LIBERTY UNIVERSITY

THE EVOLUTION OF THE ARTESH: 1980 TO PRESENT

A thesis submitted in partial fulfillment of the requirements

For the degree of Master of Science in International Relations

By

Ryan C. Touchstone

March 2023

Abstract

Despite the large media coverage around Iran's military actions, the role of the Artesh in Iran's national security structure is often unmentioned. Looking at the evolution of the Artesh since the fall of the Shah of Iran, this study uses firsthand accounts, recent research, and governmental statements and reports to trace the Artesh's journey to present day. It examines several battlefield successes and failures during the Iran-Iraq War to gauge the ability of the Artesh to adjust in a wartime environment. These adjustments are mixed with some valuable lessons being implemented to later battles while other important lessons remained unapplied. It employs victory theory to the Artesh Navy's 2007 naval reforms, evaluating the congruence of the reforms with Iran's vision of naval warfare, and concludes that Iran's reforms are inline with its strategic goals at sea. The results of this study help shed light on the applications of the Artesh and Iran's abilities to exercise power using it outside the original post-Iran Iraq War intent and may support further study of this significant topic.

*Keywords:* Artesh, Iran-Iraq War, naval reforms, Islamic Republic of Iran Navy

**Contents**

**Chapter 1: Introduction**

Recent events globally and in the Middle East have increased the importance in understanding how Iran develops and deploys military forces. The evolution of the Iranian Artesh's strategies and tactics since 1980 is key for comprehending the ways Iran intends to use force. The Artesh's role since 1980 reflects strategic and tactical lessons learned from the Iran-Iraq War, namely the need for a more asymmetric-based, deterrent strategy to secure territorial integrity and the survival of the regime. The 2011 Arab Spring provided Iran with an opening to expand its power and influence in the Middle East, and to do so Iran is increasing its regional military operations compounded with an increasing importance of the Artesh and its role in Iran's military establishment[1]. The first chapter of the thesis presents the background, the problem statement, significance, and methodology of the study. This chapter concludes by identifying the limitations and scope of the study.

Before moving to the background, definitions must be established to form a baseline. This study follows Department of Defense Joint Publication (JP) 1-02 Dictionary of Military and Associated Terms (Department of Defense, 2016). JP 1-02 defines doctrine as: "Fundamental principles by which the military forces or elements thereof guide their actions in support of national objectives. It is authoritative but requires judgement in application" (Department of Defense, 2016, p. 71). Strategy is "A prudent idea of set of ideas for employing the instruments of national power in a synchronized and integrated fashion to achieve theater, national, and/or multinational objectives" (Department of Defense, 2016, p. 227). The difference between strategy and doctrine comes down to application, strategy is the "what you do and why" whereas doctrine is "how you

---

[1] The Islamic Republic is engaged in various levels of military operations to support its pursuit for regional power. These operations are currently present in Iraq, Syria, Lebanon, Yemen, and the sea lanes of the Middle East.

do." Tactics are defined as "The employment and ordered arrangement of forces in relation to each other" (Department of Defense, 2016, p. 235). Tactics and doctrine are very similar in that they are both a "how," yet their difference lies in the level of application. Tactics are a more direct level e.g., when a force is in contact with an opposing force, in other words how engagements are executed to achieve strategic objectives assigned to a tactical unit (Sukman, 2020).

## *Background of the Study*

Since US President Donald Trump's 2018 withdrawal from the Joint Comprehensive Plan of Action (JCPOA) nuclear agreement between Iran and the P5+1 states, Tehran is more conscious of a potential confrontation over its nuclear program.[2] Iran in now engaging in an increasing 'gray zone' conflict with its competitors in the Middle East, namely Saudi Arabia, Israel, Turkey, and the United States.[3] More about the nature of Iran's gray zone conflict will be explained in Chapter 5.[4] Iran's rivalry with the United States and Saudi Arabia has escalated in the region from sanctions and tough diplomatic talk of the 1990s to present day attacks on US bases by Iranian proxies[5], direct Iranian attacks on Saudi oil facilities, disruption of Persian Gulf maritime traffic, and the

---

[2] P5+1 states are the permanent five members of the UN Security Council: Russia, China, France, UK, US and +1 Germany. These states conducted negotiations with Iran before signing the JCPOA.

[3] The gray zone strategy was made a household name after being initially deployed by Russian Chief of the General Staff Valery Gerasimov, known at the time as the "Gerasimov doctrine", after its successful achievements in operationalizing Russian foreign policy goals. Gray zone is the operational space between war and peace that is conducted, in most cases, below the threshold warranting the need for a conventional military response to an adversary's actions. These operations are typically intended to blur the lines between military and nonmilitary actions to still have tangible impacts on adversaries. Gray zone space involves competitive actions that create ambiguity between rival states through deniability and uncertainty about the nature of the conflict.

[4] For more on gray zone warfare see: Oliker, O. (2017). *Russian Influence and Unconventional Warfare Operations in the 'Grey Zone:' Lessons from Ukraine*. Center for Strategic and International Studies (CSIS); McCarthy, M., Moyer, M., & Venable, B. (2019). *DETERRING RUSSIA IN THE GRAY ZONE*. Strategic Studies Institute, US Army War College; Weissmann, M., Nilsson, N., & Palmertz, B. (2021). *Hybrid Warfare: Security and Asymmetric Conflict in International Relations*. I.B. Tauris; Eisenstadt, M. (2021). *Iran's Gray Zone Strategy*. PRISM, 77-97; Bunker, R. J., Dilegge, D., & Keshavarz, A. (2016). *Iranian and Hezbollah Hybrid Warfare Activities*. Small Wars Foundation.

