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MARITIME SANCTIONS ENFORCEMENT, MORE THAN JUST BOARDINGS

by

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A paper submitted to the Faculty of the Naval War College in partial satisfaction of the requirements of the Department of Joint Military Operations.

The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College or the Department of the Navy.

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Paper Abstract

Economic sanctions are a frequent course of action chosen by state leaders to influence or punish the actions of other states. While economic sanctions are commonly viewed as a non-violent method of compelling or deterring behavior, their enforcement frequently requires military operations. This paper will examine those operations from the perspective of a joint force commander assigned the task of planning and executing an operation to enforce economic sanctions in the maritime domain. This paper will first consider current Joint and Service doctrine. Next it will distill the nature of maritime sanctions enforcement operations by analyzing the Beira Patrol and the enforcement of UN sanctions on Iraq between 1990-2003. Finally, this paper shall provide recommendations to the planner contemplating the design of a maritime sanctions enforcement operation.

Introduction

Economic sanctions provide national leadership a flexible and scalable option in dealing with crises. As noted by Richard Haas, President of the Council on Foreign Relations, they can be imposed to: serve as a proportional response to a crisis in which interests are not considered vital; express displeasure with a certain action; either deter or coerce; provide a visible and relatively inexpensive means of doing something compared to the prospect of military intervention.ⁱ The question of whether to impose sanctions or not is political and outside the decision making authority of most military leaders. Sanctions are normally viewed as an alternative to military action. However, recent experience has demonstrated their enforcement frequently requires military operations, frequently in the maritime domain.

The need to undertake military operations leaves the military with the question of how to develop a successful operation to enforce sanctions in the maritime domain. While doctrine should be the starting point for development of operational plans, current doctrine is inadequate and of no practical use. Analysis of previous operations, such as the efforts against Rhodesia from 1965-1976 and Iraq from 1990-2003, is necessary in order to distill the commonalities which define the nature of maritime sanctions enforcement (MSE) operations. An understanding of the nature of MSE will provide the necessary foundation on which to design successful sanctions enforcement operations and give insight into new possible uses of and means of conducting them. The challenges provided by the complexity and changing nature of MSE can be solved through the understanding and application of operational art.

Current Guidance

Military operational planning on MSE operations is guided by Joint and Service doctrine. Joint doctrine is described by Joint Publication 3-03, Joint Interdiction.ⁱⁱ Navy doctrine is detailed in Navy Tactics, Techniques, and Procedures on Maritime Interception Operations, NTTP 3-07.11M.ⁱⁱⁱ The operational planner will be aided in the development of operations by Joint Publication 5-0.^{iv}

Joint U.S. doctrine encapsulates sanctions enforcement under interdiction, stating “Maritime interception operations (MIO) are a form of interdiction used for sanction enforcement that are military or legal in nature, and serve both a political and military purpose.”^v Further guidance alludes to the desirability to conduct joint and combined operations, the necessity to utilize other government agency resources, and the necessity for comprehensive Rules of Engagement (ROE). Joint Publication 5-0 will guide all further operational level planning efforts. Service doctrine, described in NTTP 3-07.11, advises of the potential that:

“...U.S. naval commanders may be called upon to enforce sanctions... Such missions are referred to as MIO. MIO is the act of interdicting suspect vessels to determine if they are transporting goods or persons prohibited by the sanctioning agency...”^{vi}

Further guidance addresses strictly tactical concerns. Current Joint and Service doctrine is inadequate.

Whether intentional or not, current doctrine does not address relevant operational level concerns. Current doctrine does not inform on the nature of MSE operations nor provides a conceptual framework for operational design, precluding the essential bridging between military theory and practice as described by Milan Vego, author of Joint Operational Warfare: Theory and Practice.^{vii} Current doctrine also does not “...provide a vision of the

future war,” limiting current operational planners to ideas based on either institutional or individual experience and memory.^{viii} Though Joint Publication 5-0 will give the operational planner a general framework and process within which to conceptualize an operation it does not provide enough insight into the nature of specific operations. Therefore, it is necessary to analyze previous MSE operations to attempt to glean an understanding of their nature and gain insight into their design and overall implementation.

