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14. ABSTRACT The proliferation of modern anti-access/area denial (A2/AD) weapons has changed the severity of the threat in constricted waters such as the Strait of Hormuz (SOH) and the Arabian Gulf. This paper illustrates how Iran has combined these modern weapons with a hybrid form of warfare that presents a Coalition Naval Force (CNF) with a serious threat to contend with when operating in Iran's littoral waters. The US Navy and its coalition partners must assess the nature of Iran's A2/AD network when considering which Course of Action (COA) will allow them to fight, win and survive a conflict with Iran. This paper recommends a COA that will allow a CNF to achieve desired objectives by leveraging the advantages of operating in the North Arabian Sea. This recommendation is defended by refuting the prevailing school of thought which contends that freedom of navigation can and must be maintained through the SOH. It dispels the myths and misperceptions regarding Iran's inability to control the straits and our ability to fight our way in/out of the Arabian Gulf. Finally, by drawing on examples from past operations, the paper supports the argument that a CNF's conventional advantages will allow them to achieve their desired objectives <u>while limiting the scale of the conflict.</u>					
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Newport, R.I.**

Rethinking the Strait of Hormuz

A Recommended Course of Action that Establishes Operational Advantage

by

**Daniel Dolan
Commander, USN**

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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27 OCT 2010

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Abstract

Rethinking the Strait of Hormuz: A Recommended Course of Action that Establishes Operational Advantage. The recent proliferation of modern anti-access/area denial (A2/AD) weapons has changed the severity of the threat in constricted waters such as the Strait of Hormuz (SOH) and the Arabian Gulf. This paper illustrates how Iran has combined these modern weapons with a hybrid form of warfare that presents a Coalition Naval Force (CNF) with a serious threat when operating in Iran's littoral waters. The US Navy and its coalition partners must assess the nature of Iran's A2/AD network when considering which Course of Action (COA) will allow them to fight, win and survive a conflict with Iran. This paper recommends a COA that will allow a CNF to achieve desired objectives by leveraging the operational advantages of operating in the blue water environment of the North Arabian Sea. This recommendation is defended by refuting the prevailing school of thought which contends that freedom of navigation can and must be maintained through the SOH. It dispels the myths and misperceptions regarding Iran's inability to control the straits and our ability to fight our way in/out of the Arabian Gulf. Finally, by drawing on examples from past operations, the paper supports the argument that a CNF's conventional advantages will allow them to achieve the desired objectives while limiting the scale of the conflict.

Introduction

But our specific policy would be to retaliate in kind. That is to say, if an action is taken [against us] we would react immediately and act against any country that searches our ships. We would carry the same action against that country and perhaps do even a little more.

-IRGC Brigadier General Ali Fadavi
(SEP 2010 Interview)

When critically analyzed, the lessons of the 2006 Israeli-Hezbollah conflict, the 1987-1988 Tanker War and observations of recent developments in Iran offer insight into the scope and scale of what a potential conflict with Iran would hold for the US Navy and its coalition partners. During the 2006 conflict in the Levant, Iran's proxy Hezbollah executed a form of hybrid warfare which combined well-trained conventional forces, unexpected new weapons (e.g. the C-802 cruise missile and kamikaze UAV) and masterful exploitation of the information environment.¹ The 2006 conflict offers an example of what a coalition naval force would likely confront in a conflict with Iran. Additionally, an examination of lessons learned from the Tanker War demonstrates Iran's ability and willingness to wage a guerilla war at sea using a mixture of conventional and irregular forms of warfare. When lessons from these two hard combat data-points are combined with an assessment of recent developments in Iran, the portrait that emerges is one of a high threat maritime environment in Iran's littorals. This analysis will show how a coalition naval force composed of large high value ships can defeat Iran, achieve the desired objectives and survive the experience.

To understand how to defeat Iran and achieve the desired objective of free flowing commerce in the region it is important first to identify and compare the Centers of Gravity (COG) for Iran and those of the Coalition Naval Force (CNF). For this thumbnail COG analysis, it stands that Iran's strategic COG is the regime and their operational COG is both

¹ Shmuel Bar, *Hybrid Conflict: A Retrospective Analysis of The Summer 2006 War Between Israel and Hizballah*, OCT 2010 Contemporary Op Art Exam Case Study, (Naval War College, Newport, RI).

the Iranian Revolutionary Armed Forces (IRAF) and the Iranian Revolutionary Guard Corps (IRGC) that protect the regime. A destroyed or weakened Iranian military could indirectly lead to a vulnerable regime—one which may be more willing to negotiate a settlement to restore order to the region. The strategic COG for the US and its international partners is their economies which depend upon the free flow of commerce in the region. The operational COG is the armed forces, with capital ships representing the greatest prize. To counter coalition sea power, Iran has derived an elaborate anti-access/area-denial (A2/AD) strategy designed to exact a high cost to any coalition fleet operating in the restrictive shallow seas of the Arabian Gulf.

