





IRAN'S HYBRID NAVAL FORCE: FLEXIBILITY IS THE KEY TO SEA POWER

LCdr D.M. Layton

JCSP 41

Exercise Solo Flight

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LCdr D.M. Layton

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A good Navy is not a provocation to war. It is the surest guaranty of peace.

- **President Theodore Roosevelt**, 2 December 1902, second annual message to Congress.

INTRODUCTION

Geographically constrained within the dynamic Middle East region, the Islamic Republic of Iran utilizes its military power to ensure its national security and to pursue its foreign policy objectives. Furthermore, in concert with its other power sources, it seeks to benefit from its military capabilities to achieve its ultimate grand strategy. That is to "transform Iran into a regional and international power which is viewed as an equal by the heavyweights on the world scene"¹. In order to achieve this, Iran's leaders realize that they must maintain national security while increasing development and sway. To that end, Iran's naval forces are some of the most potent military tools available to the regime and the state to ensure its goals of survival and influence.

Iran's naval forces are distributed amongst two distinct command groups: the Islamic Republic of Iran Navy (IRIN) and the Islamic Revolutionary Guards Corps Navy (IRGCN). The IRIN possesses the majority of Iran's conventional naval assets, most of which are remnants of the exiled Shah's pre-revolutionary Western built surface warships, as well as patrol submarines. The IRGCN possesses maritime assets that can be classified as more non-conventional or asymmetric in nature. These include "small fast-attack craft, heavily armed with rockets or anti-

¹Pierre Pahlavi, "The Place of Shi'Ism in Iranian Grand Strategy," *Défense Nationale Et Sécurité Collective* 64, no. 8 (08, 2008): 59.

ship missiles, fast mine-laying platforms² as well as coastal cruise missile batteries. Yet both organizations share the common historical legacy of the Iran-Iraq War. As a result of the War, a key event of strategic importance continues to influence Iran's naval doctrine today. In April of 1988, the USS Samuel B. Roberts struck an Iranian mine, causing her incapacitating damage. In retaliation, the US Navy conducted Operation Praying Mantis, resulting in the destruction of three Iranian warships. A second defining moment is the 2006 Lebanon campaign where a weaker and smaller Hezbollah used a mixture of guerilla and conventional tactics against the superior Israeli forces.³ These events cemented the idea that a large and technologically superior enemy such as the US could not be defeated through conventional power alone but would require irregular tactics such as mining and small boat swarming attacks.

Over the past decade, Iran's military leaders have established "mosaic" defence; a combination of diverse and "interlocking layers of asymmetric capabilities"⁴ that lead to a flexible, layered and forward defence strategy. In naval terms, this includes long range submarine and surface ship patrols in the Gulf of Oman and beyond, combined with mine laying operations, anti-ship cruise missiles from small boats and hidden coastal batteries inside the Persian Gulf. Furthermore, "mosaic" defence relies on a concept of decentralized command and control where initiative on the part of low level commanders and operators is supported and encouraged. Finally, Iran's asymmetric strategy plays to the strength of the moral component of

²Fariborz Haghshenass, "Iran's Asymmetric Naval Warfare," *Washington Institute for Near East Policy*, Policy Focus #87 (September 2008): 6.

³Stephen Biddle and Jeffrey A. Friedman, "The 2006 Lebanon Campaign and the Future of Warfare: Implications for Army and Defense Policy," *Strategic Studies Institute*, US Army War College (September 2008): xiii.

⁴Ahmed S. Hashim, "The Evolution of Iran's Military Doctrine," *Gulf Analysis Papers*, Center for Strategic and International Studies (January 2013): 2.

warfare by enabling steadfast devotion amongst its personnel, above and beyond that of its opponents. Therefore, Iran looks to capitalize on its ability to deter the enemy's will to fight.

In order to pursue the strategic goals of greater regional and global influence, conventional naval power projection is beneficial. Iran's political and naval elites must therefore incorporate conventional and non-conventional elements into a hybrid maritime force structure. However, given the conventional power gap that Iran faces vis-à-vis the behemoth that is the US Navy, does its maritime strategy provide credible deterrence against a seaborne attack or invasion? Using Iran's naval capabilities, doctrine, and tactics as a case study, this paper will demonstrate that a smaller, weaker state can utilize a hybrid mixture of both conventional and irregular maritime forces to practically defend and secure its coastline against a more capable enemy while increasing its regional influence. In order to show this, an analysis of Iran's mosaic defence doctrine will first be conducted to evaluate its characteristics and functions in the maritime domain. Next, an in depth examination of Iran's naval capabilities will demonstrate what assets are available to achieve the aforementioned national defence doctrine. Finally, the culminating discussion on how Iran combines conventional and irregular tactics into a hybrid force structure to conduct sea control and sea denial tasks, will lead to the conclusion that a hybrid maritime strategy can be an effective method for any weaker state to increase its relative power.