The Beira Patrol

The Beira Patrol was an operation conducted by the British Royal Navy between 1966 and 1976. The operation was conducted in response to the then British colony of Rhodesia’s (modern day Zimbabwe) declaration of independence in November 1965. Rhodesia’s declaration was an attempt by its ruling minority white population to maintain control of the country, counter to the British policy of establishing majority rule as part of the process to decolonize its African territories. The United Nations reacted to the Rhodesian declaration by enacting voluntary sanctions which encouraged all members nations to sever economic relations with Rhodesia, refuse its government recognition and assistance, and embargo oil shipments bound for Rhodesia. In addition to the UN’s sanctions, other newly independent colonies in Asia and Africa began clamoring for military action against Rhodesia. Britain decided to take the lead on action against Rhodesia by adopting a strategy, the main strategic objective of which, was to coerce Rhodesian political leaders into either renouncing independence or adopting majority rule as part of its de-colonization. The British strategic objective, however, was moderated by the desire to soften the blow of international

action against what it still viewed as its colony.^{ix} As such, Britain embarked on unilaterally enforcing sanctions by undertaking the Beira Patrol.

The British operational objective was to prevent the shipment of oil to Rhodesia through the Mozambique port of Beira. Though the UN sanctions allowed for a complete embargo, British leadership was forced to limit the scope of the operation's objective due to both its strategic objective of moderation and an inability to completely balance operational factors of space and force. Rhodesia was landlocked and surrounded by neutral countries, limiting the British options against it. Rhodesia's central position gave it multiple lines of communication to various oil sources: rail lines from South Africa and the Mozambique port of Lourenço Marques (modern-day Maputo); overland truck routes into South Africa; and its main source, a pipeline from Beira in Mozambique.^x Additionally, the most feasible area of operations, the Mozambique Channel, encompassed a large mass of water approximately 1000 miles long and between 250-600 miles wide. British leadership assessed that a force of seven carriers and thirty escorts would be required to effectively blockade all South African and Mozambique ports while it would require between fourteen and seventeen ships to enforce sanctions through just the two main Mozambique ports of Lourenço Marques and Beira. The first option was an impossibility while the second would come at an unacceptably high cost to other world-wide military commitments.^{xi} The British were forced to limit the scope of the operational objective to preventing the flow of Rhodesia bound oil into one port, Beira while pursuing diplomatic and economic means of stemming Rhodesian oil imports.^{xii} Though Rhodesia would still be able to import enough oil to sustain itself, the Beira Patrol would be enough to demonstrate action and appease the international community's demands

for action while still allowing the British to control the level of impact on its former colony. Its operational objective was nested in and met its strategic objectives.

British operational design was fundamentally sound in relation to the selection of an operational objective. Operations were designed to impact the Rhodesian strategic center of gravity. Strategically, the Rhodesian government's source of power was its white middle-class support, which was vulnerable to the imposition of economic sanctions in the form of an oil embargo.^{xiii} Rhodesian oil entered the country via overland routes from South African and Mozambique, but first had to reach South African and Mozambique via shipping. The maritime flow of oil and the shipping it relied on represented a physical target at the operational level of war for an indirect attack on the Rhodesian strategic center of gravity.

British military operations were founded on the simple and realistic operational scheme of using air and surface assets to intercept Beira bound oil tankers. The British would minimize the impact of having a limited force by ensuring an optimum mix of aircraft and surface ships and developing sound tactics for their integrated use.^{xiv} The British minimized the impact of the size of the operating area by centralizing the operations around Beira and exploiting their interior lines of operation relative to the Beira bound merchants. The British would utilize their well developed and nearby logistics bases and fleet to ensure operational sustainment while the nature of the operation required no consideration of operational direction nor a phasing of operations. However, while British operational design was sound and simple it can provide a misleading picture of the Beira Patrol's complexity. An analysis of the employment of British forces through a consideration of operational functions will reveal the cost and difficulty of the operation.