A recent article in the Naval War College Student Journal noted that, “Modern A2/AD... has changed the character of modern warfare, and presents significant challenges to U.S. military freedom of action wherever these advanced systems are employed.”² Therefore, when considering the critical strengths, weaknesses and vulnerabilities enveloping these COGs Commander US Naval Forces Central Command (NAVCENT) and his coalition partners must select a course of action (COA) that will allow them to attack Iran’s center of gravity while protecting their own. Clausewitz notes this elementary principle of warfare when discussing the destruction of enemy forces he writes, “The preservation of one’s own fighting forces as the dominant consideration.”³ An exploration of Iran’s operational capabilities and those of a U.S. led CNF will suggest that it is not necessary for USNAVCENT and its coalition partners to attempt an opposed entry of the Strait of Hormuz (SOH) during a time of war with Iran in order to achieve their desired objectives.

²Christopher McCarthy, *Anti-Access/Area Denial: The Evolution of Modern Warfare*, Naval War College Student Journal, Vol I (Naval War College, Newport, RI) 2.

³ Carl Von Clausewitz, *On War* (Princeton, NJ: Princeton University Press, 1989), 529.

This analysis seeks to support a COA to the NAVCENT Commander built on the premise that a CNF can better achieve their objectives by operating in the Northern Arabian Sea (NAS) (see *illustration 1*). A blue water operating base in the NAS will allow a CNF to establish an operational advantage, fight, win and survive. This recommended COA will be supported by advancing three arguments. First, a presentation of the prevailing counter argument which contends that freedom of navigation through the SOH can be maintained during a conflict with Iran. Second, an examination of Iran's current A2/AD capabilities will illustrate that Iran has constructed a high threat environment. An assessment of this multidimensional array of threats will show that Iran's A2/AD capability can overwhelm even the most modern warship. Finally, this analysis will demonstrate that, despite this threat, a CNF is capable of defeating Iran's A2/AD capabilities and achieving the desired objectives in a regional conflict.



The Persian Gulf and North Arabian Sea

Counter Argument: *Fighting the Fort*

The loss of a fortress weakens the enemy defense, especially where it occupied a vital part of it.

- Carl Von Clausewitz

Contrary to the option of remaining outside of the Arabian Gulf and using the conventional advantages of reach and mobility, there exists a prominent school of thought which contends that transiting the SOH in a time of conflict is not only a manageable risk but it will also be necessary. It is noteworthy that one of NAVCENT's standing mission objectives is ~~to~~ ensure the free flow of commerce in the Arabian Gulf."⁴ Backing up this objective is the U.S. Navy's commitment to exercising and maintaining Freedom of Navigation (FON) through international waters even when risk is involved. Further supporting this objective is a backdrop of naval tradition, stated goals and international law. An example of how this paradigm is infused in the doctrine, praxis and culture of CNF forces operating in this region is reflected in the comments of Captain David Adler, Commanding Officer of the USS *Port Royal*. Captain Adler made this statement following the December 2007 incident involving aggressive maneuvers of IRGCN small boats in the SOH, "... the U.S. Navy's regular transit through the Strait of Hormuz is to support regional stability. We're here with the 19 other Coalition countries to keep the sea lanes open for international

⁴ U.S. Fifth Fleet's unclassified website (<http://www.cusnc.navy.mil/command/accomplish.html>) notes the goal for maintaining Sea Lines of Communication as, "Coalition maritime forces operate under international maritime conventions to ensure security and safety in international waters so that all commercial shipping can operate freely while transiting the region."

traffic.”⁵ Captain Adler’s statement was echoed in the press by the NAVCENT Commander Admiral William Gortney, when queried at a 2009 press conference about the incident, he concluded the ships harassed by the IRGCN followed correct procedures and “had every right to be there.”⁶ These statements regarding this incident reflect the mission objectives of NAVCENT to uphold the international law of the sea and the traditions of the U.S. Navy.