IRAN'S MOSAIC DEFENCE DOCTRINE

Modern Iran continues to function by incorporating the experiences and characteristics of its extensive Persian heritage. Due in part to these historical features, it seeks to gain regional power and influence within the highly dynamic Middle East region, whilst preserving its national security. Indeed, its rulers operate more or less along the lines of "a strong Iranian identity based

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on nationalism, feelings of insecurity and Shia Islam.³⁵ These feelings of insecurity are caused by a regime that often feels threatened by external actors, such as the US or Israel, but also domestically by different factions of the Iranian populace, including non-Persian and non-Shia minorities accounting for a significant percentage of the Iranian population.⁶ Together, Iran's nationalist quest for regional hegemony juxtaposed with its existential insecurity make for a seemingly erratic and ambiguous defence policy. Moreover, it imposes the development of a strong defence system. Iran also realizes that it must incorporate past lessons into its security structure. Particularly, from the Iran-Iraq War it learned that it cannot defeat a larger and more technologically advanced military such as the US through purely conventional means, due to its inability to sustain combat capability indefinitely⁷. Rather, Iran aspires to "concentrate its operations at times and in locations that offset an adversary's room to maneuver and technological superiority."⁸ Therefore, a different approach to defence and security must be developed and adopted that utilizes indirect methods and combines surprise, speed, and will.

As an attempt to satisfy its security needs, Iran has adopted what it refers to as the "mosaic" defence doctrine. Developed over the past decade, it consists of a multi layered defence and deterrence system that is forward leaning so as to enable the best resistance to foreign aggression, outside of Iranian territory.⁹ Additionally, its flexibility adds to deterrence

⁵Steven R. Ward, *Immortal: A Military History of Iran and its Armed Forces* (Washington: Georgetown University Press, 2009), 301.

⁶Central Intelligence Agency. "The World Factbook: Middle East – Iran," Last modified 28 April 2015, https://www.cia.gov/library/publications/the-world-factbook/geos/ir.html.

⁷United States. Office of Naval Intelligence, *Iran's Naval Forces: From Guerilla Warfare to a Modern Naval Strategy* (Washington, DC: US DoD Printing Office, 2009) 7. Quote from IRGC Commander Kazemi said that the lesson from this battle was that, "in a purely classical naval engagement, the Iranian Navy would not be able to sustain combat capability and will soon be out of effective operation."

⁸Michael Connell, "Iranian Operational Decision Making: Case Studies from the Iran-Iraq War." *CNA Strategic Studies*, (July 2013): 37.

⁹Ahmed S. Hashim, "The Evolution of Iran's Military Doctrine..., 2.

due to the unpredictable nature of engagements. "Mosaic" defence combines the layered deterrent aspects of military power, such as hidden coastal cruise missile sites and midget submarines, with "de-centralized defence that takes advantage of Iran's strategic depth".¹⁰ Along with the de-centralization of command and control authority, the large dispersal of key military infrastructure throughout Iran negates the potential for a paralyzing first strike by an aggressor.¹¹ Additionally, the doctrine combines elements of the regular army, navy, and air forces with those of the Revolutionary Guards, the protectors of the regime. Indeed, both military organizations have the flexibility to respond to threats through the dispersal system. Relying on concealment and operational readiness, the system is tested on a regular basis during military exercises. In 2011, it was used when a perceived attack on Iran's nuclear sites caused the regime to order "Revolutionary Guards units to redistribute Iran's arsenal of long-range Shahab missiles to secret sites around the country where they would be safe from enemy attack and could be used to launch retaliatory attacks."¹²

Along with measures such as camouflage and concealment, the ability to quickly disperse key military assets is an important factor in Iran's passive defence plans.¹³ Passive defence seeks to reduce vulnerability and increase survivability against a first strike from a technologically superior force such as the US. Iran's forces must be able to withstand an initial attack and be capable of fighting back.¹⁴ "Mosaic" defence essentially decentralizes the command structure of Iran's forces in order to enable this capability of fighting back in case of a first strike on its

¹⁰Shahram Chubin, "Command and Control in a Nuclear-Armed Iran," *Proliferation Papers* No. 45, (January-February 2013): 16.

¹¹*Ibid*.

¹²Con Coughlin, "Iran's Revolutionary Guards Prepare for War," *The Telegraph*, 5 Dec 2011. http://www.telegraph.co.uk/news/worldnews/middleeast/iran/8936797/Irans-Revolutionary-Guards-prepare-for-war.html.

