)(27) and its relationship to the McGovern Amendment, see Abourezk v. Reagan, 785 F.2d 1043 (D.C. Cir. 1986), aff'd by an equally divided court, 484 U.S. 1 (1987).
foreign policy factors are no longer considered in such cases." 248

Although a close look at the laws, regulations and procedures of the State Department helps to clarify why the Soviets were neither routinely admitted nor altogether excluded from entry to the United States, it does not explain why their entry was conditioned on their observation of a CORRTEX demonstration or, alternatively, on their refraining from visiting the potential sites for seismic stations. The regulatory scheme can shed some light regarding how their visas were so conditioned, but not about why the conditions were imposed.

The authority for imposing conditions on the visit of a nonimmigrant stems from a section of the 1917 Immigration Act and, curiously, predates both the Communist exclusion provisions and the authority of government officials to waive excludability and admit otherwise ineligible aliens. Prior to 1917, Congress had already barred certain categories of nonimmigrants from visiting the United States. These categories included "idiots," epileptics, paupers, polygamists, anarchists, and prostitutes.249 In 1917, Congress imposed further limitations on the granting of nonimmigrant visas; these included prohibitions on the entry of applicants who were illiterate, psychopathic, or chronically alcoholic.250

But to some members of Congress, the statutory exclusion of visitors in all of these categories (particularly the barring of illiterates, which generated considerable controversy)251 seemed excessively Draconian. A clause, which be-

248. Letter to Vice President George Bush from Acting Assistant Secretary of State Alvin Paul Drischler (October 18, 1983), reprinted in 129 Cong. Rec. 515128 (1983). In the few cases in which State Department Officials informally request the Department of Justice to reject their own formal recommendation for a waiver, see supra note 246 and accompanying text, foreign policy considerations are taken into account, notwithstanding the contrary implication in Mr. Drischler's assertion that "the Attorney General, whose discretionary authority has not been affected by the 'McGovern Amendment' is not in a position to evaluate or act upon foreign policy factors." Id.

251. Congress had three times previously passed such a literacy provision, only to have it vetoed by Presidents Cleveland, Taft, and Wilson. H.R. Rep. No. 1365, 82d Cong., 2d Sess., reprinted in 1952 U.S. Code
came known as the "Ninth Provis," was included in the 1917 legislation to permit the Commissioner General of Immigration with the further approval of the Secretary of Labor to "prescribe conditions, including exaction of such bonds as may be necessary, to control and regulate the admission and return of otherwise inadmissible aliens applying for temporary admission."252 In the 1952 McCarran-Walter Act, when those with Communist affiliations were added to the list of excluded aliens, a provision was added to the law which made explicit the power of the Attorney General253 to waive altogether most of the statutory prohibitions on the entry of nonimmigrants (as opposed to the power to "prescribe conditions" on their entry).254 This waiver section was much used, and by the 1980s was invoked tens of thousands of times a year.255 The "conditioning" aspects of the Ninth Proviso were, however, relegated to what became an extremely obscure section of the Immigration Law,256 one so obscure, in fact, that it is invoked only in a minute number of cases per year.257 In those few cases in which conditions are imposed, the only types of restrictions that are used are geographical limitations, and the reason for these restrictions is almost always that the State Department has learned that the

CONG. & ADMIN. NEWS 1653, 1665. In passing the 1917 legislation, Congress overrode a second Wilson veto. Id.


253. The Attorney General had meanwhile succeeded to the powers over immigration of the Secretary of Labor. REORG. PLAN NO. V OF 1940, reprinted in 54 Stat. 1238 (1941).

254. 8 U.S.C.A. § 1182(d)(3) (1964). The occasion for dividing the Ninth Proviso (which implicitly authorized complete as well as conditioned waivers) into separate sections providing for waivers and for the imposition of conditions may have been the fact that Congress for the first time in 1952 created certain categories of aliens (e.g., suspected saboteurs) whose excludability could not be waived. Id. Since the language had to be changed for this purpose, and since the entire Immigration Act was being reworded at this time, a general overhaul of the section may have been opportune.

255. See supra note 243 and accompanying text.


257. Telephone interview with Harvey Adler, Inspections Program, U.S. Immigration and Naturalization Service (INS) (July 14, 1987). Mr. Adler directs the INS unit which passes on requests for (d)(3) waivers and occasionally (but always at the request of the State Department or an intelligence agency) imposes conditions under (d)(3). Id.
applicant is someone believed to have connections with an Eastern bloc intelligence service, who proposes to come to the United States for a legitimate scientific conference but who, if allowed to travel freely, might obtain technological information whose export is restricted. 258 The invocation of the "conditions" section of the law is, indeed, so unusual that none of the articles critical of the McCarran Act's exclusions of Communists mention this practice. 259 The subject of conditions on entry never came up in Congressional hearings exploring the Government's exclusion of aliens and its use of the waiver power 260 and the leading treatise on immigration law cites the section once in passing but gives neither explanation nor examples of its use. 261 The "conditioning" of nonimmigrant visas is so infrequent that the State and Justice Departments have no "standard operating procedure" for this practice; accordingly, Model II is of little help in elucidating the application of geographical restrictions to the Soviet scientists. Further understanding, if it is to come at all, must devolve from Model III. 262

258. Id.
259. See, e.g., supra note 216.
261. 1 GORDON & ROSENFIELD, supra note 223, § 2.53(b), at 2-365 (1986).
262. Indeed, the documentary record tends to suggest that such cases—or at least this one—are handled in ways inconsistent with even the most fundamental standard bureaucratic procedures. In run-of-the-mill waiver cases, the State Department either sends a wire to the Immigration and Naturalization Service (INS) requesting the waiver, in which case the waiver is kept on file by the Service, or makes a telephone request for the waiver, in which case the request is noted in a telephone log maintained by the Service. In principle, requests for conditioned waivers also should be recorded in one of these two ways, because the imposition of conditions does not change the fact that a waiver must be granted before the alien is admitted. However, with respect to the Soviet scientists who came to the United States in connection with the NRDC project, the INS files include neither a wire from the Department of State requesting a waiver nor a telephone log entry. INS officials do not know why the usual documentation is missing in this case. Telephone interview with Daniel Collins, Assistant Chief Inspector, Inspections Branch, Immigration and Naturalization Service (Aug. 20, 1987).
C. The Seismic Station Permits

Even more essential to the NRDC's ability to fulfill its agreement with the SAS was obtaining government permission to install the seismic stations, since all of the suitable land was owned by the U.S. Government. The Nevada stations could be established without a Soviet physical presence, since the data could be sent by radio or mail to Moscow. But without government permission to set up the stations (including permission to drill a 300-foot deep borehole at each site), there could be no monitoring of tests in Nevada.

In San Diego during their restricted visit, the Soviet scientists selected three sites, each about 100 miles from National Test Site. One, at Troy Canyon, Nevada, was in Humboldt National Forest. The other two, at Deep Springs, California, and Nelson, Nevada, were on federal lands managed by the Department of the Interior.

Establishment of a station in a national forest required a permit from the U.S. Forest Service in the Department of Agriculture. The permitting standards and process had been established by law and regulation long before the NRDC-SAS agreement was signed. The Federal Land Policy and Management Act of 1976 (FLPMA), among other statutes, authorizes the Secretary of Agriculture to permit the public to obtain various kinds of permits, licenses or leases to use National Forest land for a variety of purposes, most of which are called "special uses." The Secretary has delegated the

263. See supra note 88.
264. Construction of each station would require cutting into a hillside to expose an area of granite rock about 12-15 feet square. On top of the rock, a vault 8' x 6.7' x 4.5' would be built, resting on a four-inch thick concrete pad. The surface seismometers and electronic equipment would be placed in the vault, and additional seismometers would be installed in a hole drilled 100 meters into the rock. Then the vault would be buried beneath two feet of earth. In addition, two of the stations which were located away from power lines would need solar panel assemblies and shelters, and all of the stations would require telemetry equipment to transmit their seismic data to a satellite or a satellite relay station. See, e.g., U.S. Dept’ of Agriculture, Special Use Application and Report, filed by University of Nevada-Reno (Feb. 24, 1987).
266. All uses of national forests except the disposal of timber, 36 C.F.R. pt. 223 (1987), and minerals, 36 C.F.R. pt. 228 (1987), the grazing of live-
permitting authority to the Forest Service, a unit of the Department of Agriculture.267

Although no sections of the FLPMA specifically regulates seismic research stations, the law does authorize the Secretary to grant a "right-of-way"268 to use forest land for "systems for transmission or reception of... electronic signals."269 In the case of a "resource monitoring site" incorporating radiotelemetry equipment, a Forest Service officer must also be satisfied that the site will not be "suited for general communication use."270 An applicant for a special use right-of-way files a written proposal which includes a description of the project, information showing that the applicant is technically and financially capable of constructing and operating the project, a description of any public benefits, and a statement of environmental impact and of how the environment will be protected.271 When an application has been filed, a Forest Service officer assesses the applicant's qualifications, completes an environmental analysis, determines compliance with other law, and consults any other interested parties.272 In the case of simple uses having no environmental impact, comments from others are not solicited. In the

268. The use of the term "right-of-way" for construction of a research station (as opposed to a road or railway line) may seem odd. The terminology, however, apparently dates back to the days in which communications systems consisted only of linear networks such as telegraph wires. Although communications became wireless, government officials (apparently making only incremental changes in their standard procedures) continued to categorize licensing for all communications facilities under the heading of "rights of way." See Pub. L. No. 82-367, 66 Stat. 95 (1952) (inclusion of radio and television transmitting facilities), amending Pub. L. No. 61-478, 36 Stat. 1253 (1911) (rights-of-way issuable for poles and lines for electricity and communications).
269. 43 U.S.C.A. § 1761(a)(5) (1982). In terms of effect on the land, the drilling of a hundred meter borehole might seem like the most significant activity requiring federal approval, but the routines of the Forest Service...
case of a more significant disruption of the environment, the officer typically contacts interested state and local agencies such as State recreation and road departments, environmental groups, and specially affected private parties. Contact with other federal agencies is less common. Finally, the District Ranger or Forest Supervisor for the affected forest makes a decision to grant or deny the application. The special use right-of-way may be denied only on the basis of five grounds: (1) incompatibility with the "purpose(s) for which the lands are managed, or with other uses"; (2) incompatibility with "the public interest"; (3) lack of qualifications of the applicant; (4) illegality; and (5) lack of financial capacity to undertake the project.

Similarly, establishment of the stations at the other two sites required rights of way to be issued by the Bureau of Land Management (BLM) in the Department of the Interior. Because seismic research stations use communication...
tion links, the BLM, like the Forest Service, grants rights of way for their use under the authority given it to authorize the use of public lands for systems for "transmission or reception of... electronic signals... or such other... systems or facilities which are in the public interest and which require rights-of-way over, upon, under or through" those lands. The procedures and standards for granting these rights of way are governed by codified regulations. The applicant must file a form indicating its name and address, a description of the project, a map, a statement of financial and technical capacity, and certification that the applicant is authorized to do business in the state. This application is then evaluated by a "realty specialist," a junior BLM official who heads a small interdisciplinary team charged with writing an environmental analysis in accordance with the National Environmental Policy Act. The analysis must take into account a list of specified considerations which includes among others: air quality; noise; general hazards; flood plains; paleontological resources; soil resources, vegetation resources, wildlife resources; threatened and endangered species; cultural resources; visual resources; recreation and wilderness resources; and socioeconomic concerns. The realty specialist also determines compliance with federal and state laws, consults with "Federal, State, and local agencies having an interest, as appropriate," and proposes any "appropriate" modifications in the proposal.

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Arlington, Va. Interview with Annette Jameson, Natural Resource Specialist, Lands Division, BLM, Department of the Interior, by Fred Young (July 9, 1987). In 12 years at BLM, Ms. Jameson has worked on more than 300 right-of-way applications. Telephone interview with Ms. Jameson, supra note 88.

279. 43 C.F.R. § 2800 (1986).
280. Id. supra note 88.
The proposal then goes to an "authorized officer" who makes the actual decision to grant or deny the request. This official is usually a Resource Area Manager, a GS-12 or GS-13 career officer, seven rungs on the hierarchy below the Secretary of the Interior. In some BLM Districts, the "authorized officer" is a District Manager, one level above the Resource Area Manager. The officer begins the decision process with a presumption in favor of granting a right-of-way, because "[i]t is the objective of the Secretary of the Interior to grant rights-of-way . . . to any qualified individual." Further, the regulations specify only five grounds for denial: (1) inconsistency with the purpose for which the lands are managed; (2) inconsistency with the public interest; (3) lack of qualifications of the applicant; (4) illegality; or (5) lack of technical or financial ability.

The Model II framework provides the means to understand why the Government granted the permits necessary to build the nuclear test monitoring stations on federal land. Concerning the site in Humboldt National Forest, the appli-
cant filed all of the necessary standard papers. The application contained nothing that would trigger any of the five grounds listed in the Forest Service regulation as bases for permit denials. A covering letter even stated the willingness of the applicant to adjust the site location "somewhat" provided that "line of sight communications, granite structure and low quiescent noise must be maintained." The application adverted to one of the principal criteria that the Forest Service was required to keep in mind—environmental disruption.

Similarly, the two applications filed with the Department of the Interior met all of that department's criteria. The applications contained the required back-up materials, including maps and diagrams of the proposed station construction, and provided no grounds on which the applications could be denied. BLM assigned the required analysis to staff members who, drawing on other experts as needed, wrote a land suitability report and an environmental assessment. Since the seismic stations would not interfere with other proposed uses of the land (because they were small and, for the most part, underground), they were granted by the Resource Area Manager or District Manager as a routine matter.

The U.S. Government granted permits to build the seismic stations on federal land because, under the standard operating procedures of the two relevant Departments, permits to build seismic stations are always granted to applicants who show themselves financially capable of constructing and operating the stations and who are solicitous of the environment, provided that the stations did not conflict with other public uses of the land. Decisions of this kind are so unremarkable that they are routinely made by junior or mid-level officers, without any high-level policy review or referral

291. See U.S. Dep't of Agriculture, supra note 264 and accompanying text.
292. Id.
293. "Slight visual impact, stations are small and hidden from view to minimize visual impact, disturbance and vandalism. A small road will be needed for the drill rig to access the site." Id.
to any official in Washington. Once appropriate applications were filed, the Government's decision to authorize the use of public land for seismic research stations was virtually inevitable.

V. Model III

The analyst who makes use of Model III focuses more on the actions of individuals, and the interpersonal bargaining among them, than on either the rational justifications for decisions or the structure and standard procedures of the bureaucracies that make or implement them. In Allison's terms, governmental decisions are the result of moves in a "competitive game" made by players who act "according to various conceptions of national, organizational, and personal goals . . . not by a single rational choice but by the pulling and hauling that is politics." 295 The outcome may be due to the triumph of one individual or group over the other, or may result from "compromise, conflict, and confusion of officials with diverse interests" 296 and is not what any person or group wanted. In either event, however, that outcome is determined more by the "power and skill" of the players than by rationality or routines. Bureaucratic structures are not irrelevant. Bureaucratic loyalty, for example, might affect how a particular player conceives of what outcome will best serve the national interest. Nonbureaucratic concerns are relevant as well, including personal beliefs or ideology, domestic political concerns, and personal interests. 297

Bureaucratic routines are significant, though not determinative, because they establish the "action channels" that structure the game. The action channels pre-select the major players and allocate power among them (e.g., by determining which agency has principal responsibility for implementing a decision, thereby giving that agency's head some additional influence over its outcome). 298

Formal (including legal) and informal rules of the game also affect the outcome by making some moves (such as certain kinds of bluffs or deceit) legitimate and others im-

295. G. Allison, supra note 1, at 144.
296. Id. at 145, 162.
297. Id. at 167.
298. Id. at 169-70.
Even after the formal decision is made, the game continues, characteristically expanding. More players, who will have to implement the decision, enter the field. The players in conflict over a decision will often try to "maneuver to get the action into the channel that they believe offers the best prospect for getting their desired results," but often they will have no choice in the matter of implementation. As a result, the implementing players may go "beyond the spirit if not the letter" of the decision or, if they disagree with it, may delay or disobey it.

Model III analysts are not shocked that the outcome of what passes as decisional process is often incoherent. Due to the number of simultaneous games and players, the resulting actions "rarely follow from an agreed doctrine in which all players concur" and "rarely reflect a coordinated government strategy and thus [should not be read as] conscious 'signals.'" Indeed, misperception is essential to the process of government, for it is "the grease that allows cooperation among people whose differences otherwise would hardly allow them to co-exist."

Applying Model III to the Cuban Missile Crisis, Allison addresses the question of why the United States responded with a blockade by recounting the opening positions of each of the members of President Kennedy's Executive Commit-

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299. Id. at 170-71.
300. Id. at 173.
301. In the words of former National Security Advisor Zbigniew Brzezinski, "[i]n the making of national security policy, we have, in effect, a chaotic nonsystem." D. Clarke, Public Policy and Political Institutions (epigraph) (1985).
302. G. Allison, supra note 1, at 175.
303. Id. at 178. Model III seemed considerably more esoteric when Allison described it in 1971 than it is today, after the American public has now been exposed for years to spectacular conflicts within the national security policy apparatus. The public spectacles have included frequent, major clashes between Secretaries of State and National Security Advisors to the President, such as those between Secretary William Rogers and Advisor Henry Kissenger, Secretary Cyrus Vance and Advisor Zbigniew Brzezinski, Secretary Alexander Haig and Advisor Richard Allen, and Secretary George Shultz and Advisor John Poindexter, the last of which became the "battle royal" through which Secretary Shultz was excluded even from knowledge of the Government's repeated sales of arms to Iran. See Pear, Those to Whom "Battle Royal" is Nothing New, N.Y. Times, July 28, 1987, at A14, col. 1.
tee, and, drawing particularly on Robert Kennedy's posthumously published memoir, he describes the argument and bargaining among them. Allison highlights, for example, that the Joint Chiefs of Staff tried to use the crisis to force the President to undertake a massive air strike and invasion of Cuba in order to overthrow Fidel Castro. But the Defense Department's misrepresentation that a "surgical" air strike (limited to the Soviet missiles) was impossible was a key factor leading to the President's decision in favor of a blockade rather than an air strike. Similarly, he explains that President Kennedy summoned U.N. Ambassador Adlai Stevenson to a meeting of the inner circle and allowed Stevenson to argue for exchanging U.S. missiles in Turkey or the U.S. base at Guantanamo Bay for Soviet withdrawal. The President rejected Stevenson's advice in front of the inner circle, thereby "sacrific[ing] the Ambassador to the hawks in order to allow himself to choose the moderate, golden mean."