Political and economic pressures are also being applied to support the option of fighting to keep the strait open regardless of the level of conflict in the region. These arguments are built, in all or part, on the following three assumptions:

- The Iranians cannot afford to shut down the strait.
- A CNF will be able to keep the straits open through the use of superior force.
- Iran is militarily incapable of shutting down the SOH.

In response to the rising tensions in the Gulf during the period of 2003 – 2010, many global business concerns and professional organizations have weighed in on the prospect of Iran closing the SOH. This open-source business world perspective offers an interesting risk assessment analysis from nonmilitary sources. For example, political scientist Eugene Gholz writes in response to the question: “How hard would it be for Iran to disrupt the flow of oil? The answer turns out to be: very hard.”⁷ Gholz supports his argument that Iran is incapable of shutting down the strait by noting that the SOH is still too large and deep for the Iranian’s to completely deny access. He cites lessons from the 1987 Tanker War when commercial traffic adapted to the situation and accepted the risk of attack. This line of reasoning draws from the Tanker War period when a risk of attack was accepted by merchantmen as the cost

⁵ U.S. Naval Forces Central Command/5th Fleet Public Affairs, “Port Royal and Hopper COs Discuss Incident in Strait of Hormuz,” <http://www.cusnc.navy.mil/articles/2008/007.html/> (accessed 15 SEP 2010).

⁶ VADM William Gortney, “DoD News Briefing with Vice Adm. Gortney from the Pentagon,” 15 JAN 2009, <http://www.defense.gov/transcripts/transcript.aspx?transcriptid=4341> (accessed 10 SEP 2010).

⁷ Eugene Gholz, “The Strait Dope,” *Foreign Policy*; SEP/OCT 2009; 174; Proquest Military Collection, 105.

of doing business. Gholz, and others also note that the Tanker ship design proved to be surprisingly resilient against mines and missiles.

Gholz's point about tanker survivability is supported by statistics from the Tanker War where –some 441 ships had been hit during the Iran-Iraq conflict... 239 were tankers.”⁸ Of the 441 ships hit, 115 sank or were damaged beyond repair; approximately half of these were Tankers.⁹ A July 2010 incident involving the 160 thousand ton Japanese tanker *M Star* in the SOH supports the argument that tankers can withstand a mine size explosion. In late July 2010, the *M Star* encountered an explosive device, probably a suicide small boat or a mine, in the SOH. Although the exact source of the explosion is still being disputed, the relevant point for this discussion is that the *M Star* survived the impact of a large explosion with only minor damage.¹⁰

Also from the business world, Eric Walker of the *Oil and Gas Journal* writes, –Closing the Strait of Hormuz would cause Iran tremendous economic damage, and therefore Iran would probably not undertake a closure lightly.”¹¹ This line of argument contends that in a time of conflict with Iran the risk in the SOH will be the same as it was in the Tanker War--a manageable threat. This school of thought hinges on the knowledge that Iran is as economically dependent on the flow of commercial traffic as its Gulf state neighbors. A 2010 article by political scientist Peter Pham, cites the fact that –Iran itself exports some 2.4 million barrels of petroleum a day through the Strait of Hormuz. The sale of this oil provides

⁸ Lee Allen Zatarain, *Tanker War: America's First Conflict with Iran, 1987-88* (Casemate press, Philadelphia, PA, 2008), 386.

⁹ Ibid.

¹⁰ Ben Hancock, *Did Iran attack Japanese Oil Tanker in the Strait of Hormuz?* (*Christian Science Monitor*, 30 July 2010, <http://www.csmonitor.com/layout/set/print/content/view/print/317042> , accessed 6 OCT 2010).

¹¹ Eric Watkins, *Showdown in Hormuz?*, (*Oil & Gas Journal*, 7 DEC 2009) 30.s

the regime with approximately two thirds of its budget.”¹² Pham also notes that “Iran is forced to import about one third” of its gasoline for its citizens, which enjoy the lowest gas prices in the region.¹³ Considering these facts, Pham accurately assesses, “Iran needs hydrocarbons to continue to flow through the Strait of Hormuz even more than perhaps any other country.”¹⁴ He, like many other analysts, concludes that internal pressures on the regime contained in this reality will undoubtedly cause Iran to give serious consideration before creating mêlée in the SOH. If this is indeed true, it follows that Iran’s own interests rest in keeping the sea lanes open. From an operational planning perspective, the key question then becomes: will Iran restrain from attacking merchants in the SOH if they are not directly challenged by CNF vessels in these waters? Given even odds that Iran will exercise restraint in the SOH, it is well worth considering having the CNF stay clear of Iran’s littorals, since the alternative of blasting through Iran’s A2/AD gauntlet will certainly cause some degree of disruption to this vital lane of commerce.