¹³Office of Naval Intelligence, *Iran's Naval Forces: From Guerilla Warfare...*, 9. ¹⁴*Ibid.*, 8.

command and control networks. Specifically, for Iran's navy, command decentralization in a period of conflict will mean that fast attack craft will be given a sector of the Persian Gulf and will be able to attack enemy naval assets or merchant shipping under radio silence, without the requirement to maintain contact with or report back to their chain of command.¹⁵

Iran's unique physical geography provides favourable and advantageous features to its "mosaic" defence doctrine. Its land filled with mountainous regions that can be easily fortified, makes it non-conducive to manoeuvre warfare for an invading enemy. Likewise, its coastline littered with shallow littoral areas and small islands can be used to easily conceal military assets. Perhaps most importantly, the detailed knowledge of its own strategic geography allows Iran to attempt to equalize the technological weakness it faces against a more powerful military foe. This detailed knowledge is incorporated into the mosaic doctrine by constraining the freedom of manoeuver of an enemy. It can also be used to push its defences forward and further away from the Iranian homeland. From a maritime perspective, conventional naval forces are forward deployed into the Gulf of Oman and beyond to provide early presence and deterrence. In the Strait of Hormuz and inside the Persian Gulf where the depth and width of navigable water are constrained for larger conventional warships, Iran's smaller naval assets provide highly flexible and manoeuvrable deterrence and defence.¹⁶ The use of small boat swarming tactics against surface warships and merchant vessels in these constrained waters can quickly and easily overwhelm Iran's opponents. Furthermore, the numerous scattered small islands within Iran's territorial waters provide small patrol boats with concealment, ensuring that even a sophisticated enemy warship cannot easily detect them, allowing for speed and surprise to be in favour of the

¹⁵*Ibid.*, 9; "U.S. Navy: Iran military adopts decentralized 'mosaic defense'," Geo-Strategy Direct, January 27, 2010.

¹⁶ Office of Naval Intelligence, *Iran's Naval Forces: From Guerilla Warfare...*, 10.

Iranian patrol crafts.¹⁷ The use of geographical characteristics to deny an enemy's freedom of manoeuvre has also been used by other smaller nations in the past as deterrence against invasion. In fact, throughout the Cold War, NATO exercised plans to operate warships and fast attack craft "in coastal waters far forward, sheltered by the mountains surrounding the northern Norwegian fjords"¹⁸ in order to deter and repel a potential Soviet invasion of Norway.

Another important component of Iran's "mosaic" defence doctrine is the emphasis on the will to fight. Indeed, "Iran's leadership seeks to imbue its fighters with a belief in their spiritual superiority over their perceived enemies."¹⁹ In order to cultivate spiritual and ideological superiority, priority is given toward a fighter's sense of duty to the cause of Iran's defence rather than to a military objective. In this way, the ideal naval war fighter should be "psychologically prepared to fight to the death if necessary, and have enough moral capacity to persevere militarily."²⁰ Presumably, this will mean perseverance against a much stronger enemy, which is not as devoted to a cause and will be deterred and repelled through a continuous series of attacks on its forces. In effect, Iranian defence doctrine is based on the idea that the cause of homeland defence is so just that even a far superior military can be defeated by the duty, honour, and martyrdom of Iran's devoted fighters. Furthermore, "martyrdom for the sake of Islam is a religious duty, an encouraged and rewarding way for true believers."²¹ In naval terms, the IRGCN has incorporated this sense of duty and martyrdom by giving their more ideologically committed warriors prominent roles in conducting bold swarming attacks in both the Persian

¹⁷*Ibid.*, 23.

¹⁸Jacob Borresen, "Alliance Naval Strategies and Norway in the Final Years of the Cold War," *Naval War College Review* (March 2011): 100.

¹⁹Haghshenass, "Iran's Asymmetric Naval Warfare..., 10.

²⁰*Ibid.*, 11.

²¹Jahangir Arasli, "Obsolete Weapons, Unconventional Tactics, and Martyrdom Zeal: How Iran Would Apply its Asymmetric Naval Warfare Doctrine in a Future Conflict," George C. Marshall European Center for Security Studies, *Occasional Paper Series* No. 10 (April 2007): 14.

Gulf and Gulf of Oman.²² It will not be critical for these swarming attacks to achieve a specific military objective. Rather, it is more important for the attacks to occur in a seemingly confusing and unpredictable pattern so as to drive fear into the enemy. The supposedly weaker willed enemy will lose the ability to continue fighting and leave the region.