[5] Iran has substantial influence over an increasing number of militant organizations and political parties. In Iraq alone, Iran holds influence over forty organizations. Aside from Iraq, it has developed influence networks in Palestinian territories, Bahrain, Saudi Arabia, Syria, Yemen, Kuwait, and Lebanon.

gradual increase of influence from Iran-aligned militias and political parties.[6] There is also Iran's rivalry with Israel, which Israeli commentators have dubbed the "shadow war", taking place in Syria and Lebanon in addition to Iran's support to Palestinian terrorist organizations. Over the last few years this low-level conflict has moved into the maritime domain with Israel and Iran both conducting operations against each other in the Red Sea and Persian Gulf. Moreover, there is an increasing geopolitical competition with Turkey for influence in Central Asia, the South Caucasus, and Kurdish populated areas of Syria and Iraq. To meet the challenges of a fast-changing strategic environment, these encounters have caused Iran to expand its footprint by developing new capabilities to match their adversaries. Since the end of the Iran-Iraq War these changes have greatly impacted the Artesh as Iran seeks to further integrate the former Shah's military force into the Islamic Republic's national security strategy.

The Islamic Republic of Iran's bifurcated military structure was forged during the Iran-Iraq War. The Islamic Revolutionary Guard Corps (IRGC) and the Artesh fought side by side against Saddam's Iraq even as the leadership of both institutions fought each other over strategy, tactics, and direction of the war (Razoux, 2015). Because of its institutional legacy as favorites under the Shah, the Artesh was gradually displaced by the IRGC at the behest of Iran's new revolutionary government. This change secured the Artesh's loss of political and security influence

---

[6] For reading Iran's development of influence networks see: Martini, J., Tabatabai, A. M., & Wasser, B. (2019). *The Iran Threat Network*. Rand Corporation. For reading on Iran's regional influence see: Garduno Garcia, M. (2022). *Iran's Influence on Countries in the MENA Region*. European Institute of the Mediterranean. For reading on Iran's proxy networks see: Loft, P. (2022). *Iran's Influence in the Middle East*. London: House of Commons Library; IISS. (2020). *Iran's Networks of Influence in the Middle East*. Routledge; Ellis, D., Sadri, H., & Diane, Z. (2020). *Iranian Proxy Groups in Iraq, Syria, and Yemen: A Principal-Agent Comparative Analysis*. Joint Special Operations University Press. (2020)

in the wake of Ayatollah Khomeini's death and the evolution that brought to Iran's political system.[7] The Artesh's loss of influence and power remained until recently.

Since 2000 the Artesh began initiating changes in its strategies and tactics that have impacted its organization and capabilities. Iran's military leadership, starting with Supreme Leader Ali Khamenei, began developing the Artesh to be more flexible and hold greater responsibilities. In 2003 the Islamic Republic of Iran Ground Forces (IRIGF), its conventional army, commenced the development of guerrilla operations and training. The development of a guerrilla strategy fostered further reforms with the introduction of independent brigades and a rapid response force in 2005 (Cordesman & Kleiber, 2007). Starting in 2007 Iran recalibrated its entire naval strategy. This recalibration elevated the Islamic Republic of Iran Navy (IRIN) to greater importance and investment. Through this change the IRIN and IRGC Navy split their geographic operating areas and the IRIN gained a new goal of power projecting (Department of Defense, 2012).[8] These changes also certified the IRIN as Iran's first line of defense in its anti-access/area-denial (A2/AD) naval strategy (TRADOC G-2, 2016). In the air, Iran proved their capabilities during the Iran-Iraq War against a far better equipped Iraqi Air Force, but since the war this branch has remained dormant.[9]

The Islamic Republic of Iran Air Force (IRIAF) demonstrated a high degree of planning and competence with complex operations during the Iran-Iraq War, like the strike on Iraq's H-3

---

[7] Shortly after the war Supreme Leader Ayatollah Khomeini passed away and led to a power struggle between Akbar Hashemi Rafsanjani and Ali Khamenei. From here a new constitution was formed and the IRGC quickly began to assert itself in Iran's political system culminating in its almost total dominance of the Mejlis (Iran's parliament) today (Vatanka, 2021) (Alam Rizvi, 2012) (Bohandy, et al., 2009).

[8] Power projection "Power projection is the ability to conduct military operations at long distances from bases of operations or conduct them within a much shorter time span." (Rosen, Power Projection and Military Innovation, 2019)

[9] Only "aces" of the war where Iranian pilots, with three pilots logging more than eight victories. Fazlollah Javidnia, Jalil Zandi, and Fereidoun Ali-Mazandarani are credited with twelve, eleven, and nine victories (Razoux, 2015) (Bishop & Cooper, 2000).

base and its nuclear facilities.[10] During the early years of the revolution, the IRIAF was heavily purged, and the government's trust was greatly diminished following a largely air force-led attempted coup known as the Nojeh Plot (Hashim A. S., 2012). In the war with Iraq, Iran struggled to purchase replacement parts for its aircraft. Before leaving the country US advisors sabotaged of the computer cataloging program for spare parts and supplies, and coupled with massive Western sanctions, Iran has struggled to find parts for its American made aircraft ever since (Razoux, 2015). After the war ended, Iran started developing drones and missile systems as a cheaper asymmetric alternative to a conventional air superiority doctrine based on extremely expensive jet aircraft.