A third element to this school of thought is built on the grounds that a CNF’s military superiority will defeat Iran’s A2/AD capabilities with relative ease. An August 2010 editorial by noted geopolitical security analyst George Friedman went so far as to say that “going after Iran would be the kind of war the United States excels in fighting. No conventional land invasion... just a very thorough bombing campaign.”¹⁵ Friedman’s essay frequently refers to lessons from Operation ALLIED FORCE (OAF), the 1999 NATO Kosovo bombing campaign, where coercive bombing brought an end to the conflict. A second example is an extensive analysis of Iran’s A2/AD capabilities published by Caitlin

¹² Peter J. Pham, “Iran’s Threat to the Strait of Hormuz: A Realist Assessment,” *American Foreign Policy Interests*, #32, 2010, 69.

¹³ Ibid.

¹⁴ Ibid., 70.

¹⁵ George Friedman, “Rethinking American Options on Iran,” Posted 31 AUG 2010: www.stratfor.com, (accessed 7 SEP 2010), 4.

Talmadge of MIT. Talmadge's analysis delves deeply into what she assesses to be the superior tactical capabilities of U.S. sea and air power compared to Iran's A2/AD weapons. Talmadge concludes that our conventional superiority will rapidly defeat Iranian forces. For example, she states, —Facing this trap [the SOH], the United States could employ two assets in the strait that the British lacked in the Dardanelles: sophisticated surface defenses and offensive airpower against enemy fire positions ashore.”¹⁶

Iran's Gauntlet

The important point here is that the Strait of Hormuz serves as a chokepoint for the enemies and the region, and it is only natural for us to use a wide range of the capabilities that are available to us... to establish security in this area and to act against the enemies that are trying to undermine the region's security.

- IRGC Brigadier General Ali Fadavi
(SEP 2010 Interview)

George Friedman, Caitlan Talmadge and other like-minded scholars speaking on the topic of Iran's A2/AD capabilities are, at the very least, at risk of oversimplifying the complexity of Iran's current A2/AD threat. Inherent with this school of thought is the risk of seriously underestimating the true capabilities and determination of the Iranian forces. To present Iran as “the kind of war the United States excels in fighting” ignores the lessons of Iran's new style of hybrid warfare demonstrated in Lebanon 2006.¹⁷ When the Israeli Defense Forces (IDF) entered Southern Lebanon, they were prepared to fight the type of war they excel in fighting, but as the popular adage of military strategy states, “the enemy gets a vote” and Hizbollah did not choose to fight on Israel's terms. The CNF Commander would be naïve to think that Iran will fight on ours.

¹⁶ Caitlin Talmadge, “Closing Time,” *International Security*, Vol. 33, No. 1, Summer 2008, 88-89.

¹⁷ George Friedman, “Rethinking American Options on Iran,” Posted 31 AUG 2010: www.stratfor.com, (ACCESSED 7 SEP 2010) 4.

In 1987, the United States estimated that Iran could close the Strait of Hormuz for a maximum of one to two weeks, but Iran's present capabilities to interdict traffic in the strait far exceed those it had in the 1980s."¹⁸ In 2006, the Defense Intelligence Agency Director General Michael Maples estimated that Iran's recent military developments "... will significantly enhance Iran's defensive capabilities and ability to deny access to the Persian Gulf through the Strait of Hormuz."¹⁹ It is important to note that since the Tanker War Iran's tactical weapons capabilities have improved by an order of magnitude in both quality and quantity. When assessing current capabilities, Navy planners must look beyond Iran's confrontational rhetoric and make empirical observations of Iran's actual capabilities.

These tactical capabilities include the acquisition of thousands of sea mines, wake homing torpedoes, hundreds of advanced cruise missiles and possibly more than one thousand small Fast Attack Craft and Fast Inshore Attack Craft (FAC/FIAC).²⁰ In addition to these mines, missiles and FAC/FIAC, Iran has added 3 Kilo submarines and growing inventory of indigenously manufactured wake-homing torpedo armed mini subs.²¹ The majority of these A2/AD forces are concentrated astride the vital Strait of Hormuz where more than one fifth of the world's oil supplies, averaging 17 million barrels, pass daily.²² The growing inventory of A2/AD weapons is allowing Iran to disperse these forces to more than 70 ports along its 1300 miles of coastline. The net result is that Iran has created a resilient A2/AD capability. One that far exceeds the random WW I vintage contact mines

¹⁸ Fariborz Haghshenass, "Iran's Asymmetric Naval Warfare," *Washington Institute for Near East Policy*, Policy Focus #87, September 2008, 23.