IRAN'S NAVAL CAPABILITIES

The existence of Iran's dual naval institutions, the IRIN and the IRGCN, is a result of history and practicality. After the Islamic revolution of 1979, Tehran's new regime wanted to ensure its authority over the regular military forces that could not yet be trusted since they had previously existed to support the exiled Shah To counter a perceived threat of coup d'état at the hands of the regular military, the independent Revolutionary Guards Corps paramilitary service was created to maintain the regime's security.²³ Throughout the Iran-Iraq war, the Guards were developed into a distinguished fighting force and "guardians of the revolution".²⁴ Postwar military development forged the "formalization of the Revolutionary Guard's role as the preeminent service"²⁵ favoured over the regular military forces. Notwithstanding its inferior status, the regular military continues to play an important role in Iran's defence strategy. Indeed, since 2007 Iran's two naval entities have undergone a thorough reorganization with the goal of removing overlap and redundancy in responsibility in order to improve overall effectiveness. To that end, the IRIN has been assigned the responsibility of extra-regional defence to include all regions outside of the Persian Gulf and Strait of Hormuz. This includes the Caspian Sea, the Gulf of Oman, and the Indian Ocean and beyond, essentially making it the forward deployable

²²Haghshenass, "Iran's Asymmetric Naval Warfare..., 11.

²³Arasli, "Obsolete Weapons, Unconventional Tactics, and Martyrdom Zeal…, 16; Pierre Pahlavi, "Guerre irrégulière et analyse institutionnelle: le cas de la stratégie asymétrique des Gardiens de la révolution en Iran. » *Études internationales*, vol. 42, n° 4, (2011) : 477.

 ²⁴Ward, Immortal: A Military History of Iran..., 302.
²⁵Ibid.

naval force. Due to its arsenal of smaller and less sustainable vessels, the IRGCN has been assigned the responsibility of defending the waters of the Persian Gulf and the Strait of Hormuz. Overall, both organizations work in conjunction to maintain and increase regional influence while simultaneously preserving a defence capability against a seaborne attack.

Known as Iran's strategic force, the IRIN possesses and operates various conventional naval assets including surface warships, submarines, and cruise missile platforms.²⁶ While the majority of its surface ships are remnants of the pre-revolutionary era, "domestic production of the Jamaran (Mowj) frigate and the addition of several upgraded Combattante-II (Sina class) frigates are replacing these aging ships."²⁷ The combination of new and old warships provides Iran with seaborne missile capabilities and an expanded presence in the Indian Ocean and Arabian Sea. As part of a naval diplomacy campaign, IRIN warships are capable of conducting patrols and visits far beyond their immediate region. In fact, in 2011, the frigate Alvand and the tanker *Kharg*, transited the Suez Canal en route to a visit to Latakia, Syria. The implied message from Iran is that it aspires to play a more dominant role in the maritime domain.²⁸ The IRIN's three *Kilo* class submarines can be used to deter and threaten enemy warships and merchant shipping while conducting surveillance and gathering intelligence. Additionally, the domestic production of Yono and Nahang class midget submarines²⁹ will greatly aid the IRIN in its deterrence and sea denial missions due to their increased potential for remaining clandestine and undetected. The amalgamation of these naval assets is utilized to accomplish the IRIN's soft power functions of expanding regional influence, diplomacy and strategic messaging.³⁰ Finally,

²⁶Michael Connell, "The Artesh Navy: Iran's Strategic Force," *The Middle East Institute* (Jan 2012): 1.

²⁷Joshua C. Himes, « Iran's Maritime Evolution,» *Gulf Analysis Papers*, Center for Strategic and International Studies (July 2011): 3.

²⁸Connell, "The Artesh Navy: Iran's Strategic Force..., 3.

²⁹Office of Naval Intelligence, Iran's Naval Forces: From Guerilla Warfare..., 18.

³⁰Himes, « Iran's Maritime Evolution..., 1.

the IRIN continues to hold a large stockpile of Chinese built anti-ship missiles and modern homing torpedoes purchased from Russia. Along with an alleged cache of advanced Russian and Chinese naval mines, these can be used to assist in closing the Strait of Hormuz in cases of conflict.³¹