The IRIAF and IRGC possesses some of the most advanced drone capabilities in the region. The most important evolution of the Artesh's air capabilities came with the establishment of a new separate branch of the Artesh in 2008, the Islamic Republic of Iran Air Defense Force (IRIADF). This branch operates radar systems and surface-to-air missile (SAM) systems around the country. Combining lessons learned from the IIW and the United States invasions of Iraq and Afghanistan, Iran understood it needs a way to defend its cities, infrastructure, and command and control (C2) infrastructure from air strikes.[11] Like the IRIN, the Air Defense Forces are the frontline air-element in Iran's A2/AD strategy through a point-based defense of key sites throughout the country. Though this branch lacks combat experience, Iran invests heavily in the weapon and electronic systems employed by the IRIADF and its IRGC counterpart (Ajili & Rouhi, 2019). Iran expends much of its military research and development (R&D) and propaganda efforts demonstrating its

---

[10] The raid on H-3 was a deep strike into Iraqi territory that used in-flight refueling and complex deception operations to ensure the safe journey and return from deep inside Iraqi territory. This air raid is considered one of the Iranian air forces most complex operations (Maj. Bergquist, 1988) (Bishop & Cooper, 2000) (Razoux, 2015).
[11] During the Iran-Iraq War, Iraq conducted long-range strikes against Iran's cities and infrastructure using SCUD missiles and aircraft. Iraq's limited strike ability still greatly impacted Iran's economic production and the populations sense of safety (Razoux, 2015) (Ward, 2014). Iran was further alarmed during the Gulf War and the 2003 Iraqi Invasion when the Coalition air forces devastated Saddam's command and control structure.

air-defense systems and missile capabilities. Over the decades Iran has acquired Russian and Chinese air-defense systems and developed a third version of their own 3$^{rd}$ Khordad SAM system, the Bavar 373 SAM system, Mersad 16 SAM system, and the Qadir radar system (Binnie, 2022) (Operations Envrionment Data Integration Network, 2023). Iran's military evolution and its technical expertise presents a new phase in its challenge to the United States and its partners in the region. For the US, Israel, and other concerned parties, this new phase paired with Iran's expanding regional hegemony and its nascent nuclear program creates a sense of urgency in the need to counter and contain Iran.

In the Syrian Civil War, war against ISIS in Iraq, and the Yemeni Civil War, forces of the Artesh are operating and supporting various operations across the Middle East. Artesh operational expansion can be seen in all of Iran's conflicts from naval operations off the coast of Yemen and Syria, the deployment of special forces in Syria, to cross-border raids in Iraqi Kurdistan.[12] The 2011 Arab Spring increased the space Iran needed to expand its footprint across the region. Wars in Syria, Iraq, and Yemen further opened a door for Iran to send military forces abroad. In the last decade the Middle East witnessed the spread of Iranian forces to distant ramparts, increasing tensions between Iran and its regional competitors like Saudi Arabia, Israel, and Turkiye. While such newfound regional influence under the auspices of its 'gray zone' strategy has boosted Iran's military confidence across all institutional sectors of the military, the Artesh has clearly seen its institutional profile enhanced.

---

[12] The extent of information about the Artesh's operations in Syria is limited (Bucala, 2016)

*Problem Statement*

Iran is continuously viewed by the US government as a major threat to US interests, allies, and stability in the Middle East.[13] This study addresses the gap in literature about Iran and the Artesh and informs policymakers about the role and evolution of the Artesh's strategies and tactics in Iran's national security.[14] This thesis addresses the problem around understanding what reasons and how the Artesh's strategies and tactics evolved by evaluating the Artesh from a brief overview of it under the Shah, its role in the Iran-Iraq War, to its current manifestation. There is strong literature addressing Iran's overall national security strategy and how it learned lessons from the war with Iraq and the United States' invasions of Iraq and Afghanistan, but this literature rarely delves into the strategic and tactical aspects of the Artesh. Majority of the time scholars address the Artesh it is relegated to a footnote or a few paragraphs with little substantial detail.

Studying the Artesh addresses the literature gap and provides extensive history and details on why the Artesh is evolving, how its evolving, and what future directions it may pursue. It is not possible to fully understand Iran's national security strategy, and the scope of its means to destabilize the Middle East without understanding the role of the Artesh and its capabilities. Doing so shines a critical light on the forgotten journey of the Artesh since the fall of the Shah.

Before the 1979 Islamic Revolution in Iran, the Shah's military strength was considered a major foreign policy and military priority of the United States in containing the Soviets.[15] The then

---

[13] A small example is during Senate Armed Services Committee hearings on US Military posture CENTCOM Commander General Joseph L. Votel mentioned Iran 43 times in 2017, 78 times in 2018, 54 times in 2019. CENTCOM Command General Kenneth McKenzie 33 times in 2021 and 66 times in 2022. (CENTCOM, 2022) (CENTCOM, 2021) (CENTCOM, 2019) (CENTCOM, 2018) (CENTCOM, 2017).

[14] The Artesh is often an afterthought because its perceived low stature in Iran's national security structure. After the Iran-Iraq War the government's focus on the Artesh was greatly reduced and replaced with greater significance on building up the IRGC.

[15] Twin Pillars strategy and significance US strategist placed on Iran in containing the USSRs southern flank.

foreign policy lens of the Cold War benefited the Shah greatly, Iran was able to gain access to the entire catalog of American military products[16]. Early in the Cold War, Henry Kissinger penned an article for *Foreign Affairs* and recognized the importance of Iran's geographic position (Kissinger, 1954). He additionally signaled the need of the United States to build military capacity in Iran.