The British implemented a clear and functional command organization by using pre-existing and operational command organizations, Middle East Command followed by Far East Command. While Command, Control, Communications and Computer (C4) systems were rudimentary they were adequate, giving tactical units timely ability to communicate through all levels of command for required information and guidance.^{xv} British ability to receive and transmit timely and consistent operational level intelligence shaped operations, allowed for proper tactical employment of assigned units, and helped in clarification of guidance. Due to the nature of the operation, protection was not a significant factor as the Beira bound merchants never presented armed resistance. The sustainment requirements however, reflected the high level of effort and resources necessary for continued operations, requiring the dedication of eight tankers and six supply ships in providing support for the first nine months of the patrol.^{xvi} The British did not consider the use of operational fires as part of the campaign, foregoing the opportunity of conducting a psychological operations campaign to either dissuade independent mariners, port-facilities personnel, and shipping companies directly from enabling Rhodesian trade. Command and Control Warfare (C2W) was not considered. Lastly, British failure to incorporate information warfare into their operations helped give the Beira Patrol a level of symbolic importance which in turn jeopardized British strategic level objectives.

The Beira Patrol became a risk to the attainment of British strategic objectives. The British had led the debate and development of sanctions in the UN, giving themselves the preponderance of responsibility in enforcing those sanctions. The reason behind the British action was the previously discussed strategic desire to control international action against Rhodesia. While the British were able to attain the control over the process it tied their

credibility to being able to unilaterally enforce the Rhodesian oil embargo.^{xvii} The British did not shape any message regarding the Beira Patrol, instead they allowed any effort which was not completely successful to equate to overall failure. The effect of a message of failure would be the potential adjudication of action against Rhodesia at the UN level with possible outcomes contrary to British objectives. Because of this, the British were reluctant to seek additional military assistance from willing allies such as Canada, Sweden, and Norway. British fear of and subjection to the message of failure also led the British political leadership to continue the Beira Patrol well after the military leadership called into question its overall effectiveness relative to costs under the constraints of the operational factors (lack of adequate force for space).^{xviii} Unlike the British, the Rhodesians understood the British vulnerability to the embarrassment a perceived failure of the Beira Patrol would bring and exploited it in public pronouncements.^{xix} The British were subject to the pressures of an undesirable message because they failed to craft one of their own.

In addition to difficulty in force employment due to inadequate consideration of all operational functions the British complicated their operations by not fully considering and crafting adequate ROE. British embargo enforcement efforts began with unclear ROE. British ROE did not specify what level of force was authorized in intercepting, dissuading, boarding and diverting, or disabling ships. ROE questions led to two separate instances in which Beira bound ships were not stopped because units were unsure of the level of force they were authorized.^{xx} The British eventually were able to gain increased freedom of action under refinements to UN Security Council resolutions which would give them the authority to board and divert ships or even disable them. However, they were still restricted from

conducting operations in neutrals' territorial waters (Mozambique and South Africa) by the limited scope of the UN resolutions, which were strictly voluntary for member states.

The Beira Patrol was ultimately successful by the strict definition of its stated objective to prevent the flow of oil to Rhodesia via Beira. While the operation was relatively simple at the tactical level, analysis at the operational level reveals the cost and true overall effectiveness of the MSE operation. The operation was not of itself able to compel Rhodesian compliance because of the adequate oil supply available through other channels, highlighting the difficulty and effectiveness of maritime sanctions on a country with access to numerous land and sea routes. The Beira Patrol was costly, not just in money, but in opportunity costs to meet other theater military obligations. The operation demonstrated that all operational functions need to at least be considered in order to maximize the probability of success. Difficulties with ROE also highlighted the need to craft adequate ROE to allow forces the ability to complete their tasks in pursuit of the operational objective. British success in attaining their operational objective though speaks to the fruits of properly understanding relevant operational factors and incorporating the principles of sound operational design. Many of the features characterizing the Beira Patrol would resurface nearly twenty years later with the imposition of sanctions on Iraq.