¹⁹ General Michael Maples, "Testimony," Senate, *Current and Projected National Security Threats to the United States*, Statement for the Record, Senate Armed Services Committee, 28 February 2006, 12.

²⁰ Steven R. Ward, "The Continuing Evolution of Iran's Military Doctrine," *The Middle East Journal*, Autumn 2005; 59, 4; Research Library, 569.

²¹ Associated Press, "Iran's Navy gets 4 New Iranian Built Submarines," (Posted on Fox News Web site), <http://www.foxnews.com/scitech/2010/08/10/irans-navy-gets-new-iranian-built-submarines/> 10 AUG 2010 (accessed 29 AUG 2010).

²² Peter J. Pham, "Iran's Threat to the Strait of Hormuz: A Realist Assessment," *American Foreign Policy Interests*, #32, 2010), 65.

and the small arm equipped Boghammer boat swarms of the Tanker War such as those that attacked the USS *Elmer Montgomery* and USS *Vicennes* in the SOH on July 3rd 1988.²³

In addition to improved hardware, the training and skills of Iranian forces have also improved markedly since the 1980s. As noted, the performance of Iranian trained and equipped Hezbollah forces in the 2006 conflict with Israel serve as a measure of combat effectiveness for Iranian training and doctrine. This is relevant because the training provided to the Lebanese Hezbollah fighters was supplied by Iranian IRGC advisors. The IRGC Naval Force (IRGCN) is the branch of the Iranian armed forces which operate the growing inventory of FAC/FIAC vessels. The IRGC/N, like the ancient Persian “Immortals” of King Cyrus’ empire, have created squads of elite and committed fighters prepared for martyrdom.²⁴ In 1987, the Iranian Revolution was young and still finding its direction. Since that time, it is important to note that Iran has indoctrinated an entire generation of devoted revolutionary warriors. The regime has developed a form of warfare known as *Alavi warfare*. This form of warfare is part of the new lexicon the IRGC has developed to describe its doctrine of asymmetric warfare, which emphasizes the deterrent and warfighting value of religious belief.²⁵ Iranian military thinkers define Alavi warfare as “a defensive war based on religious and national values using fighters who are psychologically prepared to fight to the death.”²⁶

As the employment of suicide bombers in Israel, Iraq and elsewhere has proven, the addition of this variable radically changes the dimension of the conflict. The inclusion of

²³ Lee Allen Zatarain, “Tanker War: America’s First Conflict with Iran, 1987-88,” Casemate press, Philadelphia, PA, 2008, 297.

²⁴ Garret G. Fagan, “The Battle of Marathon,” Great Battles of the Ancient World, audio book, Part 1, Disc #5, track 9, The Teaching Company, 2005.

²⁵ Fariborz Haghshenass, “Iran’s Asymmetric Naval Warfare,” *Washington Institute for Near East Policy*, Policy Focus #87, SEP 2008, 11.

²⁶ Ibid.

martyr squads, when combined with Iran's burgeoning arsenal of conventional weapons equates to a potent hybrid force that would be difficult to defeat or deter. For example, Iran has reportedly coupled modern cruise missiles to small speed boats and shaped explosive charges to others. These explosive laden boats are small, fast and difficult to distinguish from the ubiquitous small craft routinely operating in the region.²⁷ This tactic of creating a swarm of small vessels can be used like a wave of kamikaze aircraft in WW II to overwhelm a ship's defenses. Also, like the kamikaze, it only takes one attacker to get through the defensive network to achieve a mission kill against a capital asset.²⁸ In his assessment of Iran's capabilities Peter Pham notes, "Perhaps the most fearsome threat that Iranian forces pose involves the vast inventory of small boats that the IRGCN has acquired."²⁹ The Destroyer USS *Cole* stands as a grim reminder of the damage an explosive laden small craft piloted by suicidal attackers can achieve.