Model III analysis has considerable inherent appeal. Every close reader of a good daily newspaper is constantly bombarded by details of at least some of the political give-and-take of governmental policy-making, including the formation of national security policy. The media frequently reports on disagreements between the Secretary of State and the Secretary of Defense, or between one or both of those Secretaries and the National Security Advisor, as well as efforts of Congressional leaders to influence foreign and defense policy. In an academic setting, however, Model III must overcome two obstacles. First, the model is suspect precisely because it is so familiar. "[A]ccording to prevailing doctrine, politicking lacks intellectual substance. It constitutes gossip for journalists rather than a subject for serious investigation." Second, the Model relies heavily on information—particularly interview information—that is unusually difficult to obtain. Despite these problems, Model III

306. Id. at 198.
307. Id. at 204-05, 209-210.
308. Id. at 209.
309. Id. at 146.
310. "What is required is access . . . to a large number of the participants
can at least contribute considerable information to the other forms of analysis, and perhaps it possesses substantial persuasive power of its own.

A Model III analysis of the governmental response to the NRDC initiative centers around Richard Perle, for no individual was better poised than he to influence U.S. reaction. In the Spring of 1986, Perle was completing his fifth year as Assistant Secretary of Defense for International Security Policy, including arms control. As a result of his extensive Washington experience, his support from Secretary of Defense Caspar Weinberger, his charm, and his skill at bureaucratic infighting, Perle's influence in national security decisions was far greater than his rank would suggest.

Perle had served on the staff of Senator Henry M. Jackson from 1972 until President Reagan had appointed him to his Pentagon post. He and Senator Jackson both viewed the Soviet Union as a nation that wants "a world in which no decision can be taken anywhere that isn't consistent with

in a decision before their memories fade or become too badly discolored. Such access is uncommon. But without this information, how can the analyst proceed?" Id. at 181. Allison quotes Prof. Richard Neustadt: "If I were forced to choose between the documents on the one hand and late, limited, partial interviews with some of the principal participants on the other, I would be forced to discard the documents." Id. Because gaps are inevitably created by lack of access to officials or lapses in memory, Model III analysis must occasionally speculate as to events rather than rely on interview or other information. See, e.g., id. at 190-91 (speculation that CIA Director John McCone learned of Soviet plans to install missiles in Cuba from French intelligence), 229-30 (speculation that the ultimate settlement of the Cuban Missile Crisis was the President's sending of Robert Kennedy to assure Soviet Ambassador Dobrynin that U.S. missiles in Turkey would be removed—without the knowledge of any other members of the Cabinet).

Conducting this study on the NRDC project required approximately three dozen interviews, primarily with federal officials, over an eight month period. Even so the record is incomplete, because a few officials refused to be interviewed, a few declined to answer particular questions, and in a few cases, the interviewees' memories had faded. Another problem in studying recent national security decisions is that some of the documents may remain classified for decades. See Exec. Order No. 12,356, 47 Fed. Reg. 14,874 (1982).

Moscow's interests.” Together, they succeeded in restricting arms control agreements with the Soviets by challenging, from the right, the arms control measures negotiated by Presidents Nixon, Ford, and Carter. He had arrived in office thinking that the only good arms control agreement was the 1963 atmospheric test ban treaty. From his Defense Department post, he had pressed for U.S. negotiating positions so stringent that the Reagan Administration's first Secretary of State, Alexander M. Haig, Jr. called them "absurd" because they were so unlikely to lead to any strategic agreement with the Soviets. Yet his bureaucratic skill and political support was such that he was regarded as "the major player on arms control in this town for many years," the person "having more impact on policy in arms control than any other official in the U.S. government," and even "the single most effective bureaucrat in the government."

Perle was no stranger to the issues of nuclear test ban proposals or export licensing. He was the Pentagon's principal policy-maker on nuclear testing constraints, and just days before the NRDC and the SAS had reached their agreement in Moscow, he told Congress that even if the United States could verify compliance with a comprehensive test ban at this point, "a comprehensive test ban would [not be] in our interest" or the interest of the world because of the need to develop ever-improved safety devices. He had appeared on a San Francisco television show to say that "there is signifi-

313. Id. at 12 col. 4.
318. S. TALBOTT, supra note 316, at 17.
319. Hiatt, supra note 315, at col. 3 (statement of Senator Larry Pressler).
cant evidence the Soviets have violated the 150 kiloton threshold [of the TTB Treaty]; confronted by statements to the contrary by prominent seismologists who had been Defense Department consultants, he replied that "they're a bunch of seismologists feathering their own nests." 321

Perle's view that the U.S. Government was too lax in dealing with the Soviets extended not only to arms control but also to U.S. exports. Upon assuming office, he entered into an extended feud with the Commerce Department, claiming that by supporting U.S. exporters, Commerce was allowing militarily significant technology to leak to the East. On Deputy Secretary of Defense Frank Carlucci's last day in the Pentagon, Perle persuaded Carlucci to transfer the Defense Department's functions in export controls (including reviewing applications filed with the Commerce Department) from the Undersecretary for Research and Development to himself. 322

Perle believed that the Commerce Department's attitude toward U.S./U.S.S.R. relations permeated the State Department as well. The people at State, he believed, were too eager to obtain agreements with the Soviets, regardless of the content of these agreements. 323 As a result, Perle was sure that State Department officials in conflict with him often attempted to conceal at least some of their actions. 324

At the Natural Resources Defense Council, Thomas Cochran realized that NRDC would need a certain degree of government cooperation for the seismic monitoring project to succeed. Cochran was well aware of Perle's reputation

321. Perle and the Scientists (KRON-TV, Channel 4, San Francisco, California, broadcast, May 9, 1986) (6:00 PM News) [hereinafter "Perle and the Scientists"]). The same program revealed that when Air Force Intelligence had asked seismologists to advise on Soviet Nuclear Tests, Perle had written a letter complaining that the "intelligence community is undermining the Administration's position. My department will control this area." Id. at 5.

322. Hiatt, supra note 315, at A20, col. 2.

323. Hiatt, A Richard Perle Sampler, Wash. Post, Jan. 2, 1985, at A20, Col. 2. Perle's regard for academics was no higher: "We have a tendency to turn over negotiating responsibility to mid-level officials who may or may not be competent negotiators and sometimes to academics who couldn't negotiate a sabbatical." Interview with Judith Miller, supra note 314, at col. 2.

324. Perle and the Scientists, supra note 321.
and his view on nuclear weapons issues. Therefore, he sought a more receptive audience within the U.S. Administration. NRDC had no links with Secretary George Shultz, but the Chairman of NRDC's Board of Directors, Adrian W. (Bill) DeWind, was a senior partner at the New York law firm of Paul, Weiss, Rifkind, Wharton and Garrison. Through decades of law practice, DeWind had come to know many, perhaps most, of the members of the nation's legal and financial establishments. Among his many contacts was John C. Whitehead, who had been appointed, a few months earlier, as Deputy Secretary of State.

Whitehead, sixty-four years old, had assumed office without prior government experience after thirty-eight years as an investment banker. Early in 1985, Secretary Shultz had tapped him for the Number Two job at State, and Whitehead fulfilled Shultz's expectations. After a few months on the job, those who had worked with him were praising him for "acting decisively when options are put to him rather than looking for others to choose."³²⁵

In policy matters, Whitehead was a moderate conservative. He wrote in 1984, before his appointment, that the Soviet Union "has lost its appeal to third world nations and may now be slipping backward. Over time, these developments may permit some moderation in the increase of defense expenditures..."³²⁶ Significantly, he came to the Government with the "strong conviction that now is the time for private-sector companies to step up and play a larger role in solving the country's social problems."³²⁷

At Cochran's request, DeWind asked Whitehead for a meeting when the NRDC project was still at the conceptual stage. This first meeting took place on February 20, 1986, three months before NRDC representatives went to Moscow

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³²⁷. Vise, Interview with John C. Whitehead, Wash. Post, Feb. 10, 1985, at G2, col. 5, G3, col. 3. Whitehead was referring to domestic problems, but his belief that government is not able to solve many domestic problems may have predisposed him at least to be intrigued by the possibility that a private initiative might make a contribution to arms control.
to work out an agreement with the Soviets. DeWind flew to Washington for the meeting, and took with him Cochran and another NRDC staff member. Whitehead brought Paul Nitze, one of the Reagan Administration's principal arms control negotiators, and James Timbie, an experienced arms control analyst who was serving on Whitehead's staff.

The concept of an agreement between NRDC and a Soviet institution had not, as of this meeting, arisen. Cochran disclosed the NRDC's proposal to suggest, in separate letters to President Reagan and General Secretary Gorbachev, that each nation permit seismic monitoring near its test site by non-governmental scientists of the other country. NRDC hoped that the State Department representatives would be enthusiastic, not because the Reagan State Department would want to edge the world a little closer to a comprehensive test ban, but because the NRDC proposal might obtain for the United States some unique seismic data that could reduce uncertainty about TTB Treaty compliance. 329

The State Department representatives were skeptical, however, and Whitehead wrote to DeWind a few days later to express "certain concerns." First, he worried that "private citizens" could "draw conclusions about Soviet compliance with testing constraints that differ from the judgments of U.S. officials with access to more sources of information." Second, "the Soviets could try to turn your proposal to their advantage in their campaign for a CTB." Finally, a CTB in the near future was a bad idea because continued nuclear testing was required to maintain confidence in U.S. nuclear forces. 332

When the Soviets proved less receptive to the idea of sending letters to the superpower leaders, this idea was

330. Interview with Dr. James Timbie, Special Assistant to Deputy Secretary Whitehead, U.S. Dep't of State (Mar. 10, 1987).
331. Whether DeWind meant the NRDC or the American public is unclear.
332. Letter to Adrian DeWind, Chairman, Board of Trustees, NRDC, from Deputy Secretary of State John C. Whitehead (March 4, 1986).
333. See supra note 72 and accompanying text.
abandoned in favor of the direct agreement between NRDC and the Soviets that was signed in Moscow on May 28, 1986. News of the agreement was reported from Moscow in *The New York Times*, and it was from such press accounts that Perle and other Pentagon officials first learned of the project.

Immediately upon returning from Moscow, DeWind and Cochran met again with Whitehead. In this June 3rd session, DeWind and Cochran described the agreement they had reached and made two alternative requests of Whitehead. First, they proposed that the U.S. Government assume responsibility for the project. This change would have spared the NRDC from the enormous administrative burden of running a scientific mission in the Soviet Union, but the U.S. officials did not want to encourage the seismic exchange to this extent. Alternatively, DeWind and Cochran sought the help of the State Department with the export licenses and Soviet visas that they knew would be necessary.

Whitehead liked the idea that NRDC scientists would be able to collect unique data from within the Soviet Union, and, while he did not support a governmental take-over of the project, he believed that the Government should not discourage NRDC in any way. He told the NRDC representatives that he was personally supportive of the concept of assisting the organization to obtain the necessary governmental approvals, but he could not promise much because the decision was not up to the State Department alone. Whitehead did, however, promise to appoint a State Department official to act as a liaison between the Department and NRDC. The next day, his office called Cochran to inform him that Bismark Myrick, in the Office of Strategic Nuclear Policy, a part of the Bureau of Political-Military Affairs, would act as liaison.

Representatives of Whitehead and other interested government players convened three days later, as part of the In-


336. Telephone interview with Dr. James Timbie, Special Assistant to Deputy Secretary Whitehead (Aug. 11, 1987).

337. Interview with Dr. Thomas Cochran, supra note 72.
This Working Group had been set up years earlier, established under the authority of the National Security Council as fora in which representatives of different agencies could meet to reach consensus or explore differences regarding national security policy. "Working groups" are the lowest level in a hierarchy of such bodies. The membership of working groups generally consists of civil servants not holding political appointments, although they sometimes include politically appointed deputy assistant secretaries. In either event, working group members attend the meetings with instructions from their superiors to negotiate for particular outcomes deemed desirable by senior agency officials. If the working group reaches consensus on an issue, it writes a descriptive memorandum which is circulated at higher levels. If an issue is very controversial, however, the working group may not achieve agreement, and it will instead prepare an "options paper" describing the problem and the results favored by various agency representatives. The problem is then passed along to the next level on the hierarchy, the "interagency group," known in the national security community as an "IG." At this level, assistant secretaries of the various departments explore the issues on which the working groups divided, and they either agree or write options papers for the next level, the "senior interagency group" or "SIG," which is attended by undersecretaries or deputy secretaries. Next, disagreements may be taken to the National Security Council itself, whose divisions can be resolved only by the President. Bamford, Carlucci and the N.S.C., N.Y. Times, Jan. 18, 1987, § 6 (Magazine), 16, 26; U.S. Tower Commission, Report of the President's Special Review Board II-14 to II-15 (1987).

This description is idealized. Because of bureaucratic or personal disagreements or rivalries, there are many occasions on which working groups or interagency groups are unable to reach consensus, but for which it makes little sense to convene the very busy highest officials of several agencies (in SIGs or the NSC, or even in IGs). During the Reagan administration, "generally the SIGs and many of their subsidiary groups . . . fell into disuse." Id. at II-1. The membership of IGs (in terms of agencies, rather than particular incumbents of offices) is determined by a formal order issued by the President's National Security Advisor, and the membership of working groups is determined by the IGs to which they report. Interview with William Clay, a State Department official involved in developing the Government's response to the NRDC project (April 1987). William Clay is not the real name of this official. Four of the author's interviewees agreed to speak only on the condition that they not be identified by name, and accordingly, the names, precise titles, and exact interview places and dates of these informants have been withheld. All of them specified the accurate but not fully informative descriptions to which the author was limited in identifying them. These four officials are Leonard Appleby, a foreign service officer who participated in State Department policy making at the working level, interviewed in March 1987; Steven Blair, an official actively involved in the NRDC's project, inter-
and it had been meeting periodically to discuss the U.S. response to General Secretary Gorbachev's testing moratorium. The main activity of this Group was developing ways to put pressure on the Soviet Union to accept President Reagan's alternative to a mutual halt on testing—a Soviet visit to the Nevada Test Site to observe an American test and to measure its yield with CORRTEX or some similar instrumentation. The NRDC project was discussed at the June 6th and subsequent meetings, but it was always "a kind of sidebar." 339

The membership of the Group included junior officials, none of them presidentially appointed but all experienced in nuclear policy, from the Soviet desk of the State Department, the Arms Control and Disarmament Agency, the staff of the National Security Council, the Department of Energy, the Central Intelligence Agency, the Office of the Secretary of Defense, and the Joint Chiefs of Staff. The representative of the Office of the Secretary of Defense was retired Colonel Ed Nawrocki, who reported to Richard Perle and to his Deputy, Frank Gaffney. The Group was led by State Department official Bismark Myrick. 340

At this point, NRDC had not yet formally applied for any form of government permission, so there was no paper on which anyone could act. But from Myrick's report on the meeting with Whitehead, members of the Group knew that the NRDC would soon be asking for an expedited export license, and at this meeting the Working Group began to discuss the NRDC project in general terms. They quickly realized that because of the nexus between the particular equipment the NRDC sought to export and the existing export regulations, the government would eventually have no choice but to grant the export license. 341

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339. Interview with Leonard Appleby, supra note 338.
340. Interview with Steven Blair, supra note 338. Certain meetings of the Group, including the June 6 meeting, were also attended by Dr. Ralph Alewine III, Director of the Geophysical Sciences Group, Office of Strategic Technology, Defense Advanced Research Projects Agency. Interview with Dr. Ralph Alewine in Roslyn, Va. (May 5, 1987).
341. One of the Pentagon officials present at the meeting was aware that
ets had insisted, however, on a clause in the NRDC-SAS agreement providing that seismic monitoring in Kazakhstan would begin by the end of June, slow or routine processing of the expected application might derail the project. The issue for the Group, therefore, was whether to try to accelerate the processing, to decelerate it, or to let it take its normal course, whatever that might be.\textsuperscript{342}

Deliberate delay was, in practice, a genuine possibility. Had the State Department recommended rejecting the application:

it wouldn't have been approved. We all appreciate the law, but if a high official wants to stop something it can be stopped. There are thousands of bureaucratic reasons why you can stall. Delay is sometimes worse than denial. On a denial, you can go to court. But delay is the government's most potent tool. You have to back up a decision to deny, but not a decision to delay.\textsuperscript{343}

The government does in fact stall from time to time:

We even stall a company out of business. I don't want to tell you about specific cases, so I have to be round about. Suppose a company had done a lot of sales of something that has dual civilian and military uses, such as radios. Now say that a country's status has changed because of a change of government, as in Iran. And let's say that the new government still wants the product, but the U.S. doesn't want them to have it. And let's say that we haven't formally pronounced an embargo, for political reasons. But whenever we become aware of an export by the American supplier of radios, we can have the Customs office hold up the goods and inquire whether they need a license, even though we know they don't. Then we can require them to document that

the government had already licensed the export of a far more sophisticated seismic system—one just like the borehole system that the NRDC planned to export a few months later to replace the early surface system to Bulgaria, to enable that Soviet ally to build an earthquake warning network. \textit{Id.}\textsuperscript{342}

\textsuperscript{342} Interview with Steven Blair, \textit{supra} note 338.

\textsuperscript{343} Interview with Donald Hammond, \textit{supra} note 145.
every component of the radio is decontrolled, and when they finally submit the documentation, we can pass the papers around from office to office. I know that kind of thing has happened.\textsuperscript{344}

The State Department members of the Working Group were aware that (despite his letter to Cochran three months earlier), Whitehead had a "fairly relaxed attitude" about the project.\textsuperscript{345} However, they expected resistance from other agencies, particularly Perle's office. One State Department member argued for expediting consideration of the license application when it arrived, but the representative of the Arms Control and Disarmament Agency (reflecting the attitude of Director Kenneth Adelman) suggested that the group explore means to slow down the procedure.\textsuperscript{346} When Perle's representative Ed Nawrocki took a middle course, arguing that the project was "just a routine scientific exchange" and that the Government should follow the normal procedures for such exchanges,\textsuperscript{347} Myrick supported him. Those inclined to try to obstruct the process could not realistically expect to budge the group away from a compromise on which the two leading players—the State Department chairman and the man representing Perle—agreed. Moreover, the leaders "realized that there had to be grounds for holding up an export license and even if you had grounds to refuse one . . . [i]t would look bad to hold them up on procedural grounds."\textsuperscript{348}

On this issue, then, the critical bargaining took place at the lowest possible level, the Working Group. On approximately June 11, 1986, the Group reached a consensus in favor of handling the license application, when it arrived, according to standard procedures.\textsuperscript{349}

Working Group consensus can be challenged at higher...
levels, however, and when the Interagency Group on Nuclear Testing Limitations convened at the Pentagon on June 17, 1986 with Perle the chairman, Perle questioned the Working Group's consensus.