Iraq

Economic sanctions against Iraq were enacted by the United Nations in 1990 in response to the Iraqi invasion of Kuwait and ran through 2003. Operations were conducted in both the Red Sea and approaches into Jordan as well as the Persian Gulf and approaches to it. Sanctions were founded on a number of UN resolutions and modifications to the resolutions.^{xxi} The sanctions began with a complete embargo excepting medical supplies and

vital foodstuffs and eventually allowed for a limited amount of oil exportation as part of the Oil for Food Program starting in 1996. The initial strategic objectives of economic sanctions were: to send Iraq a clear signal of condemnation; to coerce Iraq into withdrawing from Kuwait; prevent looting of Kuwaiti financial assets; restoring the legitimate Kuwaiti government; and buying time for further action.^{xxii} As Saddam Hussein's regime proved its resilience by surviving the First Gulf War the strategic objectives of the sanctions changed to preventing Iraq's remilitarization and development of Weapons of Mass Destruction technologies.^{xxiii} Maritime economic sanctions enforcement proved to be an attractive option for attaining the strategic objective.

The operational objective undertaken by the multi-national coalition arrayed against Iraq was the enforcement of UN sanctions. Operations were complicated by the challenging operational factors. As was noted during the sanctions' first implementation all merchant traffic enroute to or from Iraq had to pass through either the Strait of Hormuz or Strait of Tiran (in the North Red Sea).^{xxiv} Iraq was also unable to utilize land routes because of its isolation in the international community, increasing the impact maritime sanctions would have on Iraq's economy. While the necessity to resort to trade via constricted sea routes allowed coalition forces to focus their efforts on a smaller space, the density of shipping traffic in the Persian Gulf and the complicity of Iran in allowing smugglers to transit its territorial waters would challenge the coalition.^{xxv} The broad consensus to act against Iraq, both internationally and among US policy makers, ensured the availability of large numbers of assets to array as part of the operations. The coalition was multi-national, but able to work towards standardized procedures, ROE, and coordination of efforts through both formal and informal relationships.^{xxvi} Still, the availability of forces over the operation's duration

decreased due to coalition members' conflicting strategic interests and conflicting operations which sometimes required the same forces.^{xxvii} Lastly, while the passage of time weakened Iraq due to its inability to export oil and access its money, it would also weaken coalition unity.

Coalition operations were designed to lead directly to the achievement of the operational objective. Saddam Hussein's domestic and international power rested on oil revenues which he used to fund the military, a repressive state security system, and social programs.^{xxviii} Iraqi oil shipments represented a physical target at the operational level of war for an indirect attack on the Iraqi strategic center of gravity. The coalition operational objective was properly nested within the strategic framework.

The coalition implemented a simple scheme to enforce maritime sanctions against Iraq. Air and surface forces were positioned in key locations to maintain tactical awareness of the flow of shipping in both the Red Sea approaches to Jordan and the Persian Gulf. Coalition ships served as the primary assets for interception, queries, boardings, and inspections. When required, ships' crews or special teams would take control of suspected sanctions violators and divert them to friendly ports for further processing. While tactics and procedures evolved over time to counter the evolution of sanctions violators' tactics, the operational scheme generally remained the same. Efforts were directed at detecting, identifying, and intercepting sanctions violators both into and out of Iraq. As was the case with the Beira Patrol though, an analysis of operational functions will reveal challenges to the coalition's operations, some of which jeopardized operational and strategic objectives.