In summary, we see that Iran has used the two decades since the Tanker Wars to significantly bolster its defenses, training and tactics. An excellent study by foreign policy analyst Steven Ward on Iran's Evolving Military Doctrine stated, "Unconventional warfare... will continue to be attractive to Iranian leaders because of plausible deniability and of past successes in Lebanon and elsewhere."³⁰ The Iranians seem to agree. In a 2010 television interview, IRGC Commander, Brigadier General Ali Fadavi stated, "I think there is no comparison between our conditions today, our capabilities and power of deterrence, and

²⁷ Caitlin Talmadge, "Closing Time," *International Security*, Vol. 33, No. 1, Summer 2008, 100-101.

²⁸ CAPT Wayne P. Hughes, *Fleet Tactics and Coastal Combat* (Naval Institute Press, Annapolis, MD, 2000), 156.

²⁹ Peter J. Pham, "Iran's Threat to the Strait of Hormuz: A Realist Assessment," *American Foreign Policy Interests*, #32, 2010, 68.

³⁰ Steven R Ward, "The Continuing Evolution of Iran's Military Doctrine," *The Middle East Journal*, Autumn 2005, #59, 574.

those of the previous years. Our enemies are aware of many of these things.”³¹ As previously cited, Commander of Fifth Fleet, Admiral William Gortney, commented at a January 2009 press conference about Iran’s “provocative” actions in the Gulf, countered, “We see that their rhetoric is much greater than their real capability.”³² One would expect that Admiral Gortney’s statement was just shaping the information environment and not a disregard for the 2006 events in Lebanon, the deadly effects of Iranian designed Improvised Explosive Devices (IED) in Iraq and the known potential capabilities of Iran’s A2/AD order of battle. This collection of empirical evidence puts teeth into the Iranian claims about their capability to close the SOH. Even if the truth is somewhere in the middle, between the best and worst case scenarios for Iranian A2/AD capability, an analysis of one possible COA will demonstrate that it is not necessary for a CNF force to operate in the littorals of Iran in any low–medium level conflict in order to achieve their desired objectives.

Leveraging Operational Advantage

A single shot can sink a ship, while a hundred salvos cannot silence a fort.
- John Ericsson (Designer of the USS Monitor)

As elementary as it may appear, the best option for denying Iran the opportunity of attacking CNF warships is to operate beyond the reach of their A2/AD weapons. By simply abiding by “the great cornerstone of all fleet operations, *a ships a fool to fight a fort*” a coalition force can fight, win and survive.³³ Today’s “fort” is represented by the lethal A2/AD capabilities proliferating around the world. As illustrated by multiple points in this analysis, Iran has created a hybrid force designed to achieve their desired goal of controlling

³¹ General Ali Fadavi, “Our Defense Potential is Higher than What the Enemy Can Understand, Extensive Interview, Iranian Navy Chief Addresses Small Vessel Strategy signed by Hoseyn Nikpur,” 28 AUG 2010, <http://OpenSource.gov/> (accessed 10 SEP 2010).

³² VADM William Gortney, *DoD News Briefing with Vice Adm. Gortney from the Pentagon*, 15 JAN 2009, <http://www.defense.gov/transcripts/transcript.aspx?transcriptid=4341>.

³³ CAPT Wayne P. Hughes, *Fleet Tactics and Coastal Combat* (Naval Institute Press, Annapolis, MD, 2000), 26.

the straits in a conflict with the US. The facts presented thus far raise the critical question for military planners of: What course of action will defeat such a threat?

Perhaps the first step to answering this question is to recognize the contextual nature of the threat. Major Christopher McCarthy, a Naval War College graduate, raised a salient point in his 2010 published analysis of the evolving global A2/AD capabilities, he wrote, “In terms of domain control, U.S. military success against A2/AD will require a philosophical shift in what constitutes an acceptable level of air, space and maritime superiority.”³⁴ Major McCarthy’s point about recognizing the “philosophical shift” is supported by the lessons of history when prevailing tactical and operational paradigm shifts were not recognized by military leaders. For example, Captain Wayne Hughes, author of *Fleet Tactics and Coastal Combat*, cites the painful lesson learned in the loss of countless lives and treasure when in 1942-43, “the United States failed to grasp that the new killing weapon [of the Japanese] was the torpedo.”³⁵ Today’s Navy leaders must take pause to recognize the “philosophical shift” necessary to defeat the emerging A2/AD threat that is changing the old rules of the game. In this re-assessment, it is necessary to define the “acceptable level of air, space and maritime superiority” required to achieve the objectives.³⁶ A failure to correctly assess the potential capability present in Iran’s A2/AD threat is the tactical equivalent of the failure during World War II to recognize the threat of Japan’s Long Lance torpedoes. Failing to recognize the changing threat environment could have catastrophic results on CNF operations in the Arabian Gulf.