Unlike the IRIN, the IRGCN's main purpose is not to project maritime power and influence in the external region but rather to control and protect the coastal waters of the Strait of Hormuz and the Persian Gulf. It is the first line of protection for the Iranian regime from external seaborne threats. To that end, the IRGCN's main arsenal includes a plethora of fast patrol boats that are capable of high speeds, are highly manoeuvrable and project firepower. In addition to missiles, some of the boats are also mounted with torpedoes that can damage enemy ships. Additionally, the IRGCN's large stockpile of naval mines can be laid from a number of small mine laving vessels and is estimated to number more than 2000.³² Mining operations can be used to disrupt maritime shipping and deny the use of a specific region. A disadvantage of these small boats is their limited persistence and sustainability, only being capable of remaining at sea for a few days at a time and only in the relatively calm seas of the Persian Gulf. The most threatening of these patrol boats are the Chinese built *Houdong* and C-14 missile boats, each armed with C-802 anti-ship missiles.³³ The IRGCN shares the use of midget submarines with the IRIN. Other naval weapons include "armed and unarmed unmanned submersibles, and new systems like the 70-knot, low observable Bladerunner 35 speed boat and other similar vessels armed with explosives to act as suicide boats."³⁴ Much like the IRIN, the IRGCN also maintains

³¹Anthony H. Cordesman and Bryan Gold, "The Gulf Military Balance Volume I: The Conventional and Asymmetric Dimensions," *U.S.-Iranian Competition Series*, Center for strategic and International Studies (May 2013): 15.

³²Office of Naval Intelligence, *Iran's Naval Forces: From Guerilla Warfare...*, 16. ³³*Ibid.*, 13.

³⁴Cordesman and Bryan Gold, "The Gulf Military Balance Volume I..., 126.

a large number of coastal defence cruise missile (CDCM) batteries that are mobile and easily hidden from detection and can be used to attack a targeted threat within Iran's coastal regions. With increased technological innovation, Iran may soon obtain or develop missiles with greater range, accuracy, and lethality that can cover the whole of the Persian Gulf, the Gulf of Oman and beyond. The combination of the IRGCN's arsenal of naval assets can be "effective asymmetric tools to counter the superior conventional forces of its neighbors."³⁵

Iran's combined naval capabilities have the potential to provide deterrence against a seaborne attack. Additionally, by utilizing them within the "mosaic" defence doctrine, they can likely survive a first strike from a superior naval force. However, Iran realizes that it cannot defeat a superior navy due to its relative weakness. An examination of many of the world's navies leads to the conclusion that superiority is the result of collective defence. Western naval power is indeed vast because of the many assets made available by contributing states to coalitions such as NATO and the Combined Task Forces of the Middle East region. Thus, in order for Iran to counter such large threats, it will need to maintain the deterrent aspects of its naval forces in combination with its more unpredictable and aggressive tactics, such as small boat swarm attacks. Furthermore, much like the Western naval coalitions, the IRIN and IRGCN must work together as one hybrid force charged with the collective defence of Iran.

COMBINING CONVENTIONAL AND IRREGULAR INTO A HYBRID FORCE

The preceding two sections have attempted to demonstrate the means and ways available for Iran's navy to counterbalance and deter a technologically superior maritime force. By incorporating Iran's available maritime assets, the "mosaic" defence doctrine endeavours to diminish this power imbalance. Indeed, the US Office of Naval Intelligence describes Iran's maritime doctrine as asymmetric naval warfare.³⁶ Yet, the doctrine combines conventional assets in order to conduct sea control, sea denial, and soft power missions that include regional engagements, official state visits, and presence patrols. How does Iran pursue all of these objectives using a supposedly asymmetric strategy? Rather, since the Iranian regime wishes to be recognized as an influential regional power, it must increase its legitimacy as a credible and rational actor. Thus, it combines its conventional naval assets with irregular tactics into a hybrid force. Given its weak conventional position, it is only logical for Iran to utilize all available means at its disposal to counter perceived threats and increase its relative power. As it prepares for battle against an enemy's much more sizeable and advanced force, it also pursues deterrence and containment using soft power and deception.³⁷ Using Iran's absolute weapon of martyrdom, deterrence or defeat of an anticipated superior enemy strike will be possible.³⁸

Asymmetry means inequality between two sides. From Iran's maritime perspective, the asymmetry is the limited military capability it possesses in comparison to the technologically superior enemy. In order to compensate for this imbalance of power, Iran incorporates conventional naval assets with irregular tactics, adopting a hybrid "indirect strategy, striking at the strong state's moral fabric, that is, their will."³⁹ Indeed, this hybrid strategy seeks to capitalize upon a separate asymmetry in conflict. That is the inequality in the will of the belligerents to sustain the conflict. For Iran, maritime warfare will be necessary to ensure national security and maintain the regime's autonomy. For an invading force, the objectives will

³⁶ Office of Naval Intelligence, Iran's Naval Forces: From Guerilla Warfare ..., 6.