In the eyes of Perle and his deputy and successor Frank Gaffney, the project was very dangerous. Gaffney saw the project as "a calculated effort by the Soviet government to undermine U.S. security policy." Gaffney maintained that the U.S. Government should do "everything it legally could do to discourage it as we would discourage any subversion." Perle's opinion was equally negative. If Perle could have had his way, he would have prevented the project from going forward because he thought "it could give the public the misleading impression that seismic verification alone would be sufficient to verify a test ban" treaty. In the June 17 meeting, he said that the NRDC program would

350. This procedure, like many other practices in the system of national security decision-making, has no basis in regulations or other written guidelines. "Executive orders delegate some of the President's authority to specific Cabinet officers. More frequently, however, the operating rules [determining which bureaus have responsibility for 'moving' an issue through the government, which ones must 'clear' communications to people outside of the government, or even to senior government officials, and how high in the government an issue must go] are not written down in any place but are understood intuitively by those involved." M. HALPERIN with P. CLAPP & A. KANTER, BUREAUCRATIC POLITICS AND FOREIGN POLICY 107 (1974).

351. The role of presiding over the IG rotated between Allen Holmes, Director of the Bureau of Political-Military Affairs of the Department of State (in practice, his deputy John Hawes usually attended for him), and Perle, and between the State Department and the Pentagon, reflecting the perennial rivalry between the two Departments for control of nuclear arms control policy. Interview with Steven Blair, supra note 338. "Much of the story of the Reagan Administration's arms-control policy is the story of the struggle" between Perle and Richard Burt, a predecessor of Holmes. S. TALBOTT, DEADLY GAMBITs 15 (1984).

352. Interview with Frank J. Gaffney, Deputy Assistant Secretary of Defense for Nuclear Forces and Arms Control Policy, in Washington, D.C. (July 2, 1987). In August, 1986, Gaffney wrote that "Soviet authorities hope the NRDC experiment will serve . . . to confuse the domestic debate about the need for American nuclear testing and the reasons why we oppose the effort of the Soviet Union and others to promote an inequitable and unverifiable ban on nuclear testing." Gaffney, Test Ban: The "Quick Fix" Won't Work, Wash. Post, Aug. 29, 1986, at A15, col. 1.

353. Telephone interview with Richard Perle, supra note 335.
not advance U.S. policy, and therefore the Government should not make it easy, but should slow or stop the progress. The IG members from other departments, particularly the Department of Energy to which Cochran had circulated a draft list of the equipment he proposed to use, replied that the seismic equipment that NRDC wanted to export did not seem to present any problems, and that Cochran had expressed his willingness to substitute other equipment if the proposed items were problematic. Checked by the regulations, Perle retreated. He rejected any extra-legal opportunities for delay because he did not want to expose himself or the Defense Department to charges of arbitrariness.

Within a few days, Perle met in the Pentagon with John Konfala, Director of the Pentagon’s Office of Strategic Trade. That Office acts for the Department of Defense when the Department of Commerce receives a license application that requires concurrent Defense approval. Perle alerted Konfala to the imminently expected application and told him that the Department would not object to the export license.

Perle’s decision not to fight the export license did not, however, solve NRDC’s problem. Under normal procedures, the Government would take approximately sixty days to process the papers, and when the IG met on June 17,

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354. Interview with Steven Blair, supra note 338.
355. Id.
356. Id.
357. Telephone interview with Richard Perle, supra note 335. “We couldn’t do anything about it because they were within the technical limits set by the export regulations,” Perle says. “It would have been different if they had needed an exception from us; then I would have been very comfortable denying it, just because I didn’t like the project.” Id.
358. “There’s nothing in writing about it so don’t bother to file a [sic] FOIA [Freedom of Information Act] request. I don’t know exactly when it was. I won’t tell you who attended.” Telephone interview with John Konfala, Director, Office of Strategic Trade, Defense Technology Security Agency (April 14, 1987).
359. Id.
360. See supra note 145 and accompanying text. In addition, Donald Hammond, a Commerce Department official who helped NRDC to complete its application, told NRDC attorney David Wirth that under standard Department procedures, the application would not be approved for
1986 NRDC had not yet filed its application. The Working Group consensus had resolved only to handle the application through normal channels, and had specifically decided not to expedite consideration of the NRDC application.

At this juncture, Bill DeWind intervened to assist the project. One of his law partners, Bayless Manning, was an old friend of Secretary of Commerce Malcolm Baldrige and had served with him on the Board of Directors of the Aetna Corporation. At DeWind's request, Manning telephoned Baldrige and cleared the way for DeWind to speak with him. At Baldrige's direction, DeWind then spoke with Laverne Smith, Director of the Department's Exporter Assistance Division.361

At about the same time, Cochran moved on another front. He contacted Bismark Myrick, his contact at the State Department, to request State's help in expediting the license application. Myrick told him that although State would not publicly support the NRDC project, it would "give whatever support it could to expedite the export license within the Government."362 Myrick also advised Cochran (probably following whatever general directions Whitehead had given Myrick) that normal Commerce Department processing would take sixty to 120 days, and that NRDC should therefore ask the licensing officials in the Department of Commerce to call Myrick to confirm that the "application should be handled on an emergency basis."363 This conversation encouraged Cochran and others at the NRDC to inform the Commerce Department officials that the State Department wanted the license application expedited. On June 18, 1986, however, Myrick remonstrated with Cochran, telling him that NRDC's statements that State wanted the license expedited were "putting us [at State] in a bad position" with colleagues
in other agencies, and he asked Cochran not to say that State was being helpful.\textsuperscript{364}

Meanwhile, Cochran and David Wirth had been meeting frequently with Commerce Department officials for guidance on completion of the application forms, no easy task for a first-time exporter because of the need to include the numbers of the sections of the regulations governing each piece of equipment. Every contact was a problem. "First we needed to find out what we needed to do to apply. There's a phone number for export licenses in the Department of Commerce, but it's busy all the time. People with automatic redialers call it a hundred times to get through, so there's no chance of getting them on the phone. We went down there personally, since we were in Washington. . . ."\textsuperscript{365} After several false starts, and unfruitful meetings, Cochran and Wirth were referred to Don Hammond, an official in the Office of Export Administration of the Commerce Department who took an interest in their project. Hammond could sympathize with their problems:

They'd bucked up against the bureaucracy in a way that isn't that unusual. The office of Export Administration is a big organization with one phone number. The people who work in it have evolved a scheme to cope with the large numbers of exporters who want attention. Whomever you get passes you on to someone else. They have lists of ten referral numbers. If 75\% of the individuals take that tack, people will be referred fifteen times before they give up. I've had a woman crying on the phone with me, begging me not to hang up, because no one else would talk with her.\textsuperscript{366}

Hammond had another reason for taking some extra time to help the NRDC. Before coming to the Department of Commerce, he had worked for twenty years at the Naval Research Laboratory. At the Laboratory, "all I'd heard about the verification of nuclear test restrictions was just talk: 'it can be done, it can't be done.' Just a lot of arm waving." Now, at

\textsuperscript{364} Daily Journal of Dr. Thomas Cochran (entry of June 18, 1986); interview with Dr. Thomas Cochran, supra note 72.
\textsuperscript{365} Telephone interview with David Wirth, supra note 360.
\textsuperscript{366} Interview with Donald Hammond, supra note 145.
last, "[s]omebody was doing something other than just talking about verification." 367

Hammond spent several hours helping the NRDC to prepare its application. He found out which items of equipment required a license. With respect to the items about which he was unsure, he informally consulted colleagues who would know the relevant export control regulations. Though his job was to be a technical advisor on the formulation of certain types of regulations and he was not in the Office of Export Licenses which actually processed applications, he considered what he could do to speed the application once it was filed. 368

The application was filed with the Commerce Department on June 18, 1986, 369 but the key people at the Department had anticipated its arrival. Two days earlier, the "emergency handling officer of the day," 370 Dale N. Tasharski, had prepared a Special Processing Control Record 371 to cover the application when it arrived. 372 Without any further notations, this form would have caused other Commerce officials to give the application priority over others and to hand carry it among offices. 373 But on this form, two further notations had been added. In the "Remarks" box on the form, Tasharski had printed, in block letters, "RUSH STATE DEPT. REQUEST NEED BY JUNE 24." Under his notation, in a different hand, someone else had written, "Expedite per Baldrige Request." 374

The irregularity of the entries can be explained only by speculation. Mr. Tasharski (who handled dozens of special processing requests each time he rotated through the duties of "emergency processing officer of the day") no longer recalls precisely who asked him to make the "rush" notation. However, he thinks it unlikely that a State Department offi-

367. Id.
368. Id.
370. See supra note 187 and accompanying text.
371. See supra note 188 and accompanying text.
373. See supra note 189 and accompanying text.
374. U.S. Dep't of Commerce, supra note 372.
cial would have called him directly. More likely, some higher official in Commerce relayed the State request to him.375

What was the chain of information? Myrick had asked Cochran to have the Commerce Department call Myrick's office.376 Probably, when a middle-level Commerce Department official phoned Myrick's office on Cochran's urging, Myrick or a subordinate made the "State Department request."377 Since Laverne Smith, with whom DeWind spoke at Secretary Baldrige's request, was Tasharski's immediate superior,378 it seems highly likely379 that she was the source or author of the second notation.

The Office of Export Licensing was alerted to the exigency three times, which might have been enough to ensure expedition of the processing. Nevertheless, Hammond made sure that nothing went wrong. "I don't work in that office and couldn't order anyone to do anything," he says.

But you get to know the individuals in the office and who has to sign off at each step of the way. You get to know them on a personal basis, and you talk to them about something other than business, and to develop a relationship other than a professional one. And then people will do things for you, almost as a personal favor, if you don't ask too often and if it doesn't get them in trouble. I can ask favors of people a few times a year. And I was able to get faster action on this one.380

NRDC had every advantage in Commerce: the Department's Special Processing routine reserved for two percent of applications; an expedition request from another agency; inter-

376. See supra note 362 and accompanying text.
377. The circumstantial evidence suggesting that the call to Commerce originated with Myrick or his office includes (1) Myrick's statement to Cochran, (2) the fact that Myrick's office was handling the NRDC project for the State Department on a day-to-day basis, and (3) Richard Perle's statement that if Myrick did help to expedite the processing of the export license, "that would have been consistent with the position that he took [in interagency meetings] all along." Telephone interview with Richard Perle, supra note 335.
378. Interview with James Truske, supra note 182.
379. Ms. Smith declined to be interviewed.
380. Interview with Donald Hammond, supra note 145.
vention from, or attributed to the Secretary himself;\textsuperscript{381} and a sympathetic employee with direct, personal access to the licensing officials. As a result of this four-pronged pressure, Commerce acted in record time, and within two days of being filed, the application had completed its Commerce Department review and was on its way to the Department of Defense.\textsuperscript{382}

Review at Defense was another matter. No one at State could intervene there because the principle of leaving NRDC to the standard routines had been settled by the IG. NRDC had no connections with the Secretary of Defense, and no sympathetic employee was likely to emerge.

Nevertheless, when the application reached the Office of Strategic Trade Policy (OSTP) in the Defense Department,\textsuperscript{383} NRDC benefitted fortuitously both from the notation on the cover sheet reflecting Baldrige's personal interest and from Perle's prior consideration of the matter. "The fact that Baldrige was interested carried some weight . . . Commerce would be on the phone with our office every day [if we didn't make a prompt decision on this case]."\textsuperscript{384} This fact might alone have been enough to speed up the first half of OSTP review, the technical assessment of whether the export was consistent with the export control regulations. All applications evaluated at OSTP also undergo a second, "policy" review, however.\textsuperscript{385} This additional review could have slowed the application considerably. Fortunately for the NRDC, in this instance, "Perle and the other policy people had [already] met, so we didn't have to go back to the policy

\textsuperscript{381} Appealing to the Secretary through an outside channel was not without its risks. A Commerce Department official later told the NRDC's David Wirth that such tactics "would help us in the short run but would hurt us in the long run, because by disrupting the routine of the Department of Commerce workers, we would make enemies who would retaliate against us when we filed our subsequent applications." Telephone interview with David Wirth, supra note 359.

\textsuperscript{382} See supra note 187 and accompanying text.

\textsuperscript{383} The application was hand carried across the Potomac as part of its "special processing." Telephone interview with John Konfala, Director, Office of Strategic Trade Policy, Defense Technology Security Administration (April 14, 1987).

\textsuperscript{384} Id.

\textsuperscript{385} See supra note 165 and accompanying text.
people";\textsuperscript{386} as a result, the policy review within OSTP was fast and virtually \textit{pro forma}.\textsuperscript{387}

If the application had simply arrived in OSTP in the normal course of business, it would have taken ten to fifteen days to process and could legally have remained in defense for forty days.\textsuperscript{388} In fact, because of pressure from OSTP's Commerce Department counterparts and because Konfala had already discussed the project with Perle and knew that there was "high-level focus" on this project at State, Defense and Commerce,\textsuperscript{389} the Department of Defense approved the application within two working days.\textsuperscript{390} Defense then expedited communication of its decision to the Department of Commerce, which immediately thereafter granted the license.\textsuperscript{391} Indeed, Commerce not only speedily granted the license, but gave NRDC one year to complete the export, rather than the month which is the standard expiration period for licenses granted through special processing. Granting a one-year license for an application handled through the Department's expedited procedures is extremely rare. It happens only once every four or five months, and it happened in this case because the papers showed the personal


\textsuperscript{387} According to Mr. Kass, prior political review was one of six reasons why the application cleared the Defense Department's reviewers so quickly. The others were (1) the fact that the equipment was going to remain under the control of American scientists, so OSTP did not have to investigate a Soviet end-user; (2) the fact that the NRDC had done its "missionary work" by explaining the project to senior officials at State before filing its application, so "even though it was embarrassing that a private group had done something that the US government hadn't been able to achieve, we knew what we were dealing with"; (3) the fact that Commerce officials had called ahead to say that the application would soon be arriving; (4) calls from the NRDC to alert OSTP officials that the application was arriving from Commerce; and (5) the evident urgency that the applicants from the NRDC felt. \textit{Id.}

\textsuperscript{388} \textit{Id.}; 50 U.S.C.A. app. § 2409(e) (1985).

\textsuperscript{389} Telephone interview with John Konfala, \textit{supra} note 383.

\textsuperscript{390} See \textit{supra} note 193. Perle did not know until the author's interview with him more than a year later that the application had moved through his Department so quickly. Telephone interview with Richard Perle, \textit{supra} note 335.

\textsuperscript{391} See \textit{supra} notes 194-196 and accompanying text.
concern of Secretary Baldrige. Reflecting on the speed with which this application was processed, one Defense Department official noted, in a colloquial paraphrase of Allison, "This shows how the government works. From an administrative standpoint, there are established procedures. But also there's a lot of ad-hoc-ism." NRDC's next problem was obtaining the visas for Soviet scientists. During the deliberations on how to respond to the expected export license application, the Working Group had known that the NRDC-SAS agreement called for reciprocal visits to the United States. The Working Group had never discussed the proper response to Soviet visa applications, however, because its members believed that the Soviets would never actually implement this part of the arrangement. The Group reasoned that since the U.S. Geological Survey openly published seismic data from Nevada, including data showing most, if not all, of the U.S. nuclear tests, the Soviets would not want to go to the expense of sending a team to Nevada. The Soviets insisted on negotiating reciprocal rights into the agreement, the Group assumed, only so that the deal with NRDC did not look to the world like a unilateral U.S. inspection of the Soviet Union. As a result, Working Group consideration of these two phases of the project were "two very distinct operations."

After the license was granted, some officials began to focus on the next stage. At an IG meeting on June 27, 1989, Arms Control and Disarmament Agency Director Kenneth Adelman said that if the Soviets did propose to come, his agency would oppose the visit. In July, when U.S. scientists were already placing their seismic equipment in Kazakhstan, American newspapers reported the NRDC's announcement that the Soviets were indeed planning to come to the United States to select sites for their stations. The Soviets wanted to have these sites operational by October.

Reacting quickly, the State Department sent a telegram

392. Interview with James Truske, Division of Exporters Assistance, Department of Commerce (May 28, 1987). When the Secretary is interested, "people hop to be accommodating." Id.
393. Telephone interview with John Konfala, supra note 383.
394. Interview with Steven Blair, supra note 338.
to the U.S. Embassy in Moscow, alerting the Embassy to the
U.S. newspaper reports. "Given the media attention from
both sides which the travel of such a team of Soviet scientists
would attract, and the need to consider the question of visa
issuance for these purposes, post should alert the Depart­
ment ASAP when these Soviet scientists apply," the cable or­
dered. "Please advise via Visas Donkey Chipmunk . . . for
appropriate adjudication."\footnote{396}

Several aspects of this telegram are worth noting. First,
it is clear from the text that media attention was among
State's early concerns regarding the visa problem, and the
public relations factor would continue to mold U.S. policy.
Second, although the law gives consular officers theoretically
unreviewable discretion with respect to decisions on the
excludability of nonimmigrant visitors,\footnote{397} the officials at the
Soviet desk who drafted and approved the telegram\footnote{398} were
instructing the visa officers in the Embassy to request from
them an "appropriate adjudication" which, in effect, would
guide the decision of the Embassy personnel. Finally, the
Government would take advantage of the controls on Com­
munists in the 1952 McCarran-Walter Act to exert leverage
over the visit. Under State Department codes,\footnote{399} "Donkey"
means a request for an advisory opinion from headquarters
in Washington, and "Chipmunk" refers to a request for a
determination as to eligibility under the Communist-exclu­
sion sections of the Act, with the further recommendation of
the consular officer that if the applicant is thought to be inel­
gible only on the basis of Communist affiliations, the ineligi­
bility should be waived by the Justice Department.\footnote{400}

At about the same time that the State Department sent
its telegram to Moscow, State officials sent a visa proposal to

\footnote{396. U.S. Dep't of State, Outgoing Telegram No. 222084 from the Secre­
tary of State to the U.S. Embassy in Moscow (July 16, 1987).}

\footnote{397. See supra note 221 and accompanying text.}

\footnote{398. See U.S. Dep't of State, supra note 395 (drafters located in "SOV,"
the Department's Soviet desk).}

\footnote{399. The codes are not secret; they are shorthands that date back to the
days when telegraphic communication was so expensive that single words
were used to express pre-agreed longer messages. Telephone interview
with Cornelius D. Scully, Director, Office of Legislation, Regulations, and
Advisory Opinions, Visa Office, U.S. Dep't of State (July 6, 1987).}

\footnote{400. Id.}
the three people on the National Security Council (NSC) staff who dealt with arms control issues.401 These officials refused, however, to allow State to decide the issue unilaterally or in consultation only with NSC staff. In mid-July, NSC asked State to run the decision through the interagency process, starting with the Working Group.402

Early in August 1986, therefore, the Working Group began to discuss the proper U.S. response when the Embassy reported the filing of a visa application. Because of the McCarran-Walter Act, the government had more options with respect to the visas than it did with respect to the export licenses. As a result, the Working Group did not, in this case, reach an easy consensus. The State Department representatives argued that the Soviet applications, once filed, should be handled in accordance with normal visa regulations. This position had the cosmetic advantage of paralleling the "normal processing" outcome of the Working Group's debate about the export license. In practice, however, since the Department consistently recommends waivers for Soviet nationals without applying foreign policy criteria,403 the outcome for which State argued would have granted the Soviets the visas they sought. The State members of the Group and a few others who agreed with them reasoned that as U.S. officials "[w]e were going to have to take our lumps for giving them [the Soviets] the seismic data, but we shouldn't also have to take lumps by being seen as trying to spoil the process. We shouldn't look as though the U.S. wasn't as open as the Soviets were being."404

The representative of the Joint Chiefs of Staff agreed with the State Department,405 but Perle's representative, Ed

401. The three NSC staff members were Sven Kraemer, Robert Linhard, and Linton Brooks. Interview with Charles East, supra note 338. Of the three, Kraemer was the most influential on this issue, because he was deeply familiar with the NRDC case by virtue of his membership on the Working Group. Cf. interview with Dr. James Timbie, supra note 336.