> We thus might say that these two prerequisites of effective local action by the United States: indigenous governments of sufficient stability so that the Soviets can take over only by open aggression, and indigenous military forces capable of fighting a delaying actions…Of the countries around the Soviet periphery, only five possess insufficient forces to put op an initial defense: Iran, Afghanistan, Burma, Thailand and Indo-China. (Kissinger, 1954, p. 421).

Since Kissinger's 1954 article, this thinking dominated American military and foreign policy planners for the decades to come. But with the fall of the Shah and the rise of the IRGC over the Artesh in the final years of the Cold War, many forgot about Iran's other military. The focus on Iran shifted from building its military (the Artesh) under the Shah to its new revolutionary government's foreign policy and terrorist activity. Media, foreign policy opinionmakers, DC elites, and pentagon planners became infatuated with the IRGC and Iran's hostile activity, leading the Artesh to be left behind the in the conversations about Iran. Thus, a massive gap understanding Iran's military and national security emerged since the end of the IIW. Aside from filling a gap in literature, this thesis adds practical and comparative attributes for further use and study.

Practical attributes through insight for policymakers and Iran watchers about the Artesh's evolution from its golden age under the Shah, to taking a backseat to the IRGC during the Iran-Iraq War, to its recent modern-day resurgence in importance. It contributes to the study of military

---

[16] In 1968, Iran spent $600 million (values based on 1968 dollars) just for modernization of the military, by the end of President Johnson's administration in 1969, Iran was the United States' largest client (Parvin, 1968) (Ng, 2022). A year later National Security Decision Memorandum (NSDM) 92 placed a newfound significance on Iran and Nixon would transform the military relationship between the US and Iran (National Security Council, 1970). Between 1971 and 1977 Iran's annual budget grew from $8 billion to $48 billion and so did its arms purchases (Amanat, 2017, p. 620). Iran's shopping spree in the United States was reaching epic proportion, by 1972 Iran purchased $3.5 billion in military hardware, to $5.17 billion in 1975 (Ng, 2022). By 1978 Iran would spend a total of $9.5 billion dollars on military expenditures (Gharehbaghian, 1987). All dollar figures are based on the year they correspond with.

evolution and the field of comparative politics by organizing and applying theories to further study aspects of Iran's military culture. The thesis conducts two forms of comparison, first, comparing Iran's applications of the Artesh to its neighbors, and second comparing the previous governments development of the Artesh to the current Islamic Republics development of the Artesh. Aside from exploring the qualitative applications of non-standard comparative politics, the thesis organizes and adds information and new questions that may help advance future research on Iran's military strategy, doctrine, and culture.[17]

### *Research Questions*

After the fall of the Shah and the initiation of the Iraq-Iran War, the Artesh played a significant role in the campaigns against Iraq. Since Iran's war with Iraq, the United States has significantly increased its presence in the region over multiple conflicts. Iran has also expanded its military activity to counter the influence of the United States and the Arab monarchies. It has not been afraid to get involved in different conflicts throughout the region. The regional situation raises questions about the historical influences that have impacted the Artesh. How have regional conflicts altered its strategy and tactics and how has its military relations with foreign powers evolved since the Iran-Iraq War? In what ways has Iran's leadership and strategic culture effected the Artesh's organization, strategies, and tactics? Practically, how can this analysis help policymakers counter Iranian military threats in the region and surrounding areas?

---

[17] The comparison of Iran's armed forces and military strategy to other regional forces lacks study and focus from scholars. Cordesman and Yossef identify this and attempt to alleviate this gap in literature themselves (Al-Rodhan & Cordesman, 2006) (Yossef, 2021)

*Methodology*

First case is of the Artesh during the Iran-Iraq War (IIW) in the naval domain. Second is an assessment of the Artesh during the IIW in land warfare. The Artesh was the strongest military force within Iran at the beginning of the Iran-Iraq War, by the end of the war it was the least powerful military entity within Iran both politically and militarily. Comparing early 1980s operations to late 1980s operations provide a comprehensive view of the impacts the war had on the Artesh. Comparing the success or failure of the Artesh's defensive and offensive operations will shows the starting point of the Artesh under the new government of the Islamic Republic. Next, the Artesh Navy's 2007 naval reforms are subject to analysis.

The Islamic Republic of Iran Navy (IRIN) remains one of Iran's most direct images of the Artesh. This force is the most trusted and invested in Artesh branch. Since 2007 the IRIN has greatly expanded operations, coming to sail all over the world. This was unheard of for a navy from Iran going all the way back to ancient Persia (Office of Naval Intelligence, 2017). IRIN remains one of the most well-equipped forces in the Persian Gulf and the only Persian Gulf country to possess submarines. Using victory theory, this case study on the IRIN shows how the Iranian navy has changed to a force at the tip of the spear of Iranian force projection around the world.