The coalition implemented a clear and functional command organization which evolved over the duration of the operation. Pre established relationships, general consensus,

and legitimacy founded on UN resolutions were essential to the functionality of the operational command relationships.^{xxix} Timely and consistent operational intelligence was available and exploited by the coalition: the coalition understood the general transit routes and tactics utilized by sanctions violators. However, competing commitments would occasionally divert assets which might normally be available to provide tactical level intelligence.^{xxx} C4 systems were rudimentary, but adequate for the operation, allowing for all required communications. Operations were complicated due to the need for protection. During the early phases of the sanctions enforcement, the potential for engagement by Iraqi forces and the prevalence of mine danger areas limited the assets which could be dedicated to sanctions enforcement operations and also limited the areas in which operations could be conducted.^{xxxi} Sustainment was adequate due to the theater's maturity, thus operations were not affected. Like the Beira Patrol, the coalition did not consider the use of operational fires or C2W. Finally, like the British, the coalition failed to fully consider information operations as an aspect to the operations, jeopardizing strategic objectives and helping create additional strategic problems.

The coalition's MSE operations were successful in attaining the stated objective of successfully enforcing UN sanctions. Though there was leakage of oil because of the monetary incentive for smuggling and the complicity of Iranian forces, the sanctions enforcement effort was effective.^{xxxii} Sanctions severely damaged the Iraqi economy, which had been almost completely based on oil exports.^{xxxiii} As a result, "They also drastically reduced the revenue available to Saddam, prevented the rebuilding of Iraqi defenses after the Persian Gulf War, and blocked the import of vital materials and technologies for producing WMD."^{xxxiv} However, the resulting damage to the Iraqi economy also resulted in 200,000-

225,000 premature Iraqi deaths between 1991 and 1998, of which 135,000-150,000 were Iraqi children.^{xxxv} The humanitarian costs born by the Iraqi citizenry due to the enforcement operations impacted the coalition at the strategic level. Several countries began decreasing both political and military support for the continued sanctions by withdrawing forces for their enforcement and calling for their lifting or moderation.^{xxxvi} Additionally, the uncontrolled message the coalition's operations implied was one of the West, led by the U.S., willfully causing the death and suffering of Arabs. This message sewed the seed for future conflict, served as the genesis for much of the resentment among Muslims towards the West and the U.S., and was exploited by extremist groups such as Al Qaeda.^{xxxvii} The coalition did not adequately manage the resultant message and nearly became a victim of it.

The Nature of the Problem

The Beira Patrol and the sanctions enforcement operations against Iraq bring to light a number of commonalities which help illustrate the nature of MSE operations. Like other military operations they are affected by the operational commander's ability to apply operational art to develop and execute an operational scheme which has: established operational objectives nested among the strategic objectives; correctly identified and targeted the target country's center of gravity (COG) relative to the country's objective; balanced operational factors; and organized and developed operational functions. Though MSE is normally viewed as simply intercepting target country shipping, confusing the simplicity of the tactical action with that of the operation will result in wasted effort at best and potential failure.

The Beira Patrol and the Iraqi embargo operations were both successful within the defined operational objectives. However, the first had little impact in the attainment of

Britain's strategic objective and tied it to an operation it no longer considered worth the price. The second jeopardized original strategic objectives (coalition unity) and helped create additional strategic challenges by establishing the conditions for future conflict. In both cases the impact of sanctions enforcement was misunderstood. In the case of Beira political leadership over-estimated the sanctions impact and staked its international credibility on their success.^{xxxviii} Conversely, the coalition aligned against Iraq underestimated the human cost of success and its impact on achieving strategic objectives. Still, while it is easy to criticize the misjudgment of the operations' impact, the criticism must be balanced with a consideration that in both cases economic sanctions provided the only feasible means of taking some kind of action in support of their strategic objectives. Britain was restrained by the political decision to prohibit military action against Rhodesia.^{xxxix} Action against Iraq resulted from a conflict among American policy makers which "...was about making tough choices over how much priority and how many resources—political, diplomatic, and military should be devoted to dealing with Saddam."^{xl}

COG analysis remains essential in MSE as in other operations. COG analysis also reveals the appeal of sanctions enforcement operations. A country's economy normally represents a strategic source of power.^{xli} For its economy to function it must have the critical capability of exporting and/or importing. A country trying to export /import in the maritime domain will require commercial transport ships, which are vulnerable to interdiction. Ships therefore represent an exploitable and critical vulnerability which provide an operational commander the means of impacting an adversary's strategic COG at the operational level of war.^{xlii}