³⁴ Christopher McCarthy, “Anti-Access/Area Denial: The Evolution of Modern Warfare,” *Naval War College Student Journal*, Vol I, 7.

³⁵ CAPT Wayne P. Hughes, *Fleet Tactics and Coastal Combat* (Naval Institute Press, Annapolis, MD, 2000), 26.

³⁶ Christopher McCarthy, “Anti-Access/Area Denial: The Evolution of Modern Warfare,” *Naval War College Student Journal*, Vol I, 7

As illustrated, many foreign policy and business analysts contend that Iran may choose to act in its own best interest and restrain from using its A2/AD capabilities against merchant traffic. Others contend the A2/AD threat will be a manageable tactical military problem for a CNF. In order to devise a course of action that is adequate, feasible and acceptable, it is necessary first to dispel these misconceptions regarding predicted Iranian actions in a time of conflict.³⁷ First, while merchant traffic may be permitted to transit in a conflict, it is implausible to think Iran would offer such restraint to a CNF vessel. Rather, the presence of coalition vessels within range of Iran's A2/AD weapons would likely trigger an immediate attack. Also, if Iran recognizes capital ships as the prized symbol of the coalition's operational COG, they will certainly not allow them a free pass in the interest of global economic security. Second, regarding the minimization of Iranian A2/AD lethality as a manageable threat--in essence, this is a true statement. Iran cannot withstand the full brunt of a coalition force's power; however, trading billion dollar capital ships for explosive laden thousand dollar speed boats in a Strait of Hormuz is a foolish and unnecessary exchange. It is in the Component Force Maritime Combatant Commander's (CFMCC) best interest to deny Iran the opportunity to score a success against the CNF.

When analyzing these variables, the important question of, do we need to enter the SOH or the constricted water of the AG to accomplish our objective arises. The answer is ~~no~~, "no," at least to a point determined by the scale of the conflict. In a low-mid level conflict, a CNF can allow Iran temporary control over its littoral waters while conducting long range coercive strikes that attrite Iran's forces. In a large scale conflict with Iran, forced access through the SOH and even amphibious landings may be required to establish control. That option must always remain on the table. By leveraging the advantages of reach and mobility

³⁷ Joint Pub 5-0, *Course of Action Characteristics* (Joint Pub 5-0 Joint Operation Planning, 2002), III-26.

afforded by the modern warships and aircraft of a CNF, Iranian forces can be systematically attrited. This was true during Operation PRAYING MANTIS (1988) when the Carrier Strike Group operated in the blue water of the NAS.³⁸ This was also the case during Operation ALLIED FORCE (1999) when the USS *Roosevelt* Carrier Strike Group operated outside the restrictive waters of the Adriatic Sea. This option denied the Iranians and later the Serbians an easy opportunity to attack a capital asset. It also gave the CNF freedom to maneuver and unimpeded Lines of Communication/Lines of Supply (LOC/LOS) with clear Sea Lines of Communication (SLOCs) to sustain their operations.

This option will also result in placing the advantage of factor force, space and time on the side of the coalition. By remaining outside of the restricted and high threat environment of the Arabian Gulf, the CNF can concentrate available firepower on offensive strikes. The NAS base of operations will also mitigate Iran's A2/AD threat by remaining outside the range of enemy weapons and sensors. Additionally, this COA offers the advantage of factor time by allowing the CNF the initiative of choosing when and where to strike. Successful precedence exists in past operations such as PRAYING MANTIS and ALLIED FORCE for leveraging advantages in operational factors and functions. In light of Iran's current A2/AD threat environment, a NAS base of operations is the prudent choice for the CFMCC.

This philosophical shift of accepting limited sea control in the SOH and portions of the Arabian Gulf runs counter to the determination of the U.S. Navy and many of its coalition partners. Captain Hughes notes that —Liddell Hart, the prolific champion of maneuver warfare... believed that the best tactics involve ingenuity and avoid head-to-head battles of

³⁸ Lee Allen Zatarain, *Tanker War, America's First Conflict with Iran, 1987-88* (Casemate press, Philadelphia, PA, 2008), 54.