³⁷Arasli, "Obsolete Weapons, Unconventional Tactics, and Martyrdom Zeal..., 13. ³⁸*Ibid.*. 15.

³⁹John F. Newton, "Asymmetry in War – Abused and Overused" (National Security Studies Course Paper, Canadian Forces College, 2004), 6.

be far less vital. Thus, Iran's strategy will be to take advantage of this imbalance of wills to sustain the effort and force a withdrawal from its enemy. Historical lessons from Vietnam, Iraq, and Afghanistan demonstrate that "the reliance on military power and technology enablers does not guarantee victory. Manifestly weak actors can win, or dramatically influence, conflict outcomes by indirect means and through the strategic manipulation of the intangibles of war such as time, space and will."⁴⁰ Thus, as the relatively weak actor in the maritime domain, Iran's navy must be able to employ its conventional assets indirectly using speed, flexibility, and surprise.

A state employs naval forces to conduct sea control, sea denial, and power projection. Sea control or superiority is defined "as the condition in which one has freedom of action to use the sea for one's own purposes in specified areas and for specified periods of time and, where necessary, to deny use to the enemy."⁴¹ To succeed at controlling the sea, a state must possess numerous technologically advanced air, surface and subsurface assets. As a conventionally weak state, Iran is at a disadvantage in attempting to conduct sea control against a superior naval force. Sea denial is defined as "a limited form of sea control in which one party, who cannot establish full control over an area of sea, prevents another party from using it."⁴² As such, sea denial is used as a way of containing enemy forces. Here, Iran can utilize its hybrid conventional and irregular forces to conduct denial of a specific area of the sea. For example, using a combination of fast patrol boats along with anti-ship cruise missiles, a particular region of the Persian Gulf can be denied access to even a large enemy warship such as a destroyer. Furthermore, by sowing a field of naval mines along the entrance to the Strait of Hormuz, Iran's navy will stop the flow

⁴⁰*Ibid.*, 2.

⁴¹Department of National Defence, MCP 1 *Naval Doctrine Manual* (Ottawa: DND Canada, 2006), 1-2. ⁴²*Ibid*.

of merchant traffic. Finally, naval power projection is defined as "the use of sea power to influence events on land."⁴³ Traditional influence activities include landing amphibious forces, supporting ground wars through naval gunfire, and the use of naval aircraft. Yet, influence activities also include supporting political and diplomatic objectives. Indeed, the deployment of naval forces demonstrates a state's political resolve and provides a means of seaborne coercion and reassurance. Certainly, Iran's naval forces can be employed to fulfill these functions. For example, according to news reports, in April 2015 Iran sent a fleet of warships to the Gulf of Aden in order to provide reassurance to the Shia Houthi rebels of Yemen.⁴⁴ The presence of Iranian warships demonstrated the resolve of the political leadership to coerce Saudi Arabia into stopping its campaign against the rebels.

Should Iran feel the necessity to conduct sea denial to defend its coastline against a seaborne threat, it will utilize a hybrid strategy in the following manner. First, a comprehensive intelligence, surveillance, and reconnaissance system that combines civilian dhows, aircraft, and patrol craft will be located in the Gulf of Oman and the Persian Gulf to report on incoming threats.⁴⁵ As a threat approaches the range of C-802 anti-ship missile batteries, they may be fired to cause destruction or disruption. Small mine laying vessels will sow mine fields in an appropriate area so as to deny access to a specific region. IRIN *Kilo* submarines will be deployed in the Gulf of Oman to provide early detection and potential engagement of the threat. As these are blue water conventional submarines, they would be quite limited in operating in the coastal waters of Iran. Rather, they could fire torpedoes at seaborne enemy forces further out to

⁴³*Ibid.*, 2.

⁴⁴ Kristina Wong, "Iranian Ship Convoy Moves Toward Yemen, Alarming US Officials." *The Hill*, 17 Apr 2015, http://thehill.com/policy/defense/239295-us-officials-concerned-about-iranian-convoy-headed-towards-yemen.

⁴⁵Office of Naval Intelligence, Iran's Naval Forces: From Guerilla Warfare..., 22.

sea.⁴⁶ However, IRIN and IRGCN Yono midget submarines could operate in coastal waters to lay mines or deliver special operations divers against a threat.⁴⁷ As a last resort, IRGCN fast attack boats will be hiding along the plethora of small islands of the Persian Gulf, prepared to conduct hit and run swarm attacks.⁴⁸ Since every conflict situation is unique, it is not possible to know whether Iran would be successful in repelling a threat through the above strategy. Notwithstanding, if Iran's navy could succeed in causing even minor damage to an invading force, it might minimize the enemy's will to sustain its efforts.