402. Interview with Charles East, supra note 338.

403. See supra notes 247-48 and accompanying text.

404. Interview with Steven Blair, supra note 338.

405. In foreign policy matters, the uniformed services do not always agree with the Pentagon civilians. Richard Perle has observed that "most of these fellows [Pentagon generals he works with] are not paid to have ideas, when you come right down to it. Asking them to advise on arms
Nawrocki, strongly disagreed. Nawrocki believed that:
the NRDC’s goals were totally the opposite of our
own. They went into this project to prove that a
CTB is verifiable. [And we’d made verification into
the main public objection to a CTB because] veri-
fication is such a ‘show stopper,’ as Richard Perle is
fond of saying. So the government didn’t go much
beyond verification as a reason why we shouldn’t
have a CTB. And NRDC was out to undermine the
verification argument against a CTB. \footnote{406}

Perle and Nawrocki had another reason to try to block the
NRDC project, if possible. On August 8, 1986, in the midst
of the Working Group’s debate as to how the United States
should respond, the House of Representatives was debating
an amendment to the following year’s military authorization
bill. The amendment would have prohibited the United
States from testing nuclear weapons of more than one kt un-
less the Soviets ended their moratorium and tested at yields
higher than this level. Several members were pointing to the
NRDC project as key evidence to show that the Soviets
would indeed cooperate in CTB verification. The chairman
of the House Foreign Affairs Committee noted that the
NRDC project “could be expanded to incorporate a wider
network of monitoring stations on their territory which
would provide even greater monitoring confidence.” \footnote{407}

In the Working Group, Perle’s representatives did not
take the hardest possible line, which would have been to
deny the Soviet scientists any possibility of visiting the
United States. Perhaps Perle saw the public relations price
control is a little bit unfair. It doesn’t come naturally to them.” \footnote{Hiatt, \textit{A
\footnote{406. Interview with Col. Ed Nawrocki, \textit{supra} note 347.}
Fascell). One member displayed, in the well of the House, “the first seis-
mogram from an in-country monitoring system to come back from the So-
viet Union.” Holding the seismogram up to the television cameras in the
House, he added, “This, my friends, is the Soviet moratorium in action, a
graphic description of what happens when a nuclear explosion doesn’t go
off. It should have been a U.S. official agency installing this equipment,
not a private American environmental organization. The signatures that
are on this seismogram should read: Adelman, Perle, Weinberger, Gaff-
ney, not the names of independent scientists.” \textit{Id.} at H5744 (statement of
Rep. Hartley).}
of a flat denial as too costly. Instead, Nawrocki argued that the Soviets should be told that they could come, but only as official representatives of the Soviet Government, on an official visit to the United States. In that context, they should be invited only to the Nevada Test Site, and only for the purpose of observing an American test and measuring its yield with CORRTEX or some similar mechanism. In other words, the Government should counter the NRDC project by inviting the Soviets to accept the offer that President Reagan had extended to them a year earlier, an offer they had already rejected. In proposing this policy, Perle was indifferent to the Soviet reaction. If the Soviets accepted, the NRDC project would be revealed as one that was really sponsored, on the Soviet side, by the Soviet Government. If Soviets turned the program down, "no damage would be done."

The other members of the Working Group took positions between those of the two most directly affected agencies, State and Defense, but somewhat closer to the stand of State. The Arms Control and Disarmament Agency representative argued that the visas should be granted but that the Government should insist that the Soviet visit was limited to scientific purposes. This formulation might allow the Soviets to come, but, by characterizing the visit as a scientific exchange, could make the visit less newsworthy and could also reserve for the Government the option of discontinuing cooperation if it wanted to stop the Soviets from monitoring actual nuclear tests. The Department of Energy's member said that the visas should be granted, and that the Government should avoid official involvement in the visit.

Unable to reach consensus among the four different proposals, the Working Group wrote an options paper

408. Interview with Steven Blair, supra note 338, confirmed in part in interview with Frank J. Gaffney, supra note 338.
409. Interview with Richard Perle, supra note 335.
410. Interview with Frank J. Gaffney, supra note 338. The U.S. Government might still have appeared obstructive, but the obstruction would have been less apparent than the clear blockade represented by a visa denial with no counter-offer.
411. Interview with Steven Blair, supra note 352. The NSC member took no formal position, since the NSC is, in principle, a coordinating rather than an operating agency.
describing the agencies' positions,\textsuperscript{412} which was intended to be circulated to more senior officials for resolution at an IG meeting. Just after the paper had been completed, however, the Soviets filed their application, with a proposed itinerary that included areas in California and Nevada 100 miles from the Test Site, and a proposed arrival date of September 14, 1986.\textsuperscript{413} NRDC was already making arrangements for the Soviet delegation to meet reporters at several stops in the United States, and to attend various scientific meetings. With the clock running, the Labor Day holiday intervening, and little prospect for any greater agreement in the IG than in the Working Group, the IG members did not meet. Instead, they forwarded the options paper directly to the staff of the National Security Council.\textsuperscript{414} The reference of such a matter to the NSC staff had become a standard procedure for resolving State-Defense standoffs, "in fact it was as a consequence of virtual paralysis in the development of arms control policy in 1983 that that subject was moved to the White House."\textsuperscript{415}

Meanwhile, the NRDC staff members attempted to work with the Department of State officials to smooth the visa process, as they had with Commerce Department officials in the case of the export license. Cochran asked Myrick for assistance, and Myrick's office told him to deal with Gladys Boluda, at the State Department's Soviet desk, who worked on visa matters.\textsuperscript{416} Cochran made no mention of interagency disputes, working groups, Communist exclusions, or waivers. To the NRDC, impliedly, the decision was being handled through routine bureaucratic processes. Cochran

\textsuperscript{412} Memorandum for Members of the Interagency Group on Nuclear Testing Limitations From the Nuclear Testing Working Group (Aug. 28, 1986). The memorandum is still classified and the author has not seen it.

\textsuperscript{413} Letter to Gladys Boluda, Department of State, from Dr. Thomas Cochran, NRDC (Sept. 2, 1986); Daily Journal of Dr. Thomas Cochran (entry of Aug. 26, 1986).

\textsuperscript{414} Interview with Steven Blair, \textit{supra} note 338. The NSC staff had a copy of the Working Group paper in late August by virtue of Sven Kraemer's membership in the Group. This paper was not formally transmitted by the State Department to the NSC, however, until September 13. Interview with Charles East, \textit{supra} note 338.

\textsuperscript{415} McFarlane, \textit{Letter to the Editor}, Wash. Post, June 28, 1987, at C6, col. 3.

\textsuperscript{416} Daily Journal of Dr. Thomas Cochran (entry of Aug. 26, 1986).
called Boluda, informing her of the scientists' proposed itinerary and their proposed September 14 arrival date, and followed his call with a letter appealing for her help in expediting the visa process.\textsuperscript{417} Two days later, Boluda told Ann Schonfield, an NRDC research associate, that although the U.S. Embassy in Moscow had not actually received the visa applications, everyone knew that they would be filed imminently, and the Embassy staff was ready to process them. She told Schonfield that the approval process usually took two to three days, and, in response to a concern expressed by Schonfield, reassured her that NRDC need not worry about the Soviets being restricted to certain geographic areas—that was a problem only for diplomats.\textsuperscript{418}

Two days after the Working Group completed its options paper and sent it to the NSC staff, Nicholas Daniloff, a journalist for \textit{U.S. News \& World Report}, was arrested and jailed in Moscow, apparently in retaliation for the August 23, 1986 arrest in New York of Gennadi Zakharov, a Soviet scientific officer assigned to the United Nations.\textsuperscript{419} The President and the nation were outraged. After writing two letters to General Secretary Gorbachev,\textsuperscript{420} President Reagan told the United Nations General Assembly that the Daniloff arrest had cast a pall over U.S.-Soviet relations,\textsuperscript{421} and the United States ordered the expulsion of twenty-five Soviet diplomats.\textsuperscript{422} The NSC staff members who received the NRDC options paper could not have failed to notice the potential political fallout if they granted, in the midst of the Daniloff

\textsuperscript{417} Letter to Gladys Boluda, \textit{supra} note 413.

\textsuperscript{418} Handwritten notes of Ann Schonfield, NRDC (dated Sept. 4, 1986). Travel of Soviet diplomats to certain areas (usually designated by county) of the United States is prohibited, in retaliation for restrictions on travel by Americans in the Soviet Union. \textit{See} Note from the United States Secretary of State to the Ambassador of the Soviet Union (Nov. 1, 1983), \textit{reflected in U.S. DEP'T OF STATE, MAP OF AREAS AND MUNICIPALITIES IN THE U.S. OPEN OR CLOSED TO TRAVEL BY SOVIET OFFICIAL PERSONNEL} (undated).


crisis, unrestricted visas to a highly visible group of Soviet scientists who were coming to monitor American nuclear tests. With Daniloff a prisoner, the visit of the Soviet scientists "had a domestic political dimension" which "had a psychological bearing" on the outcome of the NRDC application.423

Unbeknownst to Cochran and Schonfield, who continued to write to Boluda,424 the matter was now in the hands of NSC staff members. Behind the scenes, each of the major players lobbied the NSC staff in attempts to persuade that arbiter to take its side. Frank Gaffney, Perle's deputy, was the Defense Department's "point man"425 in "some off-line discussions."426 While at Foggy Bottom, "everybody was talking to everybody at many levels."427 Both Whitehead and Secretary of State George Shultz called Admiral John Poindexter, the President's National Security Advisor, to press for a decision in State's favor.428

The delay in processing the visas was caused in part by preoccupation throughout the national security community with other matters, including the Daniloff affair,429 partly because of the awkwardness of dealing with the issue with Daniloff unresolved, and partly by the continuing informal discussions with and among the NSC staff members and the President's National Security Advisor. During the first three weeks of September there were many such discussions. In-

423. Interview with Dr. James Timbie, Special Assistant to the Deputy Secretary of State (Mar. 10, 1987).
424. Letter to Gladys Boluda, Department of State, from Ann Schonfield (Sept. 5, 1986).
425. Interview with Charles East, supra note 338.
426. Interview with Frank J. Gaffney, supra note 352.
427. Telephone interview with John Hawes, Deputy Chief of Mission, U.S. Embassy to Morocco (July 20, 1987). Mr. Hawes served in 1986 as the principal deputy for purposes of the NRDC project to Allen Holmes, Director of the Bureau of Politico-Military Affairs. Sitting in for Mr. Holmes, he co-chaired (with Perle) the IG meetings dealing with nuclear testing restraints. According to Richard Perle, although interagency conflicts are a "fact of life, . . . under this Administration the National Security Council has been weaker than in prior administrations. Its ability to reconcile differences is less. So the differences persist longer and are fought out with greater determination." Pear, Those to Whom the "Battle Royal" is Nothing New, N.Y. Times, July 28, 1987, at A14, col. 1.
428. Interview with Charles East, supra note 338.
429. Interview with Frank J. Gaffney, supra note 352.
deed, "[t]he role of [Working Group and IG] papers is to trigger the informal discussions. The papers cause the discussions, but the decisions are really made as a result of a series of informal dialogues."430

After Daniloff had been released from prison into the custody of the U.S. Embassy in Moscow,431 the NSC staff members reached a decision which Admiral Poindexter ratified.432 The NSC considered both the Perle option of restricting the Soviets to an official visit to the Test Site under government auspices and the Whitehead option of letting them make the trip that they wanted to make. In the end, the NSC staff members selected some aspects of each approach and gave the Soviets a choice. They could come as an official delegation, measure a test in Nevada, and then do as they pleased, or they could come as guests of NRDC but not go to the prospective sites that they wanted to examine.433

In part, this choice grew out of the previous proposals. Toward the end of the informal bargaining process, when it became clear to the State Department that the NSC would not support their preferred approach, State Department members stopped asking for unrestricted visas and argued in favor of a conditioned visa, so as to avoid a blanket denial.434 But the idea of giving the Soviets two options took all of the agencies by surprise. The reason for this outcome was that the NSC staff "split the difference. The decision embodied a

430. Interview with Charles East, supra note 338.
432. "The decision was formally looked at by Poindexter. I wouldn't say he 'rubberstamped' our decision; 'ratify' is the non-pejorative term. On issues other than very major ones, we staff members tend to debate and decide them, and the National Security Advisor signs off. In this case, he had no questions about our recommended course of action." Interview with Charles East, supra note 338.
433. Outgoing Telegram No. 305164 from the Secretary of State to European Embassies et al. (Sept. 27, 1986) (press guidance).
434. Interview with Leonard Appleby, supra note 338. The concept of a conditioned license was originally suggested in an interagency meeting by someone from an agency other than the State Department, but after Myrick checked with the Visa Office to make sure that this device would be lawful, the State Department officials decided that they could live with it for the sake of compromise. Interview with William Clay, supra note 338, supplemented by telephone interview with William Clay (Aug. 17, 1987).
compromise between imposing no conditions [State's preferred approach] and permitting the Soviets to come only as government officials [favored by Defense]." The compromise resulted because compromise is "the typical decision-making mode in the U.S. government." As a NSC staff member explained, "Sometimes we have to be tie-breakers. But there is a very strong split-the-difference ethic that works over here. The NSC staff tries to find a solution that's acceptable for the country and to avoid complete winners and losers in the bureaucracy. This administration has some resemblance to a feudal system and there is no sense in pissing off the barons if you don't have to do so. We try to keep the process as a whole functioning." 435

On September 24, 1986, Myrick informed Cochran of the two options, and shortly thereafter the State Department issued press guidance attempting to make the Government's decision appear to have been an utterly routine one. The Soviet visit was rescheduled based on a truncated itinerary, and the Soviet scientists selected sites for seismic stations in California and Nevada based on maps and rock samples shown to them while they were in San Diego. When the Soviets asked to return a few months later, to participate in the establishment of the stations, they were again offered two unpalatable choices. They could measure the yield of a U.S. test and then enjoy an unrestricted three-month visit, or if they refused to monitor a test, they would be limited to a seven day U.S. visit and barred from visiting the areas in which they wanted to set up stations.

On this round of governmental consideration, some of

435. Interview with Frank J. Gaffney, supra note 338.
436. Interview with Charles East, supra note 338.
437. Daily Journal of Dr. Thomas Cochran, NRDC (entry of Sept. 24, 1986). According to the NRDC staff member who had primary responsibility for trying to get an answer to the visa request from federal officials, "[w]e never got a formal turn-down. We never heard anything from Boluda though we'd been calling her five times a day." Interview with Ann Schonfield, NRDC Research Associate, in Washington, D.C. (Jan. 7, 1987).
438. "Regarding the issuance of visas, visa requests submitted by Soviet officials routinely require waivers. Such waivers may involve certain conditions or restrictions." Outgoing Telegram No. 305164, supra note 433.
the factors had changed. Daniloff had long since returned to the United States and the diplomatic relationship between the United States and the Soviet Union was slightly less chilly. Nevertheless, the decision on this second visa application was virtually identical to the decision on the first one because, through the interagency fracas, a new standard operating procedure had been implicitly established—a procedure for dealing with NRDC visa requests. As one State Department participant in the process explained:

the second time around, there was no Daniloff affair, but by then we had a policy. It was easier just to follow the policy because it seemed to work. Also, by just following our previous policy, we could keep Defense out of our knickers. If you just say, ‘now we've got a policy that everyone agreed to, and we'll carry it out,’ they can't tell you what to do. Also it's easier to continue a policy than to revisit it. And you waste as little time as possible.441

This time, however, the Soviets rejected both options, choosing not to visit. They preferred to allow the NRDC to perform the site preparation work and, if necessary, to accept electronic data reports without ever visiting the sites. Although data collection in Nevada would not actually be hampered by the fact that the Soviets never set foot there, the inability to provide reciprocal access to the sites in the United States opened the project to attack from the Soviet Government bureaucracy. The lack of reciprocity may have contributed to the Soviet decisions in the summer of 1987 to require NRDC scientists to move the Kazakhstan stations to locations further from Semipalatinsk, and to leave all of the Soviet stations under the day-to-day control only of Soviet nationals.442

Because application for permission to install the seismic stations on government land had to await Soviet selection of particular sites, the interaction between the NRDC and the Government on this issue lagged behind the resolutions of the export license and visa issues. By the time the sites had

441. Interview with Leonard Appleby, supra note 338.
442. Telephone interview with S. Jacob Scherr (July 9, 1987); see Natural Resources Defense Council and Soviet Academy of Sciences, USA-USSR Nuclear Test Ban Verification Project Agreement (June 25, 1987).
been selected, NRDC had contracted to the University of Nevada at Reno the responsibility for setting up the U.S. stations.