attrition.”³⁹ The option of operating safely outside the range of Iran’s A2/AD weapons is not just a reasonable survival measure it is more about optimizing the operational advantages of the CNF. The COA of operating in the Arabian Sea will afford the coalition force what Milan Vego calls near ~~absolute~~ sea control.”⁴⁰ In this condition, ~~one’s~~ fleet operates without major opposition while the enemy fleet cannot operate at all.”⁴¹ Absolute sea control can be achieved within the selected blue water operating base. This option will allow a coalition force to optimize offensive fires and not tie up limited strike assets in defensive operations. In short, it will allow the CNF to concentrate fires on attriting the enemy forces while denying the enemy an equal opportunity to return fires. This COA will also allow the CNF to limit the enemy lines of approach/threat axis. This in effect will allow the CFMCC the ability to concentrate available Intelligence Surveillance and Reconnaissance (ISR) and strike forces against limited threat axis vice the alternative of a 360 degree threat present in the Arabian Gulf.

What this COA would amount to in a time of conflict is temporarily allowing Iran to exercise limited sea control in the SOH and most of its littoral waters. This short-term condition is the trade-off for gaining operational advantage over the duration of the conflict. Iran’s limited control of the strait would be deliberately hampered by CNF forces selectively attacking and attriting Iran’s A2/AD weapons. Interestingly, this COA also leaves open the possibility that if not directly challenged, Iran may, in its own self-interest or as a global display of rational statehood, keep the SOH open for commercial shipping. Whether Iran chooses to keep the oil flowing or attempts to disrupt it, what this COA will do is put the onus of what happens in the SOH upon the shoulders of Iran.

³⁹ CAPT Wayne P. Hughes, *Fleet Tactics and Coastal Combat* (Naval Institute Press, Annapolis, MD, 2000), 28.

⁴⁰ Milan Vego, *Joint Operational Warfare* (U.S. Navy War College Press, Newport, RI, 2009), II-52.

⁴¹ *Ibid.*

This aspect of the COA will in effect leave Iran temporarily responsible for the fate of neutral shipping in the straits. If Iran chooses to attack shipping, the images of burning commercial oil tankers on global TV networks will only serve to further paint Iran as a pariah state while garnering additional support for the coalition. In effect, it will allow the CFMCC to score an information victory by being perceived as exercising due restraint in the conduct of combat operations. It is more likely that the potential for information operation victories is far greater with this COA than by risking the loss of a capital ship battling through the SOH gauntlet. Finally, the risk of going toe-to-toe with Iran's A2/AD gauntlet is difficult to justify in a low-mid level punitive scenario where a negotiated settlement that restores order to the region is the desired objective.

Conclusion

The profoundest truth of war is that the issue of battle is usually decided in the minds of the opposing commanders, not in the bodies of their men.

- Liddell Hart

Military planners and strategists concerned with the threat presented by modern Iran are wise to remember, "Iran draws on a heritage of more than 2500 years of strategic thinking for its doctrine."⁴² The Islamic Republic of Iran's A2/AD programs and their desire to achieve regional dominance represent the latest threads woven into the fabric of this ancient civilization. This analysis illustrated the specific nature of Iran's growing technical and tactical threats present in their A2/AD capabilities. It also demonstrated that Iran's weapons improvements are complimented by their improved training and doctrine. When examining the known threats and the likely level of war with Iran, this analysis recommends that the prudent CFMCC should establish a blue water base of operations in the North

⁴² Steven R. Ward, "The Continuing Evolution of Iran's Military Doctrine," *The Middle East Journal*; Autumn 2005; 59, 4; Research Library, 566.

Arabian Sea. A blue water base would allow the CNF to use their conventional superiority to achieve the desired objectives while keeping Iran's A2/AD threat at arm's length. Using their conventional advantages would also allow a CNF the clear SLOCS necessary to sustain the fight.

The coercive bombing of Kosovo offers a model which can be used as a starting point for framing the likely scale and conduct of a conflict with Iran. Operation ALLIED FORCE afforded NATO forces the advantage of factor force, space and, in the final analysis--time. OAF also demonstrates the ability to achieve desired objectives through coercive bombing. This recommended COA will result in placing the advantage of factor force, space and time on the side of the coalition. Remaining outside of the restricted and high threat environment of the Arabian Gulf will allow the CNF to concentrate available firepower on offensive strikes. The blue water base of operations also allows the CNF the freedom to maneuver outside the reach of enemy weapons and sensors. Finally, this COA offers the advantage of factor time by allowing the CNF the initiative of choosing when and where to strike. The combined benefits of this recommended COA will allow a CNF to fight, win and survive in a conflict against Iran.

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