Operational success requires the successful balancing of factors. With regards to space, MSE relies on isolation of the target country by either geography or politics. Enforcement difficulties result from too broad of access to sea routes, be they indirect access via land-routes in the case of Rhodesia or the ability to transit within a neighboring country's territorial seas as in Iraq's use of Iranian waters. Enforcement operations will also be complicated by the size of the operating area and ability of assigned forces to perform the tactical actions of detection, identification, and interception. Sanctions enforcement will normally require a sizeable force due to the nature of required tactical actions. Force composition will ideally be joint due to the scope of required capabilities. Because of the large force requirement sanctions enforcement operations will also be more successful if able to form coalitions which can address capability shortfalls. Thus, it is preferable to be operating under the authority derived from a consensus as normally represented by UN resolutions. Assigned forces must be provided adequate ROE which will provide flexibility in attaining the objective while allowing for mutual and individual self-defense. Sanctions enforcement operations will be occur over a long period of time due to the time required before economic impacts are felt by the target country.^{xliii} As such, sustainment will be a high priority function. Additionally, steps must be taken to guard against the phenomenon of "sanctions fatigue" whereby participants tire of bearing the costs of the operation before an adequate amount of time has been given for economic effects to take hold.^{xliv}

The ability to organize and develop operational functions will directly impact the effective employment of forces. The operational command organization must be clear and simple. There will likely be limitations on the extent of command and control over coalition partners. However, early identification of those limits and the assignment of tasks within

coalition partners' restraints can be accomplished by the savvy operational leader through both formal and informal command organization as exemplified in Iraq. Normally sanctions enforcement will not require C2W at the operational level. Operational intelligence will be critical due to the probable inability to sufficiently balance the factor of force with space. C4 will be complicated by the technological limitations of participating units, but the nature of the operations minimizes the necessity for C4 systems and interoperability. The need for operational protection can vary based on a target country's capabilities and intentions. Additionally, the operating area may include potential adversaries willing to use force against assigned forces for reasons either associated or not to the sanctions enforcement operation. Sustainment will be a predominant function due to the long duration of operations. The opportunity for kinetic and non-kinetic operational fires exists, though resolutions guiding the operation will likely preclude kinetic options. Lastly, an aggressive information operation campaign must be undertaken to control the potentially negative message sanctions enforcement operations can relay.

Recommendations and Considerations

The application of operational art combined with an understanding of the nature of MSE will help in the development of sound plans and also suggest novel means of employing MSE in a new context. Normal MSE operations are designed with the operational objective of affecting a country's economy by limiting imports and exports to some degree. However, MSE operations do not have to be tied to the strategic objective of impacting a country's economy. The operations can be used as part of an operational deception plan designed to lull a potential adversary while combat strength is developed for other operations. MSE operations can be used as a show of force with the objective of deterring or

coercing a third non-involved party into one action or another. Enforcing sanctions under the umbrella of international resolutions can also be used as a means of exercising and developing sea control without drawing the unwanted attention of other parties.

While conventional COG analysis might identify shipping as an exploitable critical vulnerability, the changing nature of maritime trade may provide additional means of attacking the COG. A joint force commander could leverage other government agencies through the Joint Inter-Agency Coordination Board to assist in purchasing and covertly controlling various aspects of a country's maritime trade infrastructure, as was attempted by the British in their desired co-opting of Mozambique oil pipelines and rail lines. Such an attempt could be conducted at either points of onload or offload of targeted goods. A shift of focus from traditional interdiction of shipping to other capabilities critical to the maintenance of maritime trade could provide an asymmetric means of affecting trade if unable to balance operational factors (such as force) or adequately organize and develop functions (such as protection) to conduct normal sanctions enforcement operations.

MSE operations will always be challenged by balancing the factors of space-force-time. However, an operational commander should attempt to influence the shaping of the factors of space and force both before and during the conduct of operations.^{xlv} The purpose would be to create a "Developed Theater," which would fully support his operations.^{xlvi} Possible means include: building coalition relationships and capabilities through exercises and other combined operations; helping mature regional logistics capability; and gaining a better understanding of the operating environment prior to operations.