The questions around how Iran's miliary is developing and how it would fight is perplexing military planners, policymakers, and Iran watchers to this day.[18] During the revolution it was unclear what direction the armed forces of Iran would take. The fog of the revolution was so thick

---

[18] For a small sample see, McInnis, M. (2016). *Iran at War Understanding Why and How Tehran Uses Military Force.* Washington DC: American Enterprise Institute; (2017). *Iranian Concepts of Warfare.* Washington DC: American Enterprise Institute; Office of Naval Intelligence. (2017). *Iranian Naval Forces A Tale of Two Navies.* Washington DC: Office of Naval Intelligence; Vatanka, A. (2017, December). *The Trajectory of the Iranian Military.* MES Insights, 8(6); Ward, S. R. (2005). *The Continuing Evolution of Iran's Military Doctrine.* Middle East Journal, 559-576.

that both the Israelis and Americans attempted to keep some level of relationship with the Islamic Republic as they did with Imperial Iran (Byrne & Byrne, 2022) (Ward, 2014). Since then, the bifurcated military of Iran has engaged in conflict against both Israel and the United States. With the American wars in the Middle East since 1990, Iran has attempted to adapt the Artesh to counter its national security challenges.

The methodology of this study applies two theories to analyze the evolution of the Artesh since 1980, institutional strategy model and victory theory. To assess the Iran-Iraq War, first-hand accounts like Anthony Cordesman, Iraqi Generals, and recorded meetings among Saddam's high command are utilized. In case study 1, Iran's operations during the Iran-Iraq War are under the lens of the institutional strategy model. This model provides answers to how the Artesh evolved during wartime and in what aspects the evolutions occurred, and how successful where these changes. Tracing the Artesh's institutional strategy throughout the war provides a holistic lens for analyzing every facet of Iran's understanding of the different levels of war.

Another lens for studying the Artesh is victory theory, specifically Gallo's application of this concept. Victory theory asks questions that ascertains how a military force makes two assumptions, the vision of war and the nature of war. These two assumptions show how a force views the characteristics of war and the vision for how war will be conducted for success (Gallo, 2018). This theory is effective for understanding how a military evolves during peacetime and what ideas it makes about its own doctrine in addition to non-military factors contributing to these potential changes.

Identifying what aspects of the strategy and tactics the Artesh are subject to uncovers the story of the Artesh since 1980. After the revolution it was ambiguous the direction the armed forces of Iran would head. The fog of the revolution in Iran was so unclear that both the Israelis and

Americans attempted to keep some level of relationship with the Islamic Republic as they did with Imperial Iran (Byrne & Byrne, 2022) (Ward, 2014). Since then, the bifurcated military of Iran has engaged in conflict against both Israel and the United States. With the American wars in the Middle East since 1990, Iran has attempted to adapt the Artesh to counter its national security challenges. For the Artesh, this means different levels of strategies and tactics either changed or stabilized. For policymakers and military planners, alike, assessing the directions, reasons, and outcomes of the strategic and tactical continuities and changes of the Artesh provides better understanding into the opaque Iranian national security establishment.

The literature for this study consists of academic, media, governmental, unclassified, and think tank assessments that answer the research question.[19] The inclusion of non-peer-reviewed books supplies valuable information about the Iran-Iraq War and Iran's actions during the US invasions of Iraq and Afghanistan.[20] Two major obstacles limited the researcher to rely heavily on online sources and databases. First, the Coronavirus pandemic and the policies of distancing and building closures make online research important. Second, researching Iran's military by contacting current and former Iranian military personnel it extremely difficult due to Iran's high levels of censorship and the secretive nature of Iran's military information.

*Challenges*

Accurate publicly available information is the foremost challenge when attempting to evaluate the Artesh and Iran's military. Many of the scholarly assessments about the nature of Iran's strategy and tactics derive from statements by its military's leadership, interviews, and a

---

[19] The lack of attention granted to the Artesh by scholars, required the incorporation of non-peer-reviewed articles by think tanks like the Jamestown Foundation and the American Enterprise Institute.

[20] Cordesman and Wager's *The Lessons of Modern War Volume II* includes visits to IIW battlefields during the time of the war and interviews with military personnel from both sides.

few examples of Iran's forces on the battlefield post-IIW. These challenges make deep evaluation of the Artesh more difficult. This lack of Iranian government information makes assessing Iran's military budget, technological capabilities, order of battle, and leadership dynamics challenging.

A major issue of contention is finding accurate data or scholarly consensus regarding Iran's military budget. With the high number of sanctions and lackluster economy, Iran seemingly lacks the resources to provide for a large military budget like the Gulf kingdoms. Though Iran lacks these resources, they possess a much larger number of military personnel than the Gulf states (Farzanegan, 2012). Like most major militaries in the world there are hidden budgets, often called black budgets, that are used for covert military operations and not made public. In the case of Iran, the lack of publicly available information regarding a military budget goes beyond black budgets. With the vast number of economic institutions controlled by the IRGC and military aligned companies, knowing the price of military expenditures by Iran is almost impossible (Alam Rizvi, 2012). It is suspected that with the vast regime of international economic and military sanctions, Iran uses the military's role in the economy to fund military operations at home and abroad. The defense budget passed by the Majlis, Iran's general assembly, is without a doubt not the full picture.

Robert Czulda (2020) explains how consensus on the lack of sophistication in the Iranian defense industry remains strong, yet despite this Western media often repeats the claims found in Iranian press about the value of military products (Czulda, 2020). Czulda presents the reports in Iranian press as more of a deception and propaganda campaign than anything else. The tough restrictions on a free press coupled with the state-controlled media allows Iran to develop a web

of blusterous military propaganda that many experts cite as a source of Iran's national deterrent strategy toolbox (McInnis, 2017) (Saikal & Vestenskov, 2020).