In the absence of open hostilities or imminent threats to national security, sea denial can incorporate constabulary roles. Specifically, a state can utilize its naval assets to monitor and inspect coastal shipping and enforce its maritime sovereignty through maritime interdiction. This is defined as the denial of freedom of manoeuvre and the ability to conduct trade or replenishment of forces.⁴⁹ It is not the goal of this paper to discuss the legal basis upon which states conduct maritime interdiction. Therefore, it suffices to show that Iran is capable of denying the freedom of manoeuvre of other vessels using its naval assets. For example, in May 2015, IRGCN patrol boats boarded, seized, and diverted a Marshall Islands flagged vessel during a Strait of Hormuz transit.⁵⁰ The motives for this type of interdiction can be kept purposely ambiguous in order to maintain the attention of international news agencies and policy makers. Some possible aims include the declaration that the whole of the Strait of Hormuz is inside

⁴⁶Michael V. Rienzi, "Iran's Response to a U.S. Attack," Small Wars Journal, Small Wars Foundation (Feb 2012): 7. ⁴⁷*Ibid.*; Office of Naval Intelligence, *Iran's Naval Forces: From Guerilla Warfare...*, 18.

⁴⁹Department of National Defence, MCP 1 Naval Doctrine..., 6.

⁵⁰Christopher Harress, "Iran's Revolutionary Guard, Not Navy, Responsible For Seizing Cargo Ship In The Strait Of Hormuz." International Business Times, 28 Apr 2015, http://www.ibtimes.com/irans-revolutionary-guardnot-navy-responsible-seizing-cargo-ship-strait-hormuz-1900338.

Iranian territory and vessels passing through are therefore under its jurisdiction. Regardless, it demonstrates Iran's capacity to influence the regional maritime environment.

The use of Iran's hybrid naval forces to conduct sea denial and power projection reflects its perceived role as a critical regional power. As such, it sees "its future hinging on its ability to project naval power far beyond its immediate neighborhood."⁵¹ As previously mentioned, the IRIN is Iran's strategic force. It is used as a political tool in the regime's arsenal in order to capture the focus of external actors, including regional states and the international media. In demonstrating the power projection capabilities and reach of the IRIN, Iran intends to defy and deter competing naval powers in the region, while exaggerating its own naval capabilities by deceiving on the real state of its warfighting assets.⁵² Herein lays the duality of Iran's hybrid navy. Conventional assets demonstrate its reach through foreign port visits, counter piracy patrols, maritime interdiction and naval exercises. Concurrently, asymmetric tactics such as small boat swarming operations and naval mining threats seek to defy and deter external influence within Iran's immediate coastal areas. The sum of this hybrid naval strategy appears to be a show of Iran's credible maritime security force.⁵³

Without direct conflict or repulsion of an attack, measuring the success and credibility of Iran's Navy is difficult. However, the mere fact that countless articles, studies, and US naval exercises are based on Iranian opposition can at least serve as evidence of the latter's influence. Moreover, Western studies conclude that the future outlook for Iran's naval power is based on continued expansion. Indeed, expanded numbers of surface ships and submarines are envisioned through a policy of self-sufficiency. As such, there is an active investment in the domestic

⁵¹Himes, « Iran's Maritime Evolution..., 2.

⁵²Arasli, "Obsolete Weapons, Unconventional Tactics, and Martyrdom Zeal..., 26.

⁵³Himes, « Iran's Maritime Evolution..., 4.

production of naval assets, including the manufacturing of more advanced weapons.⁵⁴ Yet, these same studies also conclude that increased naval capabilities will not necessarily lead to changes in strategy. As such, flexibility, initiative, and command decentralization will continue to be important facets of Iran's naval doctrine. More importantly, these same qualities highlight an important distinction between Iranian and Western navies. Unlike the West, Iran's navy is neither constrained by "rigid doctrinal principles nor by a highly centralized decision-making apparatus that offers no latitude for independent thinking."⁵⁵ Perhaps this is one of the key takeaways for any weak state in its naval strategy. While it is neither likely nor possible for a democratic state to adopt complete command decentralization due to the need for public accountability, perhaps a less rigid approach can be developed. Technological advancements in live data streaming have meant that central commands are capable of immediate situational access. However, these same technologies have sometimes constrained the decision-making capabilities of commanders at sea. Perhaps in order to combat the unpredictable asymmetric capabilities of Iran's Navy, Western powers need a return to flexibility, initiative and a move away from rigid doctrinal practices.