In January and February 1987, the University of Nevada applied for rights-of-way to erect the three stations.\textsuperscript{443} The University subcontractor suggested that the applications be filed by the University, rather than by the NRDC, and that they not mention the NRDC-SAS agreement.\textsuperscript{444} The NRDC agreed to this proposal. At both institutions, those who were working on the project made decisions about the application forms based on their understanding of bureaucratic decision-making. The technicians at the University Laboratory had long-standing relationships with the government agencies that would process the applications. The University had been installing seismograph stations on public lands in Nevada for more than twenty years. Their experience pre-dated the Government's enforcement, beginning in the 1970's, of laws requiring permits even for minor installations on federal lands. Walter Nicks, the engineer who actually signed the applications on behalf of the University, had, over a period of five to seven years, participated in obtaining permits for about thirty such stations. All of the University's applications had been granted without difficulty, and no one had ever objected to seismic monitoring near the Nevada Test Site.\textsuperscript{445}


\textsuperscript{444} Telephone interview with Walter Nicks, Research and Design Engineer, Seismological Laboratory, University of Nevada-Reno (April 21, 1987). NRDC's Jacob Scherr recalls agreeing with the suggestion that the applications be filed by the University, but does not recall being aware that the University was not even mentioning the agreement in its application. Interview with S. Jacob Scherr, NRDC, in Washington, D.C. (Nov. 25, 1987).

\textsuperscript{445} Interview with Nicks, \textit{supra} note 444.
Nicks and his colleagues "thought it best not to mention" the agreement with the Soviets. The NRDC's officials acquiesced in Nicks' judgment because of past adversarial relationships between the NRDC and the Bureau of Land Management. "We have sued BLM and the Forest Service countless times," reasoned Jacob Scherr, the principal NRDC attorney working on the project.447

Accordingly, the applications were indistinguishable from those previously filed by the University and granted by the federal agencies. The applicant was the University, enabling it to check a box on the form categorizing the applicant as "State Government." Where the application required the applicant to "describe in detail the land use," the University stated that the right-of-way was needed "to establish an earthquake monitoring station to obtain seismic data used in the laboratory's research."448 In the University's explanation of why federal land had to be used, the University noted that "station location needed to obtain earthquake data from this location." In its statement of need, the University said that "sites are needed to provide essential seismic data. Science, education, public awareness and public safety all benefit from the collection of this data."449

Despite the lack of mention of the NRDC, the Soviet Union or nuclear test monitoring on the applications, federal officials at all three offices responsible for processing the applications knew that the real purpose of the applications was to monitor testing at the Nevada Test Site as part of a cooperative project with the Soviets. At the U.S. Forest Service headquarters for Humboldt National Forest, the Troy Can-

446. Id.
447. "It could have been counterproductive to have named NRDC as the applicant. The papers might have gone, eventually, to someone who knew about NRDC lawsuits and who might have let them remain for a while at the bottom of his stack. We didn’t want to take a chance by calling special attention to these applications. We wanted them to be handled routinely." Telephone interview with S. Jacob Scherr, NRDC attorney (April 22, 1987).
448. NRDC Application, supra note 443.
449. Application of the University of Nevada-Reno for a Special Use Application to U.S. Dep’t of Agriculture-Forest Service, supra note 442 (emphasis added). Regarding the reference to earthquakes, Nicks reasoned that "it will measure earthquakes as well." Telephone interview with Walter Nicks, supra note 444.
yon application was assigned for investigation to Steve Wyatt, a range conservation and mineral specialist and Gary Shafran, a recreation and lands staff officer. The first step in processing the application was to view the proposed site. In order to resolve expeditiously any problems that might arise, the federal officials invited Walter Nicks, who had signed the application, to walk the site with them. Nicks agreed, and he brought one of his students with him. The student had been to Kazakhstan, where he had helped to install a station similar to the one that would be installed at Troy Canyon.

During the site walk, Nicks and his student discussed some of the technical aspects of the Soviet stations, and the federal officials joined the conversation. As a result, the federal officials learned about the NRDC-SAS agreement and the purpose of the Nevada station.450 This disclosure may have subtly improved the already good prospects for approval. "It probably influenced my decision in a positive way," says Shafran, the senior of the three officials, and the one who had responsibility for making a positive or negative recommendation to B.J. Graves, the Forest Supervisor. "It was a very positive factor in my mind because it was part of a larger effort to determine whether nuclear tests can be differentiated from earthquakes, and that is very worthwhile research."451

After the site visit, Larry Gillham, a recreational forester, was assigned to draft the environmental assessment which would then be sent to Shafran for review. Gillham was aware of the agreement with the Soviets because he had seen the project on the television news and was already excited about the project. But Gillham was conscious of not allowing his interest to affect his professional judgments. Nevertheless, that the purpose of the project did not negatively impress him influenced him, at least in part. Gillham also confirms the validity of the concerns previously expressed by Jacob Scherr:

I have pretty much full say about how this project goes. If I'd had a bias, I could have slowed it down

451. Telephone interview with Gary Shafran, supra note 450.
or speeded it up. That's how the government works. It all depends on individuals. But I'm new here, and I haven't built up biases yet. I just try to get a project done whatever it is.\textsuperscript{452}

The function of Forest Service officials involved in making a recommendation to the Forest Supervisor was not to judge the nuclear test monitoring purposes of the seismograph station but to evaluate the environmental effect. "The purpose of a project has no bearing on our approval," Gillham says. "We treated this application like we treat all special use applications. Our only job is to mitigate environmental impacts. Our only concern is with the disturbance of the surface and the protection of natural resources. We never get into what the project is specifically for."\textsuperscript{453} The fact that the application had come from the University of Nevada reinforced the officials' tendency to treat the project routinely. "That added a lot of credibility to the stated need for the site," Shafran remarks, "[i]t's a reputable school, so we would feel good about any proposal we received from them."\textsuperscript{454}

Concerned only with environmental aspects, Gillham did not consider soliciting comment from the State or Defense Departments. He did, however, confer with the Department of Wildlife of the State of Nevada. The Wildlife Department was satisfied by the University's posting of a $5,000 bond to guarantee that the land would be restored.\textsuperscript{455} With these issues resolved, Shafran recommended approval to the Forest Supervisor. Because the test-ban verification potential of the station was a positive factor in his mind, Shafran edited Gillham's environmental assessment to include a description of the international ramifications of the permit:

The seismic data is needed as part of a larger research project. It involves both the United States and [the Soviet Union]. Seismic instruments are being located around both countries [sic] nuclear test

\textsuperscript{452} Telephone interview with Larry Gillham, U.S. Forest Service, Humboldt Nat'l. Forest (July 23, 1987).
\textsuperscript{453} Id.
\textsuperscript{454} Telephone interview with Gary Shafran, \textit{supra} note 450.
\textsuperscript{455} Telephone interview with Steve Wyatt, \textit{supra} note 450.
sites. The objective being to be able to distinguish nuclear explosions from natural earthquakes. This could then be used to verify a nuclear test ban treaty.456

The Forest Supervisor, however, was not favorably or negatively influenced by this statement. Focusing only on the environmental concerns, Mr. Graves granted the permit:457

"I granted the right-of-way because the project would have minimal ground-disturbing activity. . . . Even though it may have positive world-wide political and social implications, I didn't take account of them. We do sometimes take political and social effects into account, but only when they are local ones, not global ones. My job is to assess how well the land can handle the use it's going to be put to."458

The application for a station site near Deep Springs, California, was assigned for initial processing to Eric Watson, a natural resources specialist with the Ridgecrest, California, office of the Bureau of Land Management. Because of a local policy of requiring that rights-of-way involving communications sites be approved at the District level, Watson's evaluation could not be approved by the Resource Area Manager in the Ridgecrest office. Although the application only mentioned earthquakes, Nicks told Watson on the telephone that the purpose of the station was to monitor U.S. nuclear tests as part of an exchange with the Soviet Academy of Sciences. Watson was troubled that "the written application wasn't really the same as the oral description we got [over the phone]. That isn't good."459

An environmental assessment typically begins with a de-

457. U.S. Dep't of Agriculture, Forest Service, Special Use Permit, granted to the University of Nevada (June 18, 1987).
scription of the project. Watson began to write a description which included the real purpose of the effort stating that the project would help with weapons control and the prevention of nuclear war. On second thought he discarded his draft and began a new one which did not mention nuclear testing. "I decided to follow the written application," he said. "It was better that way, for the sake of the paperwork." 460

The entire staff of Watson's Ridgecrest office knew that the purpose of the seismograph station would be nuclear test monitoring. 461 Nevertheless, all of the officials of that office who worked on the papers confined their focus to environmental concerns. "We worked it up from a natural resources perspective: the botanical impacts, geology, wildlife, that sort of thing. We don't look at the politics or purposes of a project." 462

As a result, the District Manager receiving the papers for final decision was unaware that the application was for an NRDC-sponsored project or that it involved nuclear test monitoring as well as earthquake detection. Had the papers disclosed more, said Watson:

the District Manager might have knocked it up to the State Director, and the State Director might have sent a copy of the papers to the Defense Department. There probably would have been more inquiries, but the result would probably have been the same. The purpose certainly wouldn't have been a negative factor. From the point of view of most people, setting up mutual monitoring stations to verify limits on nuclear testing can only be a good thing. 463

As at Troy Canyon, the fact that the University of Nevada had applied for the Deep Springs right-of-way might have affected the processing of the application:

460. Id.
461. Id.
462. Id. Mr. Watson's statement is entirely consistent with BLM regulations. See supra notes 286-290 and accompanying text.
463. Telephone interview with Eric Watson, supra note 459. At the time of the interview, Mr. Watson was probably not aware that some senior Defense Department officials viewed this particular monitoring project as a "subversion" of U.S. foreign policy. See supra note 352 and accompanying text.
That made it a more routine case. The NRDC probably would have seemed more political, although I don’t know because I know a lot of the environmental organizations, but I’m not familiar with the NRDC. If the applicant had been the NRDC, that probably would have at least led us to require a more complete written description of the project.464 Nevertheless, the description was deemed adequate, and the application was routinely approved.465

The application to build a station on BLM-managed land near Nelson, Nevada, followed a similar procedural path, though it included a twist which advanced its consideration to a higher bureaucratic level. Initially, the application was assigned to a realty specialist, Dennis Samuelson, for review. At Samuelson’s level, the application was entirely routine. He needed only to insure that no archaeological artifacts would be disturbed, and that the grazing area of the local rancher would not be impaired.466

The environmental analysis prepared by the staff was sent to Ben Collins, the District Manager in BLM’s Las Vegas office. Collins would have granted routine approval to what appeared to be an application for a small earthquake monitoring station, with no significant environmental impact. But as Collins was about to sign the permit, he remembered that months earlier, he had been called by Bob Stewart, the public relations director in BLM’s State Office in Reno, and had been told to watch for an application for a right-of-way for a seismic station that would monitor nuclear tests at the National Test Site. Although the University’s application for the Nelson site did not mention nuclear test monitoring, Collins realized this application was the one Stewart had mentioned. As directed, Collins telephoned Ed Spang, BLM’s Nevada State Director.467

464. Telephone interview with Eric Watson, supra note 459.
465. U.S. Dep’t of the Interior, Bureau of Land Management, Special Use Permit No. CA 19121 (a “right-of-way”), granted to the University of Nevada-Reno (March 8, 1987).
When Collins spoke to Spang, the State Director told of two concerns. First, Spang noticed that the University of Nevada was applying for several rights-of-way in the State, including not only the seismic research stations at Troy Canyon and Nelson, but numerous other facilities unrelated to the NRDC project. This series of requests reminded him of another setting in which an applicant for the use of Nevada land—the United States Air Force—had over the years acquired the right to use several small parcels. Each one individually was innocuous but, combined, constituted such a large withdrawal of public land for bombing ranges and other military uses that BLM's acquiescence had become a public issue. Spang thought that the University's numerous pending and expected applications should be reviewed together, rather than piecemeal. The State Director did not want the Nelson application to become the "camel's nose under the tent."  

Second, Spang feared that if BLM granted the requested right-of-way, the Bureau might appear to be acting inconsistently. In recent months, BLM had generated controversy in Nevada by granting rights-of-way in connection with two significant local activities—a proposed nuclear waste repository at Yucca Mountain and the Air Force's emplacement of electronic devices in order to conduct tests involving tactical aircraft. As a result of local concern, BLM had recently placed a moratorium on the granting of any further rights-of-way for these activities. Spang wanted to know how BLM could justify granting a right-of-way for a nuclear test monitoring project while it was denying rights-of-way for these other nuclear or military projects.  

Spang surveyed all of the University's applications, and was satisfied that they were not cumulatively excessive. Collins found two answers to Spang's concern about consistency. First, Collins noted that BLM's office in Ridgecrest, California, and the Forest Service in Humboldt, had already granted permits for the very same activity. The Government would certainly appear to lack consistency if it granted two of the requested permits but denied the third. Second, Collins

469. Telephone interview with Ben Collins, supra note 467.
determined, through a telephone call, that the U.S. Department of Energy (DOE), which manages the Nevada Test Site, had no objection to granting the right-of-way.\footnote{470}

To make the inquiry into DOE opinion, Collins called DOE's Nevada operations office and spoke with Pete Fitzsimmons, the Director of Health, Physics, and Environment there. Fitzsimmons regarded Collin's request as an informal inquiry regarding the granting of rights-of-way, not as an official request for DOE approval. Consequently, Fitzsimmons did not check with more senior DOE officials and told Collins that DOE had no objection to granting another right-of-way.\footnote{471}

Spang was persuaded by the precedential cases that Collins cited, and by the fact that DOE had no objection. Neither Spang nor Collins ever questioned the State or Defense Departments regarding opinions on the application.\footnote{472} Spang authorized Collins to issue the right-of-way, and Collins granted it immediately.\footnote{473}

No one will know whether, had the rights-of-way applications been known about, the senior Defense Department officials who opposed the Soviet scientists' visit to the sites\footnote{474}
would have tried to intervene or whether they would have succeeded. 475 By chance, Defense was not part of the right-of-way action channel. The lower level officials in the Departments of Agriculture and the Interior did not seek comments from Defense, and Cochran's statements, reported in the national press, 476 were apparently not noticed in the Pentagon. In addition, neither the Department of Agriculture nor the Department of the Interior were connected to the National Security Council's action channel for nuclear testing issues. Consequently, the NSC staff had no knowledge of the permits that those agencies were processing. 477

Fortuitously, a Department of Energy official (Fitzsimmons) was consulted regarding one station permit. His agency was represented on the Interagency Group and the Working Group on nuclear test limitations. The stations issue might have been brought before the Interagency Group through this channel and, ultimately, sent to the NSC staff. The official, however, was an environmental officer, not a policy-maker, and since he had only been consulted in an informal manner, he saw no need to seek policy guidance from senior officials in Washington. For the above reasons, in the spring and summer of 1987, the national security policymakers who had fought vigorously over the issue of visa awards for the NRDC project, remained unaware that federal officials in other departments were in the course of routinely granting permits to install nuclear test monitoring stations on government property.

The description of the Government's response to the NRDC initiative, as constructed by a Model III analyst, implies explanations that can be phrased in terms of interpersonal interactions rather than policies of a nation or its standard responses. As seen by the Model III analyst, the central

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475. Given the regulatory plan, Perle and Gaffney might have been able to slow down the processing for a while, but they probably could not have prevented the rights-of-way from being granted. See supra notes 286-290 and accompanying text.

476. Blakeslee, Russian Team Arrives to Monitor Atom Tests, N.Y. Times, Nov. 11, 1986, at C8, col. 3 ("[T]he American scientists said they did not think it would be difficult to get permission to place instruments at the monitoring sites to be selected. All of the potential sites are on Government land.").

477. Interview with Charles East, supra note 338.
determinants of the Government's response were: (1) the attitudes of key senior officials of bureaucratic organizations, particularly Perle and Whitehead; (2) an action channel—in this case the Working Group reporting to an interagency group and ultimately to the President's National Security Advisor and his staff—through which policy decisions could be negotiated; (3) bargaining and eventual compromise among the participants with power to affect the outcome; (4) rules of the game affecting the bargaining process; (5) maneuvers to affect the action channel for decisions and their implementation; (6) the introduction of new players at the implementation stage; and (7) misperception, misunderstanding, and luck. The relevance of each of these factors to the NRDC project may now be summarized briefly.

A. The Attitudes of Key Officials

If Whitehead and Perle had agreed that the government should do everything it could to undermine the NRDC effort, or had they agreed that the project could contribute to knowledge about verification of a test ban, the government's response would probably have been quite different. In the former case, the export licenses might have been delayed for months, perhaps long enough to cause the Soviets to lose patience with the NRDC. The Soviets would have been denied a visa or invited to visit only if they would witness a CORRTEX demonstration. In the latter case, the Government might have taken over the project as the NRDC invited it to do, or the Soviets would have received unrestricted visas.478

A more challenging question is why the leaders held the views that they did. An analysis of the attitudes of Perle or Whitehead in terms of their individual histories is beyond the scope of this work. At least one factor might have been the agencies in which they found themselves or, as Allison

478. If the leaders had strongly believed in the NRDC project but had felt constrained by the domestic political consequences of granting unrestricted visas to monitor tests in Nevada, the government might have conditioned Soviet access to seismic monitoring sites on Soviet willingness to permit the stations in Kazakhstan to remain operating even if Soviet testing resumed—a condition that would have been readily understandable in terms of the principle of reciprocity.
reminds us, "[W]here you stand depends on where you sit." Government logistics and self preservation explain why the person more willing to tolerate this Soviet-American joint project was the Deputy Secretary of State, an official of the Department primarily responsible for negotiating agreements and maintaining good relations with other governments. On the other hand, the Assistant Secretary of Defense, an official of the Department responsible for deterring Soviet aggression (in part by maintaining a nuclear arsenal that some believed would be threatened by a treaty banning all nuclear weapon tests), most wanted the project to fail.

To conclude that these individuals' bureaucratic base could constitute a complete explanation for their stances would be a mistake. Perle had formed his general stance toward the Soviet Union long before his appointment to a policy job in the Pentagon. Indeed, he was appointed to that job largely because he held those views, views consonant with those of the Secretary of Defense and of the President. Senior public officials are rarely ciphers whose outlooks are shaped (in Model II terms) by their agencies' missions. They frequently seek, and are appointed to office (an essential

479. G. ALLISON, supra note 1, at 176 (quoting Prof. Don K. Price).
480. Indeed, Perle believes that "[i]n its heart of hearts, State would have wanted to embrace this project, as a stepping stone to a CTB Treaty," but that it couldn't do so because the government's general policy toward a CTB had long been set in concrete. A more fundamental conflict about test ban policy was therefore, in his view, deflected to the second-level issue of how to react to the NRDC project, and particularly whether to grant the visas. Telephone interview with Richard Perle, supra note 335.
481. See Current Negotiations on the Comprehensive Test Ban Treaty: Hearings Before the Intelligence and Military Application of Nuclear Energy Subcomm. of the House Comm. on Armed Services, 95th Cong., 2d Sess. (1978). In these hearings, held during the Carter Administration while the U.S. was actively negotiating for a comprehensive test ban treaty, a Defense Department witness testified that "CTB would have an adverse affect [sic] upon U.S. stockpile reliability and upon our ability to develop new nuclear weapons . . . . In my view, such a CTB would be asymmetrical in favor of the Soviets." Id. at 59 (statement of Adm. R.R. Monroe, Director, Defense Nuclear Agency). Similarly, a witness from the Department of Energy (the agency responsible for developing new nuclear weapons and for maintaining the Nevada Test Site) testified that "in the long run without testing, we could not maintain the same confidence in our nuclear weapons stockpile that we have today. . . ." Id. at 22 (testimony of Dr. Donald Kerr, Acting Assistant Secretary for Defense Programs, Dep't of Energy).
move in the Model III game) because they and their appointing officials seek to affect national politics in a particular way.