Given the lack of publicly available information, press restrictions, and propaganda, calculating the Artesh's forces is difficult. Iran does not publish official military documents regarding organization and structure of units and their command. Another challenge is the lack of public maps and locations of Artesh facilities and forces. Many of the public estimates by scholars and Iran experts originate from open-source information and force distribution statements by Iranian generals and press. These issues also persist in the discussion of Iranian leadership dynamics.

Issues associated with the lack of publicly available information, information restrictions, inaccurate data, and propaganda, represents real challenges toward gaining accurate research regarding the Artesh. Finding correlation between data and information concerning the organization and leadership dynamics of the Artesh signifies the greatest challenge to research and requires careful analysis to overcome this issue. Finding scholarly consensus and trusted data sets presents an avenue incentive to probe for more accurate data. Understanding the difference between blusterous language and truthful statements from Iranian military leaders presents an additional minor challenge. These statements are often obviously overstated and hyperbole. Wading through these tasks exemplifies significant challenges, but not impossible for conducting accurate research on the Artesh and its evolution since 1980.

The growth of Iran's power in the Middle East is a direct security challenge for many regional states in addition to the United States and Europe. Study of the Artesh is necessary for seeing the complete picture of Iran's overall military capabilities and future manifestations. To help gain this information, the history and evolution of the Artesh during the formative years of

the Iran-Iraq War aids understanding its foundation within the security structure of the Islamic Republic. Additionally, studying the most important element of the Artesh, the navy, provides quality insight into the Artesh's development in the 21st century. Through examining these topics, research difficulties and synthesizing the information are challenges that need to be overcome. The first case study in this thesis analyzes Artesh operations during the Iran-Iraq War. Important information about the development of the Artesh in the early years in the manifestation of the Islamic Republic are revealed by following the strategic and tactical timeline of successful and unsuccessful operations from different phases of the war.

## Chapter 2: Iran-Iraq War Operational Analysis

This chapter examines two sets of Iranian operations from the Iran-Iraq War. These operations are assessed with the institutional strategy model, to form a paradigm that provides conclusions about the congruence of Iran's strategy and tactics and the effectiveness of their miliary planning. The roadmap of this section starts with an overview of the paradigm and the literature on this model. Second, this section is broken into two sets of Iranian military operations during the Iran-Iraq War. Aside from operational analysis, background of these military operations and the political settings are presented in each separate operation. The first set compares two naval operations, Operation Morvarid from the beginning of the war and the second is the US Operation Praying Mantis in the end of the war.

The second set of operations are land warfare actions from two different phases of the Iran-Iraq War, first being Iran's defense of Abadan during the Iraqi invasion and the second Iran's offensive operation capturing Al-Faw in 1986.[21] After assessing these operations, the last section

---

[21] This paper follows Cordesman and Wagner's seven phases of the war from *Lessons of Modern War Volume II: The Iran-Iraq War*; phase one: Iraq invades Iran 1980, phase two: Iran regains territory 1981-1982, phase three: Iran

draws conclusions about Iran's military planning competency and the evolution of the Artesh's strategies and tactics during the duration of the war.

"It is one thing to fight an army, and another thing to build the right one" (Sukman, 2020, p. 99). The Department of Defense uses three levels of war for measuring battlefield success. The first, is the strategic level where one or a group of states determine the security objectives and develop the necessary resources. The second, is the operational level where militaries plan, conduct, and sustain operations and military campaigns. Third, is the tactical level where militaries plan and execute battles to achieve military objectives (Sukman, 2020) (Joint Chiefs of Staff, 2017). Operational analysis of the Artesh during the Iran-Iraq War expands on the Department of Defense's three level evaluation.
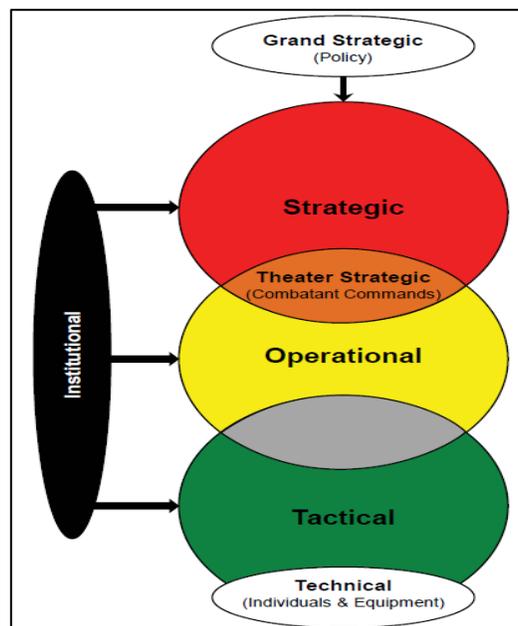


Figure 2.1 (Sukman, 2020)

---

invades Iraq June 1982-March 1984, phase four: war of attrition and war in the Gulf April 1984-1986, phase five: Iran's "final offensives" 1986-1987, phase six: war of attrition continues and the West enters the Gulf War: March 1987-December 1987, phase seven: Iraqi offensives and Western intervention forces a cease-fire: September 1987-March 1989 (Cordesman & Wagner, The Lessons of Modern War, 1990).

The institutional strategy model, in addition to the Pentagon's three levels of war, is a tool for assessing the development of material and nonmaterial military capabilities. The model accounts of training, industrial might, leadership, and planning. The institutional level of war incorporates development of important military aspects, including warfighting concepts, doctrine, weapons systems, military education, and training. This institutional level has a two-way, multi-tiered interaction with the strategic, operational, and tactical levels of war (see Figure 2.1).[22] Applying the institutional strategy model to the Artesh reveals how it evolved from its pre-1979 Shah-era institutional strategy model to an Islamic Republic-led institutional strategy. This model of analysis allows for a holistic view of the Artesh's evolution during times of war. Evolving during war is a risky yet required art to best counter an adversary's advantages and to use their weaknesses for victory.