A new look at the functions supporting the employment of forces may also mitigate some of the challenges involved in balancing operational factors. Operational intelligence

should be an inter-agency effort to describe the targeted trade networks and identify aspects open to exploitation, not just shipping routes and ship cargo manifests. C2W can be conducted by both kinetic and non-kinetic operations designed to influence key personnel in a targeted country's trade network. Non-kinetic operational fires can be conducted in the form of psychological operations designed to dissuade personnel from supporting the targeted countries trade network. An example could include inciting work stoppages in the supporting shipping industry at key locations a targeted country relies on. Lastly, information operations need to be a part of any maritime sanctions operation. The potential impact of sanctions and the resulting message need to be controlled to optimize the attainment of operational and strategic objectives. A message of legitimacy and necessity is required to maintain cohesion and prevent the attrition of both political and military will over the probable lengthy duration of the operation.

Conclusion

Sanctions will continue to be a policy option for leadership at the strategic level. As such, military leadership would be well advised to consider the nature and design of sanctions enforcement operations. The complexity of these operations is not reflected by the relatively simple tactical action of interdicting a benign merchant ship. The operations are difficult by nature and like all other military operations can have disastrous outcomes if not properly designed. While a study of previous operations can provide insight into the nature of MSE, prudence and reality necessitate a continual re-assessment of the applicability of experience and the relevance of institutional and individual knowledge. Proper application of operational art will aid the operational planner in incorporating the relevant, thinking

about the problem in new and insightful ways, and overcoming the challenges presented by this difficult type of operation.

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ⁱⁱ Joint Chiefs of Staff, *Joint Publication 3-03, Joint Interdiction*, 2011.

ⁱⁱⁱ Department of the Navy, *Maritime Interception Operations, NTTP 3-07.11M*, 2008.

^{iv} Joint Chiefs of Staff, *Joint Publication 5-0, Joint Operational Planning*, 2011.

^v Joint Chiefs of Staff, *Joint Publication 3-03*, I-9.

^{vi} Department of the Navy, *NTTP 3-07.11M*, EX-1 – EX-2.

^{vii} Milan Vego, *Joint Operational Warfare: Theory and Practice* (Newport: U.S. Naval War College, 2009), XII-3.

^{viii} *Ibid.*, XII-17.

^{ix} Richard Mobley. “The Beira Patrol, Britain’s Broken Blockade Against Rhodesia,” *Naval War College Review* 55 no. 1 (Winter 2002): 65.

^x *Ibid.*, 66.

^{xi} *Ibid.*, 75.

^{xii} *Ibid.*, 75-76. The British government first tried working with the Portuguese government, which governed Mozambique, to prevent oil flow via any land routes or pipelines. After failing to get Portuguese concurrence with their requests, the British attempted co-opting both the Mozambique railways and pipeline companies in order to prevent oil transshipment to Rhodesia. These efforts were not successful.

^{xiii} *Ibid.*, 65.

^{xiv} *Ibid.*, 79. The British dedicated an average of 2 ships and 3 patrol aircraft a day for the duration of the operation.

^{xv} *Ibid.*, 69-70.

^{xvi} F.E.C. Gregory. “The Beira Patrol,” *Royal United Service Institute* CXIV no. 656 (December 1969): 76.

^{xvii} Mobley, “The Beira Patrol,” 77.

^{xviii} Mobley, “The Beira Patrol,” 77. By 1968 the British Ministry of Defense recommended forgoing the patrol no later than 1971 as continuation jeopardized other military commitments and contingencies.

^{xix} *Ibid.*, 67.

^{xx} *Ibid.*, 71. On two separate occasions ships ignored British direction to comply with their directions, the French-flagged Artois and Greek MV Joanna V. Inability to compel the ships’ compliance forced British commanders to revise their ROE to allow for disabling fire if needed.