B. The Action Channel

The existence of a decision-making mechanism for nuclear test ban issues also affected the outcome of the various applications. Most export licensing decisions are made in a particular action channel. Depending on the commodity being exported, either the Commerce bureaucracy licenses unilaterally, or Commerce and Defense engage in bureaucratic bargaining. The Department of State, unilaterally, determines most visa applications. Occasionally it consults with the Immigration and Naturalization Service of the Department of Justice.

In this instance, however, the Government had, years earlier, established a special action channel especially for issues relating to constraints on nuclear testing. This action channel’s jurisdiction was broad enough to encompass the NRDC problem when it presented itself. As a result, the relevant players included not only officials from Commerce and Defense (for exports), and State (for visas), but also the President’s National Security Advisor and the NSC staff, the Arms Control and Disarmament Agency, the Department of Energy, and the Central Intelligence Agency. Despite the statute\(^{482}\) assigning to the Attorney General the duty to impose conditions on nonimmigrant visas,\(^{483}\) the Justice Department’s role in this case was virtually irrelevant.\(^{484}\) The

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483. In another context (asylum), the staff of a Congressional Commission has severely criticized the Department of Justice for permitting the State Department to exercise, \textit{de facto}, the discretion in immigration matters assigned by law to the Attorney General. "Congress has given the Attorney General the primary responsibility for deciding on the admission or exclusion of aliens in accordance with the INA [Immigration Act]. . . . The Attorney General, or his designated agent, may not fail to exercise the discretion which has been granted to him by Congress through statutes. . . . The Department of State is not at liberty to control or coordinate an alien’s request for admission. . . ." \textit{COMMISSION ON SECURITY AND COOPERATION IN EUROPE, THE MIROSLAV MEDVID INCIDENT, CSCE Doc. No. 1-2, 100th Cong., 1st Sess. 100 (1987).}
484. How the visa issue would have been resolved if it had been decided by the Justice Department rather than by the test ban action channel is
Government's decisions with respect to establishing the seismic stations on federal land never entered the test ban action channel. While difficult to determine what would have happened had those land use applications been debated by the Working Group or referred to the National Security Advisor, the possibly that the permits would have been denied (subject to litigation) on the ground that they were not consistent with the "public interest." 485

C. Bargaining and Compromise

The Government's export license and visa decisions resulted at least partially from inter-agency bargaining. The former occurred in the Working Group which achieved consensus on processing the application in the normal course of business. The latter occurred in both the Working Group and in "off-line" communications between senior departmental officials and the President's National Security Advisor. The final, critical decision was a compromise between positions of disagreeing officials, drawn from elements they proposed. Once the agencies reached an impasse and referred the visa issue to the NSC staff, compromise was an inevitable outcome because the NSC staff wanted to avoid

impossible to know. But perhaps the visas would not then have been conditioned, because it was the custom of the Immigration and Naturalization service to condition visas very rarely, and only when unrestricted travel of the applicant threatened the United States with loss of technological secrets. Even those restrictions, however, seem to result from decisions made in other departments. The only court to have addressed this issue believed that independent judgment by Department of Justice officials on visa applications was an important part of the statutory scheme. The idea that the bureaucratic model of decision-making could be used to design systems that would help to ensure that the laws would be faithfully executed was attributed to Congress, and the division of visa denial responsibility between the State and Justice Departments was even analogized to the constitutional separation of powers between branches of government. "Congress apparently designed the [McGovern] Amendment with the traditional division of responsibility between the two executive departments in full view. Such divisions of responsibility, and the closely kept balance of powers that results from them, have long been regarded as an effective check on the disingenuity of individual public officials." 485. Forest Service, 36 C.F.R. § 251.54(h)(2) (1986); Bureau of Land Management, Interior, 43 C.F.R. § 2802.4(a)(2) (1986).

outright "winners" and "losers" in the line departments.486

D. Rules of the Game

The bargaining power of the players was governed not only by their personal persuasiveness or by long-term interdepartmental power relationships, but also by specific laws and understandings applicable to this case. In the Working Group, the bargaining over the export license was strongly influenced by pre-existing regulations governing export controls. The decision not to impose arbitrary delays was influenced, at least for some players, by a sense that such delays were unfair, or, if reported in the press, would be perceived by the public as unfair. The visa decision was made in the context of a web of statutes and regulations which opened some options (e.g., conditioning the visas) and closed others (e.g., making no decision at all). Similarly, law and custom highly regulated the process governing grants of authority to use federal lands. This process included widespread understandings that the job of the relevant licensing officials consisted only in examining environmental factors and ignoring national or global political implications.

E. Maneuvers to Affect the Channels for Decision and Implementation

The Working Group made a decision to allow the Commerce Department and related agencies to handle the export license application regardless of how long that might take. In all probability, none of the Working Group members knew, when the decision was made, that Commerce had two implementation channels—a slow lane, for 98% of the cases, and a fast track for the rest. A key maneuver was to move this application from one channel to the other, and at least part of that play was executed by someone at the State Department, probably although not necessarily, Bismark Myrick or someone in his office. The NRDC itself executed a second key play to the same effect when DeWind contacted Secretary Baldrige and was able to have Baldrige's name invoked as an authority for expedition. Similarly, action on the

486. This competitive dynamic is a central feature of Model III. See supra note 296 and accompanying text.
visa applications might have been different if the determina-
tion of the applicants' excludability had been left, as it must
legally be left, to the consular officer in Moscow. In order to
avoid the risk of policy makers' eventual exercise of discre-
tion being determinative, officials at State in Washington
sent the telegram ordering the consular officer to request an
advisory opinion through a "Donkey Chipmunk" cable. In
addition, the NRDC dramatically influenced the decision
channel for the station permits by applying in the name of
the University of Nevada, and by omitting any reference to
nuclear test monitoring in their applications. Although offi-
cials at all three recipient offices knew that the proposed seis-
mic research stations were part of a nuclear test monitoring
project involving transmission of data to the Soviet Union,
the fact that the applicant was a respected Nevada institu-
tion, technically, a part of the state government, and that the
application documents did not overtly refer to nuclear tests
helped to prevent challenges to the applications that might
have caused them to be referred to policy officials at higher
levels or in other departments.

F. The Introduction of New Players

After the action channel reached the export license deci-
sion, the manner in which the decision was implemented was
affected by the introduction of a whole new cast of charac-
ters. These characters included the Secretary of Commerce,
the Director of the Exporter Assistance Division, the "emer-
gency processing officer of the day," a Commerce Depart-
ment official not responsible for acting on the application
but who became NRDC's Samaritan, and the Director of the
Defense Department's Office of Strategic Trade Policy.

G. Misperception, Misunderstanding, and Luck

In any real, complex, human interaction, people do not
act with machine-like precision. The outcome is at least par-
tially influenced by factors such as misperception, misunder-
standing, and luck. The policy-makers in the Working
Group, and their senior officials to an even greater extent,
were too busy to devote a significant amount of time to react-
ing to the NRDC. Although Cochran had told Whitehead
that the Soviets would need visas, the Working Group did
not even attempt to address the visa issue until it had resolved the export license issue that had arisen first. Hence, the Group denied itself the opportunity to formulate for the government an internally consistent policy affecting both issues.

Senior officials also lacked the time to explore aspects of the problem beyond those brought to their attention. They were unaware, therefore, that NRDC also needed permission to establish stations on federal land, even though NRDC's need was evident from the nature of the project and from the fact that Nevada land is owned almost exclusively by the U.S. Government. The Working Group members did not perceive the possibility of expedition in their decision to let the normal processes of export licensing take their course. The officials of the Office to Strategic Trade Policy may have mistakenly taken Perle's acquiescence in the export and his instructions not to delay the license for concurrence in expedited licensing.

The role of luck is illustrated most dramatically by the fortuity of personal connections linking the Chairman of the Board of NRDC with both Whitehead and Baldrige, the arrest of Daniloff as the Working Group completed its visa option paper (which at least delayed the decision and may have made the Group less favorable to the project), and the fact that the House was debating a testing funds cut-off just as Perle was asked to take a stand on visas for the Soviet scientists (which became a factor, though not the decisive one, in the position he took).

To the Model III analyst, an understanding of how a governmental decision was made must derive from a close examination of motivating factors. As evidenced in the NRDC case, the factors affect how real people interact with

487. In addition, Cochran had told the press that NRDC needed permission to emplace the monitoring instruments on federal land, and the press had reported that fact. Blakeslee, supra note 476.

488. Another less dramatic example of the role of luck is the processing of the Nelson station application. Chance factors completely unrelated to the NRDC project (the fact that the University of Nevada had recently made other applications to use BLM-managed land, the current controversy over the Yucca Mountain nuclear waste dump, and the Air Force's encroachments on public uses of land) caused a delay in the permitting process while the Nelson application was reviewed by the State Director.
each other under conditions of: pre-existing relationships; institutions (including action channels); constraints; incomplete information; limited time; multiple agendas; and divided power. In principle, sufficient information about the interactions of officials (and others) in this milieu could enable the analyst to "explain" the government behavior.

VI. THE THREE MODELS

Describing the Government's response to the NRDC project three ways suggests that just as major crises, deployments, and negotiations can be understood from multiple perspectives, relatively routine national security decisions can usefully be examined through Allison's three different "lenses." Each of the three models contributes additional information to our understanding of government behavior. This study also intimates that Allison may underesti-

489. That scholars have not yet been able to formulate more definitive theoretical statements about national security policy, such as a statement that bureaucratically negotiated decisions are never rational or a claim that ideology conquers bureaucracy in all decisions involving East-West confrontations may be unsettling. Foreign policy analysis over the last two decades "has not developed a generally coherent and validated set of theories, as the spirit of scientific advances requires." Hill & Light, Foreign Policy Analysis, in INTERNATIONAL RELATIONS THEORY 153 (A. Groom & C. Mitchell eds. 1978). The "state of the art is still one of competing paradigms [and] most scholars agree that real-world decision processes are marked by a mix of the procedures postulated by [the various] models." Maoz, The Decision to Raid Entebbe: Decision Analysis Applied to Crisis Behavior, 25 J. CONFLICT RESOLUTION 677, 677-78 (1981). The present study is, in part, a response to Allison's call for further research to develop a "typology of decisions and actions that would serve as a guide to the analyst about predominant reliance for a first cut." G. ALLISON, supra note 1, at 276.

490. The metaphor is Allison's. G. ALLISON, supra note 1, at 2.

491. There is no reason to think that the behavior of the U.S. Government is unique although, as a result of inadequate information, even sophisticated analysts who understand the bureaucratic determinants of U.S. Government actions tend to treat other countries as if their officials made national, rational decisions. Allison cites the example of a U.S. Government interagency meeting on Middle East desalination in which representatives of twelve different agencies disagreed strenuously with one another and revealed that their agencies were acting at cross-purposes. They then proceeded to discuss "the Israeli policy on desalination" as if that policy had been dictated by one individual. G. ALLISON, supra note 1, at 146-47. But see W. WALLACE & W.E. PETERSON, FOREIGN POLICY MAKING IN WEST-
mate the significance of two aspects of his paradigms: the role of laws and regulations in Model II and the role of interpersonal initiative by people who are not leaders in Model III. The study enables speculation on ways in which one of the models may possess relatively greater explanatory power as the decisions under examination move down the ladder from crises and other "major" events\textsuperscript{492} to more routine national security concerns.

The case study confirms that the new kinds of information developed in the context of Models II and III add additional dimensions to reason, dimensions that deepen an understanding of why a decision was made.\textsuperscript{493} At the same time, the case study demonstrates that none of these models, standing by itself, presents an adequate picture of a very complex reality. A Model I explanation of the Government's reaction is the easiest to develop, and it comports with our innate hope that governmental decisions are reasonable and

\textsuperscript{ERN EUROPE} 1-2, 19-20, 124 (1978) for the view that "[p]luralist politics in Washington, encouraged by the division of powers in the American constitution, do not necessarily provide representative data for generalisations that will extend to the one-party systems of Eastern Europe, or the narrowly based elites of many less developed countries." \textit{Id.} at 20 (citation omitted).

Applying the three models to a study of why the Soviet government responded as it did to various aspects of the NRDC project would be very interesting. Why did it agree, early in 1986, to allow NRDC scientists to monitor its nuclear test site from stations in Kazakhstan? Why did the Soviet Government agree to send its scientists to the United States even though they were refused access to the potential station sites? Why did it at first refuse to allow NRDC monitoring during nuclear tests and then, in June 1987, reverse this position? The author is not in a position to answer these questions in depth, since addressing them on more than a superficial level would require interviews with Soviet officials. Perhaps \textit{glasnost} will one day permit issues like these to be explored by Soviet scholars.

\textsuperscript{492} See the rough distinction between critical and second-level national security problems at \textit{supra} note 21.

\textsuperscript{493} From a more practical perspective, appreciation of Models II and III could make decision-makers better able to achieve the results they desire, by helping them to predict how standard operating routines and interpersonal interactions will cause their desired outcomes to be modified in the course of decision-making and implementation. For an outline of advice to decision-makers based on these paradigms, see the "planning guide" developed by Allison & Halperin, \textit{Bureaucratic Politics: A Paradigm and Some Policy Implications}, in THEORY AND POLICY IN INTERNATIONAL RELATIONS 40, 77 (R. Tanter & R. Ullman eds. 1972).
within the control of accountable public officials. But after learning the fuller contexts developed under Models II and III, the Model I analysis of this case, like Allison's Model I description of the Cuban Missile Crisis, "seems somewhat disembodied," and since, by definition, it must demonstrate rationality, it is hard pressed to account for the full range of governmental responses to the NRDC project.

Still, Model I must not be rejected altogether. The officials whose representatives bargained in the interagency Working Group were motivated, at least in part, by their conceptions of a unitary, rational "national interest." However, particular notions of where that interest lay varied from person to person. The State Department actors thought there might be some merit to the project, and that the national interest would not be served if the U.S. Government were seen by the world as attempting to strangle the project through delay or denials. Perle believed that the project could mislead the American public into premature enthusiasm for testing restraints and could encourage the Soviets to continue to refuse to negotiate TTB Treaty amendments encompassing a CORRTEX system. Each of the major policy-

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494. Model I analyses "are perfectly coincident with the ethical assumptions of democratic politics" while the "machines" that make policy under Model II "cannot be held responsible for what they do, nor can the men caught in their workings," and Model III analyses suggest that "[p]olicy results from compromises and bargaining[, not] the values of the President let alone of lesser actors." Krasner, Are Bureaucracies Important?, in PERSPECTIVES ON AMERICAN FOREIGN POLICY 411, 412, 414 (C. Kegley & E. Wittkopf eds. 1983). If former National Security Advisor John Poindexter is to be believed, the diversion of Iran arms sales profits to the Contras in Nicaragua in 1986 offers a spectacular example of Krasner's ethical criticism of bureaucratic analysis. If Model I is generally accepted, the public would put the blame squarely on the President for the policies carried out in his name and the illegal means used to implement them, while the other models, and Poindexter's testimony, tend to exonerate the President and blame a flawed system of national security decision-making or its less accountable minor actors. Cf. U.S. TOWER COMMISSION, REPORT OF THE PRESIDENT'S SPECIAL REVIEW BOARD IV-3 (1987).

495. G. ALLISON, supra note 1, at 247.

496. Krasner's characterization of Allison notwithstanding, Krasner, supra note 488, at 410, Allison himself concedes a place for Model I reasoning as a "quick, imaginative sorting out of a problem . . . a productive shorthand." G. ALLISON, supra note 1, at 254.
makers was probably moved in large measure\textsuperscript{497} by individual conceptions of a rational response to the NRDC.\textsuperscript{498} Whether or not that was the case, in the bargaining that followed each actor had to argue as if he held such a conception.\textsuperscript{499}

If any one of the individual, human players had controlled the entire decision, the final results, in terms of the combination of decisions on export licensing, visas, and station permits, might have been internally consistent. Undoubtedly on some occasions one player does "win," and perhaps some in which the players' views of the world are nearly congruent. Model I may be a more useful theory for such cases.\textsuperscript{500}

\textsuperscript{497} In the view of Morton Halperin, "much of what goes on in the government involves efforts to analyze an issue from the point of view of shared images and to persuade others that the requirements of national security, flowing from those shared images, require that a particular stand be taken. However, what is in fact in the national interest is often elusive despite shared images. . . . In such cases [participants] will often look to organizational interests." M. HALPERIN WITH P. CLAPP & A. KANTER, BUREAUCRATIC POLITICS AND FOREIGN POLICY 25 (1974).

\textsuperscript{498} The point has also been made that Model III is more of a "rational" process than it would at first appear to be, because the act of compromise is itself intentional. "[T]he compromise that results from the pulling and hauling was deliberately intended by the participants. The exact nature of the compromise that results may be unintended or unforeseen, but not the initial intent to achieve some sort of compromise." ART, BUREAUCRATIC POLITICS AND AMERICAN FOREIGN POLICY: A CRITIQUE, 4 POLICY SCIENCES 467, 471 (1973). Whether the result can qualify as "rational" is unclear if it is one that no bargainer intended or would have desired, any more than a decision to decide a foreign policy question by throwing dice would be made "rational" by the deliberate intention of the gamblers to have the decision made in that way.

\textsuperscript{499} That is, the informal "rules of the game" would have ruled out a claim that the NRDC project should be scuttled because it could lead to a Comprehensive Test Ban Treaty that might impair weapons designers' employment security.