### *Operational Analysis 1: Naval Warfare - Operation Morvarid*

This section follows two important naval operations that greatly impacted Iran's war effort. First is Operation Morvarid, a joint Artesh operation encompassing, air, sea, and special operations elements. This operation's aim was to cripple Iraq's oil exporting capability and to blockade its access to the Persian Gulf.[23] The Iran-Iraq War is notoriously noted for its lack of effective join-operations and maneuver warfare (Cordesman & Wagner, 1990) (Ward, 2014) (Razoux, 2015) (Zabih, 1988). The context for Operation Morvarid begins with the very first weeks of Iraq's invasion of Iran. In September 1980 the force posture of each country was dramatically different,

---

[22] Figure 2.1 shows these interactions in addition to how the strategic level drives the operational level that drives the tactical level, all these levels are consistently impacted by the institutional level of war (Sukman, 2020).
[23] Assessing Operation Morvarid is especially interesting because of the joint-operational nature of the Artesh's plan.

Iraq had 12 division spread along the border compared to Iran's 4 under-strength divisions (Cordesman & Wagner, 1990).[24]

On the 22nd of September 1980, Iraqi forces rolled into Iran through four points creating a 700 kilometer-long front (Cordesman & Wagner, 1990). Iran was completely discombobulated from the ground-level up, with massive troop desertions over the prior months and a general staff deal with revolutionary government infighting. The Artesh in this period has lost most of its generals and a large percentage of the officer corps was purged by Khomeini's revolution.[25] The institutions of the Artesh and the central government failed to adequately prepare for a possible confrontation with Iraq and to properly mobilize the Artesh.[26] Iraq on the other hand, had effectively developed an appropriate force posture and armed its divisions with top line soviet weapons. Iraq opened its attack with a massive air assault aiming to reproduce Israel's attack on the Arabs in 1967.[27]

This air assault had little impact on the Artesh Air Force and the Artesh Air Force would quickly impose dominance in the skies against Iraq.[28] The IRIAF quickly retaliated from Iraq's initial air attack on 23 September 1980 and launched sorties against the Iraqi port of al-Faw and

---

[24] Days before Iraq's invasion, the United States National Security Council issues an Alert Memorandum warning of the possible outbreak of full-scale hostilities between Iran and Iraq (Byrne & Byrne, 2022, pp. 66-68). The US was worried that if Iraq chose to invade Khuzestan this would bog down into a protracted conflict that would greatly impact the flow of oil in the Persian Gulf (Byrne & Byrne, 2022, p. 67).

[25] An estimated 140,000 Iranian military personnel deserted during the revolution. Another 12,000 or so officers and NCOs were purged by revolutionary courts. (Foreign Broadcast Information Service, Otcober 15 1980).

[26] The infighting between secular revolutionary elements and religious revolutionary elements presented a common theme that would play itself out over the 8 years of war with Iraq. Iran would face two major infighting obstacles throughout the war, one between senior political leaders and two, between the Artesh and IRGC. The secular revolutionaries would eventually find themselves purged from the government and replaced with clergy after the first year of war.

[27] The Islamic Republic inherited Shah-developed airfields that followed the standards of American military air bases; jets stored in bunkers and dispersed throughout the base to reduce the risk of damage during an assault (Maj. Bergquist, 1988).

[28] From October to December the Islamic Republic of Iran Air Force (IRIAF) shot down roughly forty Iraqi aircraft (Razoux, 2015) (Bishop & Cooper, 2004).

the principal naval base at Umm Qasr. Iraqi counterattacked with strikes at Bushehr naval base sinking three patrol boats and one PF-103 corvette. The escalation in the northern Gulf forced Iranian President Bani-Sadr to give an international address stating Iran would not obstruct the Strait of Hormuz but Iran would blockade Iraqi ports and disrupt Iraqi oil shipments (Razoux, 2015). The Artesh proceeded to mine the Shatt al-Arab using Sea King helicopters and the IRIAF sunk multiple cargo ships in the Shatt al-Arab. The Artesh demonstrated competent strategy and planning a month before Operation Morvarid by probing the Iraqi Navy's resolve, strength, and aggressiveness. On October 28 and 31, the IRIN sent three La Combattante II patrol boats to attack al-Faw. On both days Iran's naval vessels were escorted by radar bearing Sea King helicopters.

Iraq countered with shelling the oil refinery in Abadan, Iran. This attack crushed Iran's refining capacity and forced it to import gas. Over the first month of the war, both countries targeted oil-related infrastructure, demonstrating a strategy of exhaustion. To erode their adversary's resolve Iran and Iraq each attacked the funding sources of their enemy's war machine. By destroying Kohr al-Amaya and Mina al-Bakr oil terminals, Iraq would have no offshore terminals for loading commercial tanker vessels. For the first time in the war Iran would launch an inter-Artesh operation. This operation called for army, navy, and air force elements. Iran would show the Iraqi's the power of combined arms operations.