^{xxi} For a detailed description of the evolution of UN sanctions levied on Iraq see Lois E. Fielding, *Maritime Interception and U.N. Sanctions* (San Francisco: Austin and Winfield, 1997), 43-171.

^{xxii} Eric D.K. Melby. “Iraq,” in *Economic Sanctions and American Diplomacy*, ed. Richard Haas (New York: Council on Foreign Relations, 1998), 110.

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- ^{xxiii} Ibid., 117.
- ^{xxiv} Tom Dellery. "Away, the Boarding Party!" *Proceedings* 117, (May 1991): 66.
- ^{xxv} James Goldrick. "Maritime Sanctions Enforcement Against Iraq, 1990-2003," in *Naval Blockades and Seapower: Strategies and Counter-Strategies, 1805-2005*, eds. Bruce A. Elleman and S.C.M. Paine (New York: Routledge, 2006), 211.
- ^{xxvi} Vincent J. Andrews, "Maritime Interception Operations" (Unpublished paper, Naval War College, 1992), 19.
- ^{xxvii} Fielding, *Maritime Interception and U.N. Sanction*, 156.
- ^{xxviii} Kenneth M. Pollack, *The Threatening Storm: The Case for Invading Iraq* (New York: Random House, 2008), 131.
- ^{xxx} James Goldrick. "Maritime Sanctions Enforcement Against Iraq, 1990-2003," 209.
- ^{xxxi} Ibid., 206-207.
- ^{xxxii} Ibid., 208-209. The high price of oil was an attractive incentive for potential smugglers. Assisted by bribed Iranian Revolutionary Guard forces, Iraqi smugglers were able to smuggle approximately \$500 million out from 1998-2000, many traveling through Iranian territorial waters before melding in with the heavy merchant and fishing traffic of the Persian Gulf.
- ^{xxxiii} Pollack, *The Threatening Storm*, 131.
- ^{xxxiv} George A. Lopez and David Cortright. "Containing Iraq: Sanctions Worked," *Foreign Affairs* 83 no. 4 (July/August 2004): 91.
- ^{xxxv} Pollack, *The Threatening Storm*, 139.
- ^{xxxvi} Fielding, *Maritime Interception and U.N. Sanctions*, 156.
- ^{xxxvii} National Commission on Terrorist Attacks upon the United States, *The 9/11 Commission Report: Final Report of the National Commission on Terrorist Attacks upon the United States* (New York: W. W. Norton, 2004), 49.
- ^{xxxviii} Mobley, "The Beira Patrol," 66. British Prime Minister Wilson estimated Rhodesian independence leaders would rescind their declaration of independence within three months, later revised to a matter of weeks.
- ^{xxxix} Mobley, "The Beira Patrol," 66.
- ^{xl} Gideon Rose, letter to Kenneth M. Pollack, July 7, 2002 in *The Threatening Storm*, 56.
- ^{xli} While the Beira Patrol and sanctions against Iraq were good examples of where a maritime economic sanctions enforcement operation provided a way of targeting an adversary's strategic COG, it may not always be the case based on the adversary's reliance on economic strength. For the purposes of this paper, this analysis assumes a political decision has been made to target an adversary's economy either because it does represent a means of attacking an adversary's COG or because it is the only means available of having any kind of influence whatsoever on that adversary.
- ^{xlii} While these ships do represent a method of attacking a maritime network's COG, this paper will examine other options for affecting the COG in the recommendations and conclusions section.
- ^{xliii} Haas, "Economic Sanctions and American Diplomacy," 197.
- ^{xliv} Fielding, "Maritime Sanctions and U.N. Sanctions," 156.
- ^{xlv} The British were able to conclude the Beira Patrol by negotiating an agreement from Mozambique upon its independence to prevent oil flow to Rhodesia. Coalition ability to influence Iran during the Iraq sanctions operations would have impacted smuggling, as was

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reflected in the drop of smuggling success when the Iranians unilaterally began preventing smugglers from using their territorial waters.

^{xlvi} Vego, *Joint Operational Warfare*, IV-6.