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Naval Presence: Sizing the Force

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During the period from 1946 through 1982 US military forces were postured some 259 times as a political instrument in support of national policy. In over 80 percent of these instances, naval forces were employed. In examining these naval operations a number of problems were quickly identified. First, naval presence has different meanings to different people. Second, there are dissimilar opinions on how naval presence is scheduled and how it can be used effectively. And last, if forces are not properly chosen, i.e., structured to a crisis management (CM) response, there can be a much greater impact on fleet operations than is necessary. Hence the purpose of this study is threefold.

- to establish our definition of naval presence,
- to briefly describe how it is scheduled and some factors that may determine its effectiveness, and, most importantly,
- to develop a rational, structured approach to choosing a force to respond to CM situations.

Such a framework should aid in identifying the “proper” force to accomplish the objective of the naval presence mission with the minimum of impact on scheduled fleet operations.

More often than not the impressions one has on the concept of naval presence rests with the *beholder*. One of the first statements made by two former CinCs in separate interviews on the subject was that “we [in the Navy] do not understand naval presence.” They both went on to say that naval presence is the most powerful and effective lever that can be used in pursuit and support of our national policy. In our discussion here we will consider naval presence to encompass those actions as indicated in Figure 1.

One should first distinguish the level of “violence” between routine presence and a show of force. Routine presence includes those actions conducted during regular deployments, primarily training exercises and port visits, while a show of force would be a specific deployment of naval forces

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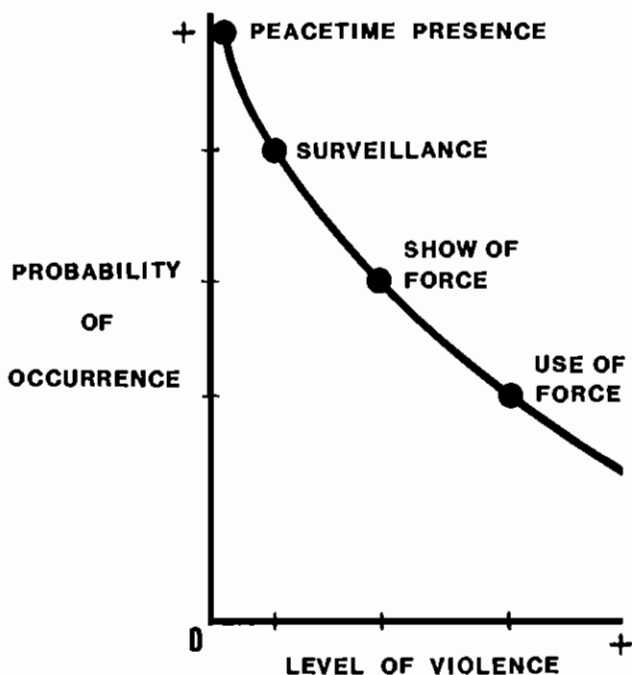


Figure 1. Use of Naval Forces

that are planned in pursuit of an identifiable political objective in which the use of force is contemplated or could reasonably be expected to occur if circumstances arise. These two divisions of naval presence would be roughly equivalent to preventive deployments and reactive deployments as described by Admiral Stansfield Turner in his definition of the missions of the US Navy.¹ The division of routine presence and show of force equates to the terms latent and active suasion, respectively, as used by Edward Luttwak in *The Political Uses of Seapower*.² Show of force as defined to include limited or symbolic use of force also equates very closely to James Cable's definition of gunboat diplomacy.³

Routine presence encompasses those benign and latent actions expected on a deployment including normally scheduled exercises and port visits. The primary objective of routine naval presence is to demonstrate that we have interests in various regions of the world and to reassure our friends and allies. Some naval persons are skeptical as to the degree that naval forces could favorably support national strategies. Yet, a majority of opinion supports the proposition that routine naval presence can be effective if utilized properly. An experienced US foreign service officer assigned to the Embassy in Tokyo related a specific instance in which the Japanese expressed open concern over the movement of carrier battle groups which they apparently perceived as a lessening of US commitment. Jonathan Howe in his book *Multicrisis* concludes that "in regions of vital security

interest to the United States, the advantages of maintaining a naval presence appear to far outweigh the disadvantages."⁴