CONCLUSION

In mid-2002, the US Armed Forces conducted a major exercise called Millennium Challenge 2002. Its goal was to test the employment of large conventional forces in a seaborne invasion against a weaker opponent with only asymmetric capabilities. The results were unexpected for top US military brass. "In the first few days of the exercise, using surprise and unorthodox tactics, most of the US expeditionary fleet was sunk in the Persian Gulf, bringing the

⁵⁴Office of Naval Intelligence, Iran's Naval Forces: From Guerilla Warfare..., 24-25.

⁵⁵Connell, *Iranian Decision Making*..., 35.

US assault to a halt.⁵⁶ These outcomes underlined the lesson that a technologically superior military force cannot allow hubris to cloud decision-making and action nor to discount the inferior enemy.

Iran recognizes that it will not be able to defeat advanced and massive Western naval fleets through conventional means in the near to medium term. However, incorporating "mosaic" defence into the maritime environment is an attempt to even the battlefield until it can increase its cache of conventional assets. Submarines, naval mines, anti-ship missiles, and fast patrol boats are not purely asymmetric resources. In fact, most conventional naval powers possess some if not all of these, in their respective maritime arsenals. Rather, it is the ways in which they are employed by Iran's navy that labels them asymmetric. Yet, concurrently, the Iranian Navy continues to pursue regional influence through conventional means, including the demonstration of its power projection capabilities upon its neighbours. This amalgamation of conventional and irregular strategies supports the branding of Iran's hybrid maritime force. The inherent flexibility enables deception and deterrence against a seaborne attack while increasing Iran's relative power.

For conventional navies, an analysis of Iran's hybrid tactics can provide insight into the development of counter strategy. Primarily, other than in circumstances of open conflict, Western navies should maintain restraint when confronted by either IRIN or IRGCN naval units, especially fast patrol boats. These frequently swarm foreign warships inside the Persian Gulf, including HMCS *Toronto* in August 2013 during a combined exercise with a US Coast Guard vessel.⁵⁷ This is also a common occurrence during US Carrier Strike Group transits of the Strait

http://www.theguardian.com/world/2002/sep/06/usa.iraq. Wikipedia was also utilized for background information.

⁵⁶Julian Borger, "Wake-up Call," *The Guardian*, 6 Sep 2002,

of Hormuz. Perhaps the IRGCN is attempting to provoke an escalatory response from the US Navy. An overly aggressive response might discredit the US in the eyes of the global media and could be used to increase Iran's sway. Furthermore, technologically superior naval forces must not allow overconfidence to breed complacency into maritime operations. They must remain vigilant when in or near the Middle East region since the martyrdom zeal of the Iranian naval warrior cannot be discounted.

Some of the lessons of this paper can be pertinent to any weak or medium state wishing to increase its relative naval power. In order to deter or defeat a superior enemy, flexibility is required. This translates into the flexibility to act or engage an objective at the correct time and place and with the appropriate amount of resources. Moreover, it is knowing when and how to improvise. Flexibility enables initiative and ingenuity so as not to be enslaved by doctrine. A conventionally weaker navy must strike at the enemy's will and hubris. Iran's naval strategy relies on the decentralization of physical resources and command and control structures. For the majority of democratic states, decentralizing command and control decision-making is simply untenable. As technological improvements in communications systems have reached the point of instantaneous information sharing, it has meant that military and political leaders can be held accountable for even the minutest indiscretions. As such, leaders at all levels are reluctant to allow initiative from subordinate levels for fear of paying the consequences of potential mistakes. Notwithstanding, effort must be made to counter this trend in order for the limited naval resources to be employed optimally.

⁵⁷This paper's author, LCdr D.M. Layton, was onboard HMCS *Toronto* and visually observed four small IRGCN patrol boats swarm the two vessels and then depart back toward the Iranian coast. While the intentions remained uncertain, it is suggested that IRGCN units are there as a show of force, to maintain situational awareness or to coerce a more hostile escalatory response from Western naval units that could favour Iran in the international media.

While Canada's doctrine and ideology could not be more diametrically opposed to Iran's, there exist similarities pertinent to its navy. As Canada's Arctic region becomes further developed, its sovereignty and security, especially in the maritime environment, may be increasingly contested. Canada's Arctic shares many geographical similarities with Iran. These include a multitude of small islands and shallow water depths that make for good concealment of small patrol boats along the arctic shoreline. A hybrid naval force could include a combination of smaller and faster patrol boats, midget submarines that can navigate in shallow depths, and conventional submarines and surface ships to conduct maritime interdiction and power projection. Most importantly, Canada's naval forces will require new forward operating bases in the arctic region in order to employ these resources. Without a serious commitment to the development of new infrastructure, Canada's arctic influence may someday disappear at the hands of a superior naval power.

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