\textsuperscript{500} In a particular case, bureaucratic routines could support rather than undercut rational decision-making. In the case of the Israeli raid on Entebbe, the existing standard operating procedure militated against negotiation with terrorists, even to buy time, for events in Israel or friendly countries, but allowed such negotiation for events in hostile countries. This routine "instead of constraining the decision-makers, provided a useful guide for the exploration of multiple options, had a built-in element of value tradeoffs, and [was] sufficiently flexible to allow on-the-spot improvisations." MAOZ, supra note 489, at 704.
Furthermore, to overlook the role of deliberate, rational decision-making in establishing the very routines that characterize Model II would be an error. For example, some irrational inconsistencies in the export licensing controls may exist, and the controls may have curious impacts in unusual cases (e.g., disabling senior officials from having discretion to prevent NRDC's export). But the control list was created as an attempt to impose some rational ordering on export licensing. The plan was intended to be useful, in the great majority of cases (i.e., typical commercial trade matters) to protect the nation from its own commercial entities which, through ignorance or the profit motive, might otherwise be inclined to sell to other nations technology or goods that could be used in military actions against the United States.501

Model II considerably enhances an understanding of the Government's response to the NRDC. To begin with, the model discards the assumption (which a Model III investigation shows to be erroneous for this case) that the export license, visas, and station permits were all part of a single "decision" and substitutes two assumptions more plausible to virtually everyone who has ever worked in a large bureau-

501. In addition to influencing the thinking of individuals who engage in Model III bargaining and the creation of Model II institutional mechanisms, rational planning may affect the Model III game through individuals' commitments to policies that transcend the case at hand. As strongly as Perle believed that the NRDC project was harmful to U.S. foreign policy, he may have been committed even more strongly to a principle (or policy) of "fair dealing" which caused him to accept what he thought would be the "standard procedures" routine (as opposed to deliberate delay) of export licensing. This relatively rational explanation is not, of course, the only possible hypothesis concerning the fact that he did not hold up the license for any period of time. In pure Model II terms, Perle's bureaucracy may not have had an available routine for deliberate delay, or the trouble to try to deviate from routine altogether might not have been worthwhile. (Indeed, the Office of Strategic Trade Policy had been criticized for excessive delay in the average case, and the bureaucratic imperative was to reduce it. The Office was very proud of the fact that it had reduced the average West-to-East case processing time from 70 to 15 days in only two years. See U.S. DEPARTMENT OF DEFENSE, THE TECHNOLOGY SECURITY PROGRAM, A REPORT TO THE 99TH CONG., 2D SESSION 28 (1986).) In pure Model III terms, a strategy of deliberate delay in the face of the working group consensus (which had been ratified by the interagency group) might have incurred the wrath of other officials from whom Perle needed action on other occasions.
cracy. The new assumptions are that each part of the bureaucracy usually works on only the part of the "decision" for which it has principal responsibility, and that a bureaucracy usually reacts only to the matter immediately before it. A bureaucracy does not anticipate related problems or evaluate all of their ramifications before taking action on part of the problem. Seen in this light, no "government" decision was made. Rather various bureaucracies undertook a series of separate responses to particular parts of the NRDC's proposed project. These bureaucracies included the Office of Export Licensing in Commerce, the Office of Strategic Trade Policy in Defense, and various offices in the Departments of State, Agriculture and the Interior. This effect resolves the central problem of the Model I explanation—the inability to integrate all of the parts of the Government's response into a single, internally consistent rational explanation.

In addition to offering this central insight, the Model II description highlights a world in which decision-making institutions are not free to do whatever seems best or most reasonable under the circumstances. Instead, decisions are channelled and constrained by formal and informal operating procedures. Some of these are standard routines developed by an agency itself for convenience in most of its case load. These include some classically Allisonian SOP's: Commerce Department's procedure of according very quick review to a small percentage of export license cases, and assigning to junior officers the power to decide when cases fall into that category; the Forest Service's routine of having District Rangers or Forest Supervisors in the field rule on applications for rights-of-way in the National Forests, rather than sending such applications to Washington for high-level review; and the Justice Department's tradition of allowing State Department officials to decide when the Attorney General should exercise his statutory power to waive the exclusion of an alien or to condition a visa.

The constraints on bureaucratic judgment also include, to a surprising extent, a welter of statutes and regulations, which share with the informal SOP's their historical attachment to the "typical" case rather than to any particular decision to which they must be applied. Allison is not concerned with the web of legislative and regulatory limits on govern-
mental freedom to act in the area of national security,\textsuperscript{502} despite their emergence as an increasingly significant feature of the national security landscape.\textsuperscript{503} Given the detailed nature of the regulations governing export licenses, for any level of government to reach a "policy" decision that could have prevented the export would have been difficult. However, delay would have been available if the policy-makers had reached a consensus to stall the project.

This regulatory constraint was based more in history than in conscious planning. It was essentially fortuitous that off-the-shelf seismometers were uncontrolled; that the data recorders the NRDC wanted to use fit the guidelines for export to the Soviet Union, and that only "national security" and not "foreign policy" controls applied to the export of such recorders to the U.S.S.R. (depriving those who might have opposed such a license of the additional argument that the export of the devices in the NRDC project undercut foreign policy).

Similarly, had the governmental leaders reached consensus, after the Soviet visit, on a "policy" of denying the use of federal lands to seismic stations monitoring U.S. nuclear tests, they would have found it virtually impossible to impose that choice. The existing land use regulations simply did not recognize such a policy. The standard routines for changing the regulations\textsuperscript{504} are slow and cumbersome, and denying the rights-of-way despite the regulations would quite probably have resulted in litigation and perhaps an embarrassing court defeat for the Reagan Administration.\textsuperscript{505}

\textsuperscript{502} See supra note 140 and accompanying text.

\textsuperscript{503} This emergence of legislative limits reflects the increasing role that Congress is playing in foreign policy, but may also indicate that, as Frederick S. Young put it, "laws are an attempt [by Congress] to make Model III questions into Model II questions." Memorandum to Philip G. Schrag, July 22, 1987. There is, of course, disagreement as to whether, in most cases, decisions will be more reasonable if the relevant officials are less restricted.

\textsuperscript{504} 5 U.S.C.A. § 553 (1982).

\textsuperscript{505} To rationalize such a decision, the Government probably would have to claim that granting of the permits was not in the "public interest," a ground for denial under 36 C.F.R. § 251.54(h)(2) (1986) and 43 C.F.R. § 2802.4(a)(2) (1986), because it undercut U.S. pressure for CORRTEX. This claim would have given the NRDC the opportunity for a highly publicized court test of whether its seismic verification project was in the public interest.
Even in the matter of the visas, where the Government was able to impose its policy decision, its ability to do so was based in large measure on luck. That the Soviet scientists were excludable at all (as a result of the 1952 McCarran-Walter Act’s ban on the entry of those with Communist affiliations) was an historical accident favoring the Government, and a countervailing fortuity favoring the NRDC that a McGovern Amendment was on the books, creating a presumption in favor of waiving the exclusion. Luck favored the Government, in that the 1979 Solarz amendment had changed the McGovern amendment so that it did not apply to the Soviet Union, but luck favored the NRDC, in that State had interpreted the Solarz amendment in a way that did not, in fact, lift the presumption of ineligibility for Soviet nationals. The final stroke of luck benefitted the Government’s position: a little-used 1917 statute permitting the visas of excludable aliens to be “conditioned” still remained on the books.

interest, and given the fact that the “public interest” provisions are rarely if ever used for this purpose, the NRDC might well win such a case.

The purpose of these provisions was to exclude “subversives,” see H.R. Rep. No. 1365, supra note 251, reprinted in 1952 U.S. Code Cong. & Admin. News 1703, but their existence gave the government an opportunity to control the visit of the Soviet scientists for reasons of foreign policy, notwithstanding the fact that no one argued that their presence would endanger U.S. security.

The purpose of the McGovern Amendment was to implement the Helsinki Final Act, designed to encourage the free flow of people and ideas. Few of the legislators who voted for it could have contemplated that it might have the effect of preventing the U.S. from employing visa restrictions for this purpose, namely, pressuring a foreign government to bow to a U.S. position on a nuclear test ban treaty. The resulting standard procedure of waiving exclusions was significant in this case, for it both created genuine pressure to admit the Soviet visitors (departing from standard practices is harder to explain than adhering to them, and it can invite lawsuits) and armed the State Department representatives to the Working Group with a rationale for opposing the Defense position.

For a historical discussion of laws governing visas, see supra note 243.

Id.

In writing the 1917 statute that created the visa-conditioning routine, Congress was in no way addressing the use of visas as instruments of foreign policy, or even the control of visiting Communists (the Communist exclusion was added to the law 35 years later). The “policy” was to create a humane exception to the absolute prohibitions on admission to the
The legal restraints on the government’s reaction to the NRDC project were at least as significant as the informal bureaucratic routines, and like the pre-existing routines, they had no strong relationship to the particular issues posed by the seismic monitoring exchange. It may be the case that statutory constraints exert more influence on second-level national security decisions (like those involved in this case) than on major controversies. Although major aspects of foreign policy are increasingly governed by statutes, those statutes may be phrased in more general terms in order to afford flexibility to the President.511

Sometimes, formal and informal routines interact in curious ways. For example, the State Department was statutorily required to allow the consular officer in Moscow to make an initial and final decision on the Soviet scientists’ visit. But State had long ago developed an SOP (sending a cable instructing a consular officer to request a Donkey Chipmunk advisory opinion) for ensuring that, in significant cases, such decisions are really made in Washington. Like the Attorney General’s de facto deference to the State Department, this situation represents an informal SOP taking precedence over a formal one.

Model III resolves some of the questions that neither Model I nor Model II can explain: where no standard procedure exists or where the Government succeeds in deviating from rote behavior. Model III also introduces the element of

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511. The author is indebted to Peter Schuck for this observation. On the other hand, some statutes regulating very significant foreign policies such as the Boland Amendment and the Nuclear Non-proliferation Act appear to be fairly specific in their commands and prohibitions, if not always free from ambiguity or even escape clauses.
human judgment and interaction.\textsuperscript{512} In Model III, individual people, working through established action channels, make the critical differences. Whitehead's warmth to the project gave it a chance. Perle's hostility created significant obstacles. In this respect, Allison's paradigm may be due for some revision, for the case study suggests that many human hands make a difference. National security policy decisions are affected not only by the heads of traditional national security related agencies, but also by the leaders of peripheral agencies, lesser officials in agencies, and people outside of government. Bayless Manning, who was able to put the NRDC in direct contact with the Secretary of Commerce, was instrumental in expediting the export license, as was Donald Hammond, a junior official in Commerce whose only connection to the project was his interest in it and his proclivity to help members of the public who were having trouble with his bureaucracy. Very junior officers such as Larry Gillham and Eric Watson, in agencies far removed from foreign policy issues, helped the NRDC project develop by their decisions not to include in the seismograph station right-of-way applications the information they had learned about the nuclear test monitoring function of the equipment. Only in the case of the visa requests was the outcome determined almost exclusively as a result of bargaining, through representatives of senior officials of the relevant agencies—State, Defense and the NSC, with some input by the Department of Energy, the Joint Chiefs of Staff, and the Arms Control and Disarmament Agency.

The interpersonal maneuvering at the heart of Model III does not take place in a vacuum. To overlook the impact of standard procedures on what kind of bargaining or other in-

\textsuperscript{512} In a 1972 essay co-authored with Morton Halperin, Allison described what he called Model III in a way that imported many Model II concepts, though he did not suggest that he no longer regarded distinctions between Model II and Model III as useful. Allison & Halperin, \textit{Bureaucratic Politics: A Paradigm and Some Policy Implications}, in \textit{Theory and Policy in International Relations} 40 (R. Tanter & R. Ullman eds. 1972). This publication has led one author to observe that Models II and III are "analytically distinct" but that "the evidence is often fuzzy—it can fit either model. This helps us to understand why even Graham Allison, author of the best description of the two models, can be found at various times using the two together or each one separately." P. Morgan, \textit{Theories and Approaches to International Politics} 83 (1981).
terpersonal contact takes place or on how these interactions are translated into action would be erroneous. Most dramatically, standard routines affect the central participants in the bargaining process. Routines determine which action channel is most relevant. No new negotiating group was created to deal with the NRDC. Instead, the project was thrown into an existing interagency group, with an established membership. Indeed, the State Department's decision to refer the NRDC problem to such a group (as opposed, for example, to Whitehead simply determining the U.S. policy) was itself an example of following a standard operating procedure. Similarly, the standard procedures of the Forest Service and BLM, to grant rights-of-way at the local level, without Defense or State Department consultation, determined which player or players had a voice in deciding the station permits. On a less dramatic level, standard operating procedures limit the types of possible bargains and significantly affect their implementation. The existence of an expedited system in the Department of Commerce (which was one of that Department's standard procedures) helped to undercut the Working Group's decision, through an interpersonal process, to avoid expediting the request.

While generalizing from a single case study is a dangerous undertaking, an analysis of the Government's reactions to the NRDC enables speculation on which model might be more or less appropriate when the decision at issue is a second-level national security matter. For several reasons, the structures, laws, and standard operating routines of Model II may have more effect in determining policy in second-level cases than they do in major ones.

First, in a crisis or other major decision, the issue will directly implicate the "shared images" of the decision-makers. With exceptions, most of the players will generally agree on the type of solution necessary to resolve a major

513. Halperin identifies sixteen "shared images" which frequently affect American foreign policy specialists. These include such statements as, "the surest simplest guide to US interests in foreign policy is opposition to Communism," and "[c]oncessions made under pressure constitute appeasement which only whets the appetite of aggressors." M. HALPERIN WITH P. CLAPP & A. KANTER, supra note 497, at 11-12.

514. One such exception is the disagreement between Secretaries George Shultz and Caspar Weinberger, on one hand, and CIA Director
problem such as whether to deploy troops to Grenada, bomb Libya, negotiate a missile reduction with the Soviet Union, or build the Stealth Bomber. By contrast, broad principles such as belief in military strength or opposition to Communism may be less helpful to decision-makers dealing with second-level matters. Second-level issues involve questions of judgment as to which of several courses (e.g., pressuring the Soviets to observe CORRTEX or encouraging them in their willingness to accept seismic monitoring of their territory) is more likely to lead to a broadly desired result (negotiated, verifiable constraints on nuclear arms competition). The broad principles may be even less helpful in addressing matters that are essentially questions of implementation (e.g., would the United States be more damaged by allowing the Soviets to operate seismic stations in Nevada or by appearing to try to prevent them from doing so). To the extent shared images determine outcome, both Model I and Model III may be more significant than Model II.

Second, because of the greater need for secrecy, major problems may be addressed by a smaller circle of players. Instead of leaving such problems to the bureaucracies of the departments and to the multiple layers of interagency processes, Presidents are more likely to bring them directly into the White House, calling upon the immediate personal attention of the relevant department heads and a few other advisors, as President Kennedy did in the Cuban missile crisis. The bargaining at the core of Model III is most feasible when the number of players is so limited. By contrast, when a large number of government actors can play some role in the decision process, no clear action channel may emerge, and bureaucratic routines may simply take over.

William Casey and National Security Advisor John Poindexter, on the other, on the desirability of secret sales of arms to Iran.

515. "If shared images dominate . . . are we not talking about a 'unitary purposive actor'? . . . Have not the cases of shared mind sets occurred on precisely the pivotal decisions of American foreign policy since 1945?" Art, supra note 498, at 476.

516. When what is in the national interest appears "elusive," the players often "look to organizational . . . interests." M. HALPERIN WITH P. CLAPP & M. KANTER, supra note 497, at 25.

517. Policy in that crisis was essentially made by a group of seventeen people in a group called the "ExCom." G. ALLISON, supra note 1, at 185.
In the case of the Government's reaction to the seismic monitoring project, the export license decision was channeled to the small Working Group. But, as so often happens, implementation was left to the large, indeterminate number of people in the bureaucracy, enabling numerous lower level officials to whisk the license through in close to record time. By contrast, the visa decision stayed within the control of the Working Group and the organizations to which it reported, and the results of the bargaining became the decision of the Government.518

Third, bureaucratic routines may tend to predominate in second-level cases because only the most important national security cases are worth the extraordinary effort necessary to change those routines. For example, routines established by statute, or regulation, or effective order, can only lawfully be altered by amending the law, regulation, or order. Escalation to the Presidential or Congressional level, or going through notice-and-comment rulemaking procedures may not be warranted if the problem is of less than immense importance. That any Defense Department official would even consider beginning a process of amending the export control regulations or seeking an Act of Congress to frustrate the NRDC project is doubtful.

Fourth, because of the nature of second-level decisions, they are worth less time and attention than major ones, less effort is expended in investigation of the problems. In particular, the decision-makers may make fewer attempts to scan the horizon for related decisions, or neglect to make certain that they have considered as many alternative courses of action as possible. In the case of the NRDC project, the Work-

518. However, once the first visa application was decided in September 1986, a new standard operating procedure was born within the Department of State. Each time the Soviets would apply for a visa, they would be given the choice of having the trip they proposed along with a CORRTEX measurement at the Nevada Test Site, or having a curtailed trip and not being allowed to go to the seismic station sites. See supra note 441 and accompanying text. A decision dominated by Model III had become one in which Model II factors were controlling because, in Henry Kissinger's words, "an attempt to change course involves the prospect that the whole searing process of arriving at a decision will have to be repeated." I. M. Destler, Presidents, Bureaucrats, and Foreign Policy 76 (2d ed. 1974).
ing Group dealing with the export license and visa requests never attended to the station permit questions, even though the station permits were more central to the establishment of Soviet stations in the United States than were the visas. 519

Finally, Model II may be a more significant determinant of outcome in second-level cases because leaders are likely to give less attention to questions of implementation than in major cases. The literature contains numerous examples of significant leadership decisions in the area of national security being ignored or sabotaged by the bureaucracy. For example, President Kennedy was shocked during the Cuban missile crisis to learn that the order he had twice given to remove obsolete U.S. missiles in Turkey had never been effectuated. 520 Secretary of Defense Robert McNamara had decided to begin construction of a small ABM system, capable of defending against a Chinese attack, but the military constructed a large anti-Soviet system. 521 The State Department authorized the U.S. Ambassador to the United Nations to declare, contrary to President Truman's directive, that the United States did not support partition of Palestine. 522 Obstruction of these decisions could take place because the leaders who made them were too busy with other problems to ascertain whether their instructions were being obeyed. 523 With respect to those decisions deemed most critical, leaders can and do attend to details, including details of implementation. 524 Severe limits exist, however, as to how much lead-

519. Allison implicitly makes this point about second-level decisions when he says that in the Cuban missile crisis, "a small group of men, unhitched from the bureaucracy, weighed the options and decided. Such central, high-level crisis decisions would seem to be the type of outcome for which Model I analysis is most suited." G. ALLISON, supra note 1, at 9.
521. M. HALPERIN WITH P. CLAPP & A. KANTER, supra note 497, at 804-06.
522. Id. at 252.
523. McNamara, for example, was so preoccupied with the war in Vietnam that he had to hand over implementation of the ABM decision, among other responsibilities to his Deputy Secretary, Paul Nitze. Nitze favored keeping open the option of having a large system, as did the Army, and the Defense Department engineers resisted having to redesign components so that they could not be used against Soviet ICBMs. Id. at 305.
524. During the Cuban missile crisis, President Kennedy himself gave positioning orders to the commanders of the submarines conducting the
ers can attend to the implementation of second-level decisions, such as whether the bureaucracy expedites an export license that was intended to be processed routinely.

Both the suggestion that Model II is relatively more useful for smaller decisions and the specific hypotheses about why that might be the case must be tested through additional case studies of governmental decision-making. If the general proposition appears to be true, then the great majority of national security decisions—those not prominently featured in the headlines—may be subject to most of the inherent defects of suboptimal decision processes and lack of accountability inherent in the organizational process paradigm. In that event, those who would reform the system to make decisions more coherent and more responsive to elected authority have an even greater task ahead of them than was previously thought.525

VII. IMPLICATIONS FOR LAWMAKERS AND LAWYERS

The bulk of this study has considered the Government's reaction to the NRDC project from the perspective of the academic analyst, testing the hypotheses advanced by Allison two decades ago. The study, however, also has implications for legislators and practicing lawyers.

A. Legislators

For legislators, a multi-model analysis of executive branch decision-making is a useful component in planning effective policy change. Imagine ten years after enactment of the McGovern Amendment, certain members of Congress believe that continuing governmental denials of nonimmi-

blockade, speaking to them by radio from the White House. G. Allison, supra note 1, at 128. (Even so, his orders were countermanded by the Navy's bureaucracy. Id. at 130.) President Carter's lengthy, personal involvement in the Israel-Egypt peace treaty negotiations at Camp David is another example.

525. On the need for reforms of the national security decision system, see generally G. Allison & P. Szanton, Remaking Foreign Policy: The Organizational Connection (1976); I. M. Destler, Presidents, Bureaucrats and Foreign Policy (2d ed. 1974). Most of the organizational problems identified by Destler in his first edition in 1971 have become even greater problems since then, as the Iran-Contra hearings in Congress have shown in a dramatic way.
grant visas to certain Communist speakers and other visitors are embarrassing the nation and undercutting the Congressional goal of encouraging worldwide freedom of travel. Imagine, further, that these members are attempting to design an effective legislative response.\textsuperscript{526}

To the extent that Model I accurately describes the world, repealing the statutory language mandating the exclusion of Communists,\textsuperscript{527} or declaring the policy of the United States to be that waivers should be liberally granted or denied only where strong foreign policy or national security interests so required would be enough for these legislators. Congress would presume good faith efforts by the executive branch to honor the new law, or to carry out the new policy.

On the other hand, if Models II and III more accurately account for bureaucratic responses, this type of legislation might not suffice. Offices or individuals with responsibility for visa issuance might have their own agendas, and might claim legal support, despite the new statute, to carry out their goals. For example, they might claim that the repeal of the Communist exclusion provisions left the executive branch of the government with inherent authority, under the President's power to administer foreign relations, to exclude undesirable aliens.\textsuperscript{528} Alternatively, they might seize on any vaguely worded exceptions to a new "policy," claiming those exceptions covered the individuals they were seeking to exclude.

A legislator attuned to Model II explanations of "decisions" might, therefore, be somewhat less concerned with the scope of the prohibition on exclusion and more attentive


\textsuperscript{528} Indeed, executive branch officials determined to retain the power to exclude individual Communists might even argue inherent Constitutional authority despite contrary statutes, justifying nonconformance with direct statutory prohibitions on exclusion. Simple repeal of the McCarran-Walter exclusions, however, would not require so dramatic a claim. \textit{Cf.} Youngstown Sheet & Tube Co. v. Sawyer, 343 U.S. 579 (1952) (Jackson, J., concurring).
to the administrative procedures for implementing the new policy. The legislator might determine, for example, that exclusions or domestic travel restrictions were likely to endure primarily because several people were employed in processing exclusions and restrictions. A legislator who diagnosed the problem this way might require a written report to Congress within days after each exclusion was made, or after each admission with travel restrictions, stating the reasons for the exclusion or the restrictions. Exclusions and restrictions might become less frequent because denials and restrictions would involve more work and more political exposure than grants. This procedure is, in fact, part of the approach taken by the McGovern Amendment, which provides that the Secretary of State may refrain from recommending waiver to the Attorney General only upon certifying to the Speaker of the House and the chairman of the Senate Foreign Relations Committee that granting a waiver would be contrary to United States security interests. Curiously, the bureaucratic burden for denials was placed only on the Department of State, while the power to deny waivers continued to reside ultimately in the Attorney General. Therefore, the "Model II" solution predictably failed. The Attorney General could deny waivers (with or without off-the-record coaching by State Department officials) without having to report to Congress. Additionally, although the imposition of domestic travel restrictions on admitted aliens had to be reported annually to Congress for the first three years after the McGovern Amendment was enacted, this deterrent expired in 1982.


A more severe set of legislated Model II procedural controls could have come into play if the seismic equipment to be exported by the NRDC had been subject, on the export control list, to "foreign policy" as well as "national security" controls. See supra text accompanying notes 167-180. In that case, the Secretary of Commerce could have prohibited the export, but to do so, he would have had (a) to have engaged in prior consultation with U.S. industries, and (b) to have testified before two Congressional Committees. In addition, the President would have had (a) to have consulted with U.S. allies, (b) to have engaged in prior consultation with the
Procedural controls are less relevant to the extent that the intervention of leaders, rather than the purring of the bureaucratic machine, accounts for the problem that the legislator seeks to address. Perhaps the hypothetical legislators discover that the relevant bureaus in the State and Justice Departments are headed by officials who strongly believe that sooner or later, a Communist speaker will steal industrial secrets or inspire violence by a domestic group. These officials are thought to have instructed their offices to deny or condition visas where legally possible to do so. Alternatively, perhaps one or more of the relevant bureaus is headed by an official whose appointment to that post has been engineered by a particular anti-Communist Senator to whom the official is especially responsive. If one of these Model III explanations accounted for the Government’s “policy,” neither a substantive statutory change nor an alteration of procedural routines might suffice to put a stake through the heart of visa denials. The best approach might be to impose counterpressure on the particular bureaucrats responsible for the policy, either through hearings (exposing the officials to public scrutiny), budget reductions (which might prompt their staffs to exert pressure from below in favor of less confrontation with Congress) or efforts to persuade the President or Secretary to change or reorganize personnel.

Sanctions represent an important special case of how multi-model analysis can play a role in legislation. Consider an example of a problem that might have seemed a "second-..."
level” problem when Congress first considered it, but which developed into the most significant foreign policy issue of 1987: the Iran-Contra Affair. How could a foresighted Congress have prevented the executive branch of the government from providing funds to insurgents in Nicaragua despite Congressional defeat of a proposed appropriation for this purpose, trading arms to Iran in exchange for American hostages in order to finance this effort, and seeking to establish an all-purpose off-the-books covert action operation?531

If Model I correctly describes the behavior of the executive branch, the appropriate legislative precautions would have been to pass the Boland Amendment, barring the Government from giving financial aid to the Nicaraguan rebels “directly or indirectly,”532 and barring the government from selling arms abroad without meeting certain criteria, including prior Congressional notification.533 In normal times, such measures as these suffice. No specific sanctions need be attached to them, because Congress expects its legislative mandates to be obeyed.

Imagine that members of Congress intent on achieving these objectives had fully understood the bureaucratic structure within the executive branch. They knew that a small group of officials on the National Security Council staff, together with a few officials at the State Department and the Central Intelligence Agency, were planning to circumvent the Boland Amendment by raising and using money from foreign officials, by selling arms to Iran for a concealed profit, and by misleading Congress about these activities in executive branch testimony.534 In such a case, Congress might have strengthened its substantive law-making by substituting specific operational requirements for general provisions in the laws themselves,535 enacting “whistle-blower”

535. For example, Congress would require the President to notify it of all covert action operations within 48 hours, rather than “in a timely fashion,” as the law specified during the period of the Iran Arms Sales. 50 U.S.C. § 413(b) (1981).
provisions and requiring routine oath-taking by executive branch witnesses testifying on national security matters.

Finally, if Congress had understood that the relevant executive branch group consisted of determined, ideologically driven officials who would not easily have been deterred by procedural devices from skirting the law, Congress might have resorted to the tool most particularly appropriate for deterring individual misconduct. Specific criminal penalties might have been attached to the Boland Amendment, which could have reminded the relevant officials of their personal accountability, and of the risks they ran by using their positions to conduct a covert foreign policy.536

B. Lawyers

Practicing lawyers, too, may use the Allisonian models to hone their ability to effectively bargain with a government bureaucracy. Returning once again to issues suggested by the case study, imagine a lawyer who is seeking, on behalf of a client, to obtain a Commerce Department export license. Assume, also, that the lawyer has never before dealt with this particular entity.

Model I would suggest that the lawyer simply research the statutory and regulatory requirements, and then file the client's application. If meritorious, the government, being rational, will grant the application.

The lawyer attuned to Model II would, however, also engage in considerable research on the structure of the Commerce Department. She would look into the substructures and subroutines of each relevant office. In the course of that work, she would discover, among other things, the Department's unpublished "fast track" routine. If her client wanted to export quickly, she would try to make her application fit the "fast track" criteria.

The lawyer would not merely file the application. Realizing the application had to go to several offices, each with its own concerns, she would attempt to make written or oral presentations to each of them. Each presentation would be

536. For a more detailed look at how multi-model analysis can help a legislature to devise an appropriate sanctions regime, this time in a domestic context, see Note, Decisionmaking Models and the Control of Corporate Crime, 85 YALE L.J. 1090 (1976).
designed to move the application to the top of the pile and would be tailored to the concerns of that office. If necessary, she would work with her client to alter the nature of the export to avoid issues which would bring about delay or objections in any office.

The lawyer who believes that government proceeds through the actions of people rather than through policies or procedures would first identify the key players, both among the senior officials of the Commerce Department and among those on whose desks the license applications would actually reside. She would use all possible personal contacts to affect their judgments and to get them on her client’s side. The staff of the NRDC did this very effectively with respect to the Commerce Department, the Bureau of Land Management, and the Forest Service. But NRDC’s analysis did not extend sufficiently to reveal the involvement of those who were really making the visa decisions: the members of the Nuclear Test Ban Working Group and the three arms control experts on the National Security Council staff.

Many practitioners work on all three levels instinctively. Despite their lack of familiarity with formal Allisonian theory, they already make sophisticated multi-level approaches to key governmental groups and officials. By systematically applying Allison’s three theories of decision-making, lawyers might nevertheless be able to exert greater influence over governmental and other bureaucracies. Formal models such as those developed by Allison can help them to think more clearly about what kinds of information they need to gather before acting for a client, and how to link their appeals to the needs and goals of bureaucratic organizations and their key personnel.537

VIII. THE NRDC PROJECT: A POSTSCRIPT

By the middle of 1987, the NRDC’s seismic verification project was in a curious stage of development. American scientists had already spent a year in residence at seismic

537. Enhanced planning ability is one of the most important values of models as they are used by policy analysts. Using a formal model “forces you to identify the levers that will influence outcomes, which are in actuality the true policy alternatives.” E. STOKEY & R. ZECKHAUSER, A PRIMER ON POLICY ANALYSIS 19 (1978).
monitoring stations in Kazakhstan, and the NRDC had built virtually identical stations in California and Nevada to monitor nuclear explosions at the Nevada Test Site. But the hopes of the project’s initiators had been frustrated in two ways. First, the Soviet scientists had not been given the same right to work in the United States that their American counterparts were enjoying in the Soviet Union. Second, although the NRDC’s operation of the stations in the United States was unrestricted, so that these stations could provide continuous monitoring of test site activity, the Soviets required the Kazakhstan stations to be shut down during Soviet nuclear tests.

In June 1987, NRDC and Soviet Academy officials renegotiated their agreement. For 1988, the Soviets agreed to permit the American scientists to leave their equipment running during Soviet tests, and to expand the number of stations in the Soviet Union from three to five. At the same time, the stations were required to be relocated to sites six hundred miles, rather than one hundred miles, from the Semipalatinsk test area. Although the new and relocated stations would provide continuous data to the Americans, they would be operated primarily by Soviet scientists, “with occasional assistance as required and requested from the NRDC.” The revised agreement also provided that non-nuclear calibration explosions would be detonated in each country so the scientists could better determine what magnitudes of explosions could be detected at various distances. A side benefit of the calibration explosions would be that scientists could use them to make better estimates of the yields of

538. According to NRDC, this requirement, which appeared to be a political retreat on the part of the Soviets (and was probably imposed at the request of the Soviet military authorities responsible for testing at Semipalatinsk) was actually better from a research perspective, and it was welcomed by the American scientists on the NRDC team. The original stations were so close to the Soviet test site that they could easily pick up even very small seismic events there. To be able to monitor low-yield Soviet tests from locations as far away as 600 miles would better demonstrate the verifiability of restrictions on such testing. Interview with S. Jacob Scherr, Senior Attorney, NRDC, in Washington, D.C. (May 17, 1988).

nuclear tests detected by the seismic equipment.\footnote{540}

Shortly thereafter, with their American counterparts on site, the Soviets set off two explosions of ten tons of TNT and one of twenty tons of TNT, as provided by the agreement to detonate calibration tests. The American scientific team in the Soviet Union watched the seismic monitors at project stations, some of which were 400 miles from the blast. Despite the distances and the low yield of the explosion, all of the NRDC stations detected the explosion, and its waves were clearly distinguishable from those caused by a distant earthquake which occurred, coincidentally, at almost the same moment as the test explosion.\footnote{541}

Meanwhile, the Reagan Administration continued to oppose ratification of the 150-kiloton Threshold Test Ban Treaty, conditioning acceptance on Soviet agreement to renegotiate its verification provisions to utilize CORRTEX measurements to check the yields of Soviet tests. Early in 1987, Soviet opposition to consideration of CORRTEX began to dissolve, and in November, 1987, Soviet negotiators agreed to conduct experiments. As part of these experiments, the Soviets would permit U.S. Government representatives to tour Semipalatinsk, would send Soviet representatives to visit the Nevada Test Site, and would participate with American scientists in demonstration measurements of monitoring equipment, including both seismic and CORRTEX instruments.\footnote{542} Notwithstanding this new Soviet willingness to observe a CORRTEX demonstration at the Nevada Test Site, the government continued to deny Soviet Academy scientists the right to operate or even visit the three project stations in Nevada and California.\footnote{543}

\footnote{540. Id.; interview with S. Jacob Scherr, supra note 538.}
\footnote{543. In December, 1987, the NRDC requested that federal officials undertake a "reconsideration of U.S. policy on visas for Soviet seismologists," noting that the "rationale" of the Soviets' unwillingness to witness a CORRTEX demonstration "is no longer applicable and appropriate." Letter to Ambassador H. Allen Holmes, Assistant Secretary of State for Politico-Military Affairs, from Dr. Thomas B. Cochran and S. Jacob Scherr,
By the spring of 1988, when NRDC applied once again for the Soviet scientists to visit the stations—this time to participate in experiments in which a calibrating TNT explosion would be set off in Nevada—not only had the Soviets acceded to observing the use of CORRTEX, but two other events of significance had occurred. First, both Richard Perle and his deputy Frank Gaffney had resigned from the government. Second, for reasons having nothing to do with the NRDC project or nuclear testing, Congress had suspended, from January 1988 through February 1989, the government’s power to deny or condition nonimmigrant visas on the basis of the applicants’ beliefs or associations. This suspension appeared to require a change in the routine that the government had established for dealing with NRDC applications.

In March 1988, the NRDC applied once again for unrestricted visas for the Soviet scientists, to allow the scientists to participate fully in calibration and monitoring experiments with NRDC scientists. The Soviets wanted to visit all of the NRDC station sites in Nevada and California, to visit the sites of NRDC’s TNT calibration explosions in northern Nevada, and to bring with them a ton and a half of their own equipment which they would use to monitor the

NRDC (Dec. 10, 1987). The response stated that because “direct, bilateral negotiations between the United States and the Soviet Union are the only proper forum for addressing nuclear testing issues I do not anticipate the current US policy will be revised.” Letter from William F. Burns, Principal Deputy Assistant Secretary of State for Politico-Military Affairs, to Dr. Thomas B. Cochran, NRDC (Dec. 29, 1987). See also the visa issued to Igor L. Nersesov, a Soviet scientist working on the NRDC project, on which the following legend is inscribed: “Invited by NRDC. 212(d)(3)(A)(28). Stay Auth: Nov. 28 until Dec. 8, 1987 only. NY, DC, San Diego, SF, and Reno only. NO SEISMIC STATION VISITS.” Visa No. 012411 Issued at Moscow (Nov. 27, 1987) (emphasis in original).

547. Letter from Terence J. Fortune, Paul, Weiss, Rifkind, Wharton and Garrison (representing the NRDC), to Lt. Col. Michael Fry, Deputy Director, Office of Strategic Nuclear Policy, Bureau of Politico-Military Affairs, Department of State (March 18, 1988).
calibration explosions and the Nevada Test Site.\textsuperscript{548}

In a legal memorandum attached to the application, NRDC argued that because of the suspension of statutory authority, the expected presence of the Soviet scientists at the NRDC stations was "an impermissible basis for denial or restriction of the requested visas." This legal memorandum was co-signed by the Director of the National Security Litigation Project of the American Civil Liberties Union, which implied, at least, that NRDC was prepared to test a denial in court.\textsuperscript{549} The State Department responded, "we disagree with your interpretation [of the suspension legislation]. In our view that section does not limit the Executive's authority to deny or restrict the admission of aliens where such action is necessary to protect important internal security or foreign policy interests of the United States. [Nevertheless], the instant case does not require denial or restriction of the visas."\textsuperscript{550}

One month later, for the first time in history, scientists from the Soviet Union began to operate a seismic monitoring station on American soil.

\textsuperscript{548} Interview with S. Jacob Scherr, \textit{supra} note 538.
\textsuperscript{549} Letter from Terence J. Fortune, Paul, Weiss, Rifkind, Wharton and Garrison, and Kate Martin, Director of the National Security Litigation Project of the American Civil Liberties Union, to Abraham D. Sofaer, Legal Advisor, Department of State (March 18, 1988), \textit{appended to} letter to Lt. Col. Michael Fry, \textit{supra} note 547.
\textsuperscript{550} Letter from Abraham D. Sofaer, Legal Advisor, Department of State, to Adrian W. DeWind, Paul, Weiss, Rifkind, Wharton and Garrison (March 31, 1988).