Port calls constitute a great part of what we have defined as routine naval presence. Besides the normal objectives of liberty for the crew, maintenance for the ship and dollars for the host country, port visits serve other uses. They can signal the closeness of relations of the United States and the host nation. The sophistication of our advanced technology looks impressive and generates enthusiasm. Port calls serve as showcases for our technology and can help to boost foreign military sales. The scheduling of routine naval presence is normally affected through interaction between the CinC or his fleet representatives and the on-scene ambassador. This interaction allows for a comprehensive evaluation of the results and reduces to a minimum port visits to which there is an overall negative reaction.

Further up the violence scale, a show of force is usually in support of a national political objective that has the attention of the highest levels of government. A show of force is scheduled and coordinated by the CinC or his superiors, including the commander in chief, depending on the specific situation. The requirement could be identified at the Joint Chiefs of Staff, the National Security Council, or the State Department level. The JCS would coordinate requests with other CinCs, especially in those cases where the forces required were in excess of the forces available to the requesting CinC. In a parallel information flow the on-scene ambassador would report via State Department channels what he perceives as the requirement for a show of force, and other diplomatic and economic action. Conflicting views, if any, would then be resolved by the National Security Council.

What constitutes a show of force has been a matter of some debate. Within the Navy there is general appreciation that naval units smaller than aircraft carriers can show naval presence. But outside of the naval service, the idea that naval task groups come in nothing smaller than CVBGs (or now battleship surface action groups), is generally the norm. This latter concept is probably most appropriate for most show of force missions. When a show of force is required in support of a national interest, the situation generally requires that it be the high scale of naval presence, such as the CVBG.

Yet there are dangers that should be recognized if only carriers are used to respond to naval presence requirements. One deals with "devaluing of the currency." As pointed out by Kenneth McGruther in his article on naval diplomacy, if aircraft carriers are used too frequently, and come to be the expected response, they will thereby be robbed of their special significance for use in future crises. Besides, the use of a carrier battle group may be overkill which may send unintended signals—a greater level of commitment than is really intended.⁵ One can imagine the effect that a Royal Navy SSN would have if seen in the vicinity of the Falkland Islands. It could have served the deterrent purpose without requiring any more forces to be employed.

In searching for general principles one seeks to develop a rational framework that can be used to size a force for a particular need. Existing scholarly studies of the subject arrive at conflicting conclusions, however, a few observations in some areas of general agreement would seem useful.

First. A routine or latent naval presence may detract from a show of force, that is, one that has been undertaken in an active attempt to evoke a specific reaction. The strongest message of resolve and commitment is usually associated with the arrival of the forces and tends to decrease over time as the forces become institutionalized and are no longer unusual and newsworthy. Should a force be in the area of concern, then one must expand the present force and demonstrate a higher level of resolve. However, the expansion of the existing force will probably not be as effective a message as when a force is first introduced into a region. The balance between the need for routine presence in support of a forward strategy and the diluting effect this may have on a show of force requirement needs to be considered when constructing both routine presence and show of force missions.

Second. A show of force in its coercive role can be used in two ways. It can be used to compel a party to change his behavior and it can be used to maintain an established behavior. Of the two, it is generally agreed that a show of force is more effective in maintaining an existing behavior than in effecting a change in behavior. Accepting this proposition, it would follow that the timing of introduction of the force into the area of concern is critical for two reasons. First, the force should arrive in the formulative stage of a crisis. Studies indicate that prior to the outbreak of a crisis there are many underlying forces that gradually build and the crisis is finally precipitated by some event that may or may not be related to the underlying causes.⁶ Secondly, in a situation which would involve a show of force by both the United States and USSR in an attempt to influence a third party, the second force to arrive will serve primarily to mitigate or counterbalance the influence of the first force. Rear Admiral Edward Wegener points out that "if both sides are present, their presence neutralizes each other."⁷ Howe's analysis of various crises would support this neutralizing effect and he further states that "since neither superpower is likely to risk a direct confrontation it is extremely important to gain the initiative."⁸ It would follow that the most effective influence would be executed by the first force, and then only until arrival of the second force.

Third. There is general consensus that where a show of force "maintains" behavior, it slows the rate of crises development, thereby, allowing more time for diplomatic and economic initiatives to succeed. The mere fact that a show of force is required implies that policy has not been successful. A show of force is not an end in itself but only a means to complement political and economic initiatives. A show of force, or for that matter any military action, will not rescue ill-conceived policy. Without successful economic and political policy a show of force cannot by itself attain the desired objective.

Once the need for a naval presence has been established, then there is a need for a rational framework for sizing a force. Such a framework is intended only as a means to ensure that the proper questions are considered during the selection process. As Cable concludes after analysis of several crises in which naval forces were utilized with less than desirable results, "Perhaps the wrong questions were asked or in the wrong order."⁹ Every situation requiring a show of force is unique. The force used must be tailored to the specific situation while considering applicable military, political and economic factors.

Objective

The first step in the process is to identify the true political objective—the what. The emphasis here should be on the real political objective and not necessarily the publicly stated objective. A recent illustrative example could be: was the objective of the Marine peacekeeping force in Lebanon to support the Lebanese government?, or was the true political objective to restrain Israel? The point being that the military leader must know the real political objective in order to take proper action and select the optimum forces.

After identifying the objective, the next question is, who are we trying to influence?—the government, the people, or a third party? And then, how are we trying to influence them? The relevance of this process is that the forces chosen must in some way be able to effectively communicate their presence. Without some form of interaction—landing of forces, aircraft overflights, positioning ships in view—or news media exposure, the ability to influence the desired party would be nonexistent. For instance, if one wishes to influence a local populace in a third world country with very limited internal communications, the use of an aircraft carrier—that by necessity must stay out of sight—would have limited, if any utility, unless the embarked aircraft are allowed to fly and exercise over the country in question. In this case, a better choice might simply be to employ smaller surface combatants that could be maneuvered in close vicinity of the country or could make a port visit.

Force Choice Assessment

Time Frame. The basic considerations of timing concerning arriving prior to precipitation of the crisis and being the first force to arrive were discussed earlier. There exists a common belief concerning crisis response that the time available for decisionmaking is necessarily short. However, Snyder and Dising point out that while crises will involve urgency of decisionmaking due to a sense of danger and risk, it does not necessarily follow that short decision time is characteristic of crisis. They go on to observe that numerous

past crises have lasted for months or years.¹⁰ Identification of the time interval early in the force-sizing process will allow for a realistic estimate of the time available for decisionmaking.

Committed vs. Uncommitted Forces. For the purposes of this framework, committed forces are forces that are inserted on the ground in the area of concern. Committed forces usually consist of Marines, Air Force assets (AWACS), Army forces or military training teams. The advantage of committed forces is that they portend a greater commitment and higher level of resolve than uncommitted forces. Some would argue that committed forces are more successful in attaining their objective than are uncommitted forces, but opinion is far from unanimous on this point.¹¹ Generally speaking, committed forces are more vulnerable, harder to sustain, and that once in place they are hard to extract as compared to uncommitted forces, such as naval units. Furthermore, the removal of committed forces prior to attainment of their objective can be more politically damaging than the removal of uncommitted forces. Committed forces will almost without exception be in more physical danger than uncommitted forces. This danger is even more pronounced with the increased terrorist activity of recent years.

Generally speaking, uncommitted forces are in the form of naval forces and their major advantage is mobility. Uncommitted forces are physically capable of being easily removed from an area although history shows a tendency for short-term crisis response requirements becoming long-term commitments. Uncommitted naval forces include Marine amphibious ready groups that can quickly become committed if the need arises.

One of the major factors when considering the use of a committed or uncommitted force is the uncertainty factor created by an uncommitted force vs. the known quantity of a committed force. As an example, the Marines while remaining on their amphibious ships introduce an uncertainty factor that includes questions of: Will or won't they land? If they do, when and where and in what strength? The uncertainty factor may act as a force multiplier with the potential adversary having to consider defending against all possible options. Once the force is committed the adversary can plan for fewer options and is dealing with a known quantity.

A similar consideration is that Marine forces while uncommitted perpetuate the perception of the invincible, 10 feet tall American fighting man. This perception will quickly dissipate if the force is put ashore and shows itself susceptible to combat attrition like any other fighting force. Along the same lines the USS *New Jersey* may have been more effective prior to firing her 16-inch guns—portraying an immense power limited only by the imagination of the perceiver. Once she has fired, her capability becomes a known and calculable factor. There can be little argument that even assuming that the military objectives of the naval tactical bombing raid on Syrian positions

were achieved, the overall negative perception caused by the loss of two aircraft resulted in a lessening of the effectiveness of the aircraft carrier as a show of force.

Dominant vs. Hostage Force. A dominant force represents the superior military capability in the region. It has the capability to protect itself from any potential adversary, is likely to prevail and may make the desired outcome more likely.¹² A dominant force is most probably required in a case where coercion is necessary, and behavior modification vice maintaining the present behavior is required. A hostage force on the other hand, is a relatively weak force that is interposed between two or more competing parties to cool a situation. As such it is dependent upon limited objectives and reasonable rules of engagement from competing factions for its very survival.

The hostage force has little chance of success in attaining the political objective if it is perceived as being other than neutral, or if one or more of the competing factions wishes to draw the hostage force into the dispute. An example of a hostage force would be the Marine peacekeeping forces in Lebanon. A hostage force could also have linkage to a stronger military force that has superior capability. For example, the Mideast Force, which is a small and relatively less capable force when compared to potential adversaries, has a linkage to the CVBG not far removed in the North Arabian Sea. To be deterred, however, the potential adversary must perceive that an unacceptable level of punishment would occur were he to take hostile action.

Force Credibility. One of the most important factors to be considered when posturing military show of force is the credibility of that force. In the event that the force is called upon to act—not just merely be present—is the combat capability of that force sufficient to attain the military objective? Present US military forces are stretched thin in their support of national policy. When a crisis looms unexpectedly, there is a tendency to employ the nearest or most readily available force without fully evaluating combat capability. In other words—bluff. Whenever military forces are utilized as a show of force, the possibility that these forces will be employed in actual combat must be considered carefully. Only fully combat capable and credible military forces should be postured as a show of force.

Perceptions. Virtually every study consulted, dealing with crisis response, stressed the importance of perceptions. Luttwak states, “because suasion can only operate through the filters of others’ perceptions, the exercise of suasion is inherently unpredictable in its results.”¹³ When dealing with the third world, perceptions seem to take on even more significance. Milan Vego concludes that: “. . . the perception of military capabilities, when dealing with the problems of the third world, is often more important than real

power.”¹⁴ Howe observes that: “in the arena of the third world visible power has special significance: ready forces make an impression.”¹⁵ Thus, to a great extent, the selection of forces must be done through the eyes of the potential adversary.

Luttwak also observed that “Generally, political leaders around the world understand more about ground power than air power, and more about the latter than about naval power.”¹⁶ So it may be that a particular leader may be better influenced by a committed ground force of which he has a better understanding. Conversely, he also appreciates the capabilities, limitations and vulnerabilities of this ground force and may be awed by the uncertainty and perception of the great power encompassed in the fleet off his shores. The overriding concern is that the force must be structured for each specific situation with thoughtful consideration of local perceptions.

Repercussions. The show of force may have repercussions in other nations not directly involved. These repercussions may be positive or negative. For instance, during the Indian Ocean buildup, some third party nations, India for example, reacted negatively to the increased naval presence. While overall, the objective of this particular event was worth the negative reaction, such may not always be the case. Additionally, a show of force that requires withdrawal of forces from and cancellation of exercises with third party nations may be greeted with dismay by those nations.

Applicability. The applicability and effectiveness of the force available to obtain the desired objective—in relation to the military threat of the potential adversary forces—must be taken into consideration. For example, surfacing a nuclear submarine in the vicinity of the Falkland Islands might well be the most effective choice of force if the objective is to deter future Argentinian incursions in the area. An Air Force AWACS aircraft may seem like a good choice to help interdict seaborne terrorist infiltrations. But if the deployed AWACS is vulnerable to the terrorist threat, then the use of carrier-based assets, while possibly less effective, may be a more applicable force selection.

Threat. When considering the threat of a potential adversary, it is important to consider it in relation to the military capability of the force chosen to show force. Such a threat should not be considered in relation to the potential military force that can be brought to bear, but only to forces that will actually be committed to the show of force. Howe points out that ships are symbols of the nations whose flag they fly and their influence may extend beyond their pure military capabilities, yet the *Pueblo* demonstrated the limits of protection afforded by symbology not backed up by credible power.¹⁷ More recent events such as the Iranian hostage situation and the peacekeeping force in

Lebanon would indicate the continued decline of symbolic power. Cable observes that power has no absolute existence, but what is important is the ability to apply appropriate force about a given point.¹⁸ With the introduction of sophisticated weapons into third world countries, the buildup of military forces has given these countries increased capability to apply force. Illustrative of this is when the carrier USS *Franklin D. Roosevelt* made a naval presence deployment to the Mediterranean shortly after WW II; her airwing was larger than most all of the air forces of the countries bordering the Mediterranean.¹⁹ Since then, the relative balance of power has changed and with it has come the decline of the symbolic power of the United States. The threat posed by even a small power, one that can muster a superior force around the chosen point, must be taken seriously.

Selected Forces

Sustainability. The selected force needs to be evaluated as to its sustainability. Is there adequate logistic support available to ensure that the selected force will be a credible force? Can the force be sustained over the prospective time frame? If the time frame cannot be readily identified, how long can the force be sustained and when is the likely decision point for its removal or reinforcement?

Costs Involved. What is the dollar cost of the selected force over the time frame required? Does the objective and probability of success justify the expenditure? Opportunity costs to be considered include the impact on other commitments, training, readiness and morale. A show of force crisis management response will have an impact in at least one and commonly all four of these opportunity costs.

The global commitments for our naval forces today provide for little flexibility to respond to emerging requirements without affecting other commitments. For example, when the USS *Ranger* battle group was diverted to Central America, this required either extension of the USS *Vinson's* battle group deployment or gapping of the Indian Ocean commitment. When the Indian Ocean presence was built up to two CVBGs after the invasion of Afghanistan in 1977, naval forces had to be withdrawn from the Mediterranean and Western Pacific to fulfill that new commitment for continued presence. Historically, crisis response show of force requirements have not developed in areas where training support and services are available. Crisis response restricts force mobility and reduces training exercises necessary for unit combat proficiency and integrated force training for general war strategy. The newly emerging Caribbean presence requirements may require the surging of forces during their training cycle which will necessarily result in loss of training and proficiency. The show of force requirement may well

justify the loss of training. But it must be understood that should the use of force be required, the reduced combat proficiency of the force could have an overall negative effect. Blechman and Kaplan noted, "Performance in war, of course, is of primary significance to the reputation of armed forces and to the consequent assumptions and decisions of policymakers . . . performance, more than victory or defeat, is the key."²⁰

The increase in operations tempo associated with show of force response situations has a direct impact on maintenance time available and upkeep/overhaul schedules that affect force readiness. Morale may increase in the initial stages of most crisis response situations and can be maintained if the need for the response can clearly be established. However, where deployments are extended and stateside periods reduced, increased family separation is bound to have a negative impact on morale and overall retention.

In the final analysis, the question that must be answered is one that considers both monetary and opportunity costs. That is, does the objective justify the overall costs of the selected force or would a different force be more cost-effective? If in answering these questions, the selected force is deemed to be inappropriate, the framework should be reentered at the Force Choice Assessment block to select an alternative force.

Desired Actions

The measure of effectiveness of naval forces in a political role to influence another nation is purely subjective in nature and requires thoughtful attention as to the specific action the force is to carry out. The military commander must consider those actions that are and are not conducive to attainment of the political objective and give directions to the force commander accordingly. Appropriate questions include: Is the force to engage in joint exercises? Are live firing exercises desired or required? How are news media and news releases to be handled? Is embarkation of local military/political leaders desired for air/seapower demonstrations? Are there specific areas in which the forces should or should not operate? In short, what actions should the on-scene forces take and what actions are to be avoided?

The actual use of force requires special consideration. In a limited/general war scenario, the primary emphasis of the military commander will be on the ends to be achieved, i.e.: What is the military objective desired and, how can it best be accomplished? As has been previously mentioned, in a show of force situation where actual use of force is employed, the perception of performance can be more important than the ends achieved. For instance, consider again the Beirut bombing raid. The loss of two aircraft (performance) totally overshadowed any actual results achieved. However, during the planning and execution of the raid the primary emphasis was on the physical destruction of the targets as an end. This subtle shift in emphasis from operational objective

to the display of the performance of forces employed is extremely important for strike planning and the ultimate results of the operation. This subtlety should not be lost on the operational commander.

Outcome

Lastly, the commander needs to try to anticipate all possible outcomes both successful and otherwise. What are the indicators of a successful outcome and attainment of the objective? When is the crisis over? When can the forces be withdrawn? Conversely what are the indications that things are not progressing as desired and additional forces are required or another course of action should be pursued? If additional forces are required, then the framework should be reentered at the Force Choice Assessment block as depicted in Figure 2. If it is determined that the outcome will not be satisfactory then the objective should be reexamined to determine if it is attainable through the use of military forces.

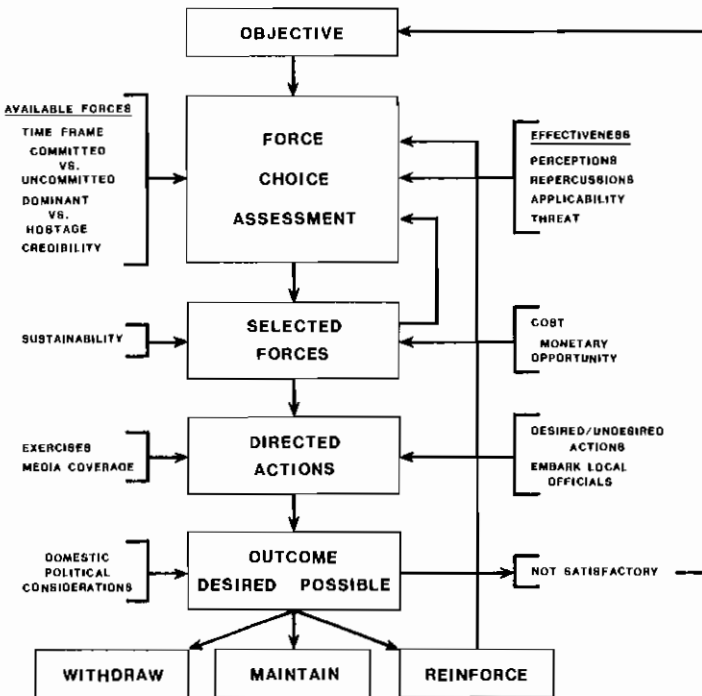


Figure 2. Sizing Force for Naval Presence

One of the primary considerations involving use of military forces is what the impact will be on the domestic political scene. While a proposed action to

augment or withdraw forces in a show of force situation may be correct from a military standpoint, political considerations may make the same move inadvisable. William Hickman points out that once the two carrier battle groups were committed to the Iranian hostage crisis, they could not be withdrawn without touching off a fire storm of domestic criticism.²¹

Answers to the foregoing questions and judging the impact of military actions on domestic political concerns will be difficult and in some cases impossible but the decisionmaker will be wise to heed the words of Carl Von Clausewitz, “. . . one should not take the first step without having considered the last.”²²

Naval presence is the peacetime mission of the US Navy. In this discussion, we have defined naval presence as being divided into two parts, routine presence and show of force presence. Routine presence encompasses those actions normally expected on forward deployments including port visits, joint exercises, and VIP visits. Forward deployments and the associated routine presence is important to show our interest in strategic areas of the world, to show our commitment to our allies, and our resolve to potential adversaries. Additionally, through forward deployments one is able to more favorably position forces for crisis response, and limited and general war contingencies.

Show of force constitutes the other division of naval presence. It is employed in direct support of our national interests and can be used to show resolve as well as signal intentions. Show of force can involve actual use of force so it is imperative that use of force be contemplated when structuring a show of force. The forces used for a show of force must be tailored to each specific situation. Each aspect of the situation must be thought through from objective to outcome. This rational framework is designed to assist in this task.

Notes

1. Stansfield Turner, "Missions of the U.S. Navy," *To Use the Sea* (Annapolis: Naval Institute Press, 1975), p. 3.

2. Edward N. Luttwak, *The Political Uses of Sea Power* (Baltimore: Johns Hopkins University Press, 1974), p. 3.

3. James Cable, *Gunboat Diplomacy* (New York: St. Martin's Press, 1981), p. 7.

4. Jonathan T. Howe, *Multicrisis: Sea Power and Global Politics in the Missile Age* (Cambridge: MIT Press, 1971), p. 345.

5. Kenneth R. McGruther, "The Role of Perception in Naval Diplomacy," *Naval War College Review*, September-October 1974, pp. 3-20.

6. Glen H. Snyder and Paul Diesing, *Bargains, Systems, Decisions: A Theory of International Crisis Behavior* (Buffalo, N.Y.: Center for International Conflict Studies, 1976), p. 11.

7. Edward Wegener, "Theory of Naval Strategy in the Nuclear Age," *US Naval Institute Proceedings*, May 1972, pp. 190-207.

8. Howe, p. 19.

9. Cable, p. 178.

11. Barry M. Blechman and Stephen S. Kaplan, *Force Without War* (Washington, D.C.: Brookings Institution, 1978), p. 108.
12. Geoffrey Till, *Maritime Strategy and the Nuclear Age* (New York: St. Martin's Press, 1982), p. 212.
13. Luttwak, p. 6.
14. Milan Vego, "Their Operations in the Third World," *Naval Institute Proceedings*, January 1984, p. 56.
15. Howe, p. 20.
16. Luttwak, p. 14.
17. Howe, p. 20.
18. Cable, p. 26.
19. Dennis M. Pricolo, *Naval Presence and Cold War Foreign Policy: A Study of the Decision to Station the 6th Fleet in the Mediterranean, 1945-1958* (Cameron Station, Alexandria, Va.: Defense Logistics Agency, Defense Technical Information Center, 1978), p. 97.
20. Blechman and Kaplan, p. 7.
21. William F. Hickman, "Did It Really Matter?" *Naval War College Review*, March-April 1983, pp. 17-29.
22. Michael Howard and Peter Paret, trans., *Carl Von Clausewitz On War* (Princeton, NJ: Princeton University Press, 1976), p. 584.



The Canadian Navy in the Modern World Halifax, Nova Scotia, 16-18 October 1985

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