The Iraqi Navy, led by army General al-Janabi, compared to the Artesh Navy was less advanced in technology and less skilled.[29] Iraq's Navy was outfitted with Soviet Osa-class I and II missile boats and P-6 torpedo boats while Iran was outfit with more modern ships, the La Combattante II missile boats (Farrokh, 2011). The IRIN was under command of Captain Bahram

---

[29] Before the war started both navies were involved in low level skirmishes. In these skirmishes Iraqi sailors demonstrated lack of discipline, initially aggressive tactics until their adversary returned fire and then Iraqi sailors fled the area of attack back to the safety of their naval base in Umm Qasr (Cordesman & Wagner, 1990).

Afzali, Afzali and his commanders dusted off a US-consulted contingency plan that was designed to cripple Iraq's access to the Persian Gulf[30].

On the night of 27 November 1980 Tehran gave the greenlight and an Iranian EC-130 electronic warfare (EW) plane-initiated radar jamming procedures towards Iraq. Iraq's two oil terminals held SAM systems and radar to provide cover and early warning for Iraq's air force of a possible incursion into their air space. Unable to counter Iran's EW, Iraq could not detect Artesh naval commandos, carried by Artesh Army Chinook helicopters escorted by Army Cobra helicopters.[31] After a short fight Artesh commandos took over the platforms, at this point the Artesh operation called for commando reinforcements to arrive.

Task Force 421, consisting of six hovercrafts and two La Combattante II missile boats, converged on the oil platforms. From here the commandos would lay explosives on the platforms, board the hovercrafts and return to their bases. In a matter of hours, the Artesh's joint operation was able to completely eliminate Iraq's ability to export oil through the Persian Gulf. But the impressive strategy and true tactical skill lay in the second phase of the operation. From here the IRIN would bait the Iraqi Navy into a fight in an attempt to cripple any operational ability it had left.

The *Joshan* and *Paykan*, the two La Combattante II missile boats from Task Force 421, positioned themselves in the mouth of the Shatt al-Arab. On reserve was another 3 missile boats and two PF-103 corvettes if one of the Task Force 421 members where sunk. The IRIN was flexing its strength and technological superiority against the Iraqi Navy, evading the Iraqi missile boats by

---

[30] Afzali would later be arrested and executed in 1984 or 1985, likely for having different political opinions than those favored by the regime in Tehran (Abdorrahman Boroumand Center for Human Rights in Iran, n.d.).

[31] Iranian Cobra pilots have enough tactical skill to dawn night-vision goggles to provide nighttime fire support for the commandos (Razoux, 2015).

hiding their signatures in the smoke and wreckage of the two terminals. Iraqi radars picked up the ships while they sat in the Shatt al-Arab and responded by sending most available ships after them. Four Iraqi P-6 torpedo boats and 5 Osa missile boats left their base in Umm Qasr to meet the two Iranian vessels. It is important to note that Iran's ships where not only technologically superior compared to their Iraqi counterparts, but the armaments it used gave Iran a significant leg up.

Iraqi Osa missile boats were outfitted with Soviet-made SS-N-2 Styx ship-launched anti-ship missiles. These missiles had an operational range of 40 kilometers. Iran was equipped with Harpoon missiles, a US-manufactured over-the-horizon anti-ship missile with an operational range of 90 kilometers. Iraqi boats also only had a 30mm gun, whereas IRIN boats were armed with a 76mm aft gun and a 40mm rear gun (Woods, Murray, Nathan, Laila, & Venegas, 2011, pp. 155-158). This confrontation during Operation Morvarid not only highlighted the technological differences between Soviet and American missile systems but also Iraq's Soviet-trained boat crews compared to Iran's American-trained boat crews. Iran's crews demonstrated creativity and a more flexible, diffused command structure. These attributes paired with Iran's technological superiority provided an obvious gap in strategy that such an advantage in combat should have alerted Saddam and his generals.

Iraq's Navy, while more independent from the other Iraqi military branches, was commanded by an Army general at the start of the war. Iraqi military high command cared little for the Navy, and it often did not receive support from other branches, mostly due to the other branches lack of training at sea (Woods, Murray, Nathan, Laila, & Venegas, 2011). Iraq was clearly out trained and out planned in the naval arena. The inexperience at sea for Iraq and Iran's technological, tactical, and strategic advantage was evident in the losses Iraq took and especially in the way these losses were incurred.

Iraq's Air Force did not have training in attacking at sea. This lack of experience had dangerous consequences. During the *Joshan* and *Paykan's* hours long conceal and attack strategy against the Iraqi navy, the Iraqi Air Force dispatched two Su-22s. The Su-22s failed to hit the two Iranian boats and their training was so lacking that the *Paykan's* 76mm gun destroyed an Su-22 in the air. Shortly after, the Artesh Air Force appeared over the battle and a F-4 Phantom immediately destroyed an Iraqi P-6 torpedo boat.

Iran deployed multiple F-4s to attack sea-based targets while F-14 Tomcats provided radar coverage. This tactic paid off as the F-14s were able to intercept Iraqi Air Force MiG-23s. The cover from the F-14s allowed the F-4s to destroy another three Osa torpedo boats, though an Iraqi Osa boat had time to fire several SAM-7 MPADS (man-portable air-defense systems) downing one Iranian F-4 (Razoux, 2015). For the rest of the day, the IRIAF pounded Iraqi naval positions at al-Faw and other Iraqi ships in the area, sinking another handful. The naval blockade of Iraq was now solidly established. The Iraqi Navy would have little to no role for the rest of the war.

Iran's strategy was simple yet audacious; destroy Iraq's ability to export oil in the Persian Gulf, blockade Iraq's access to the Gulf, severely damage or destroy the Iraqi Navy, and strike a blow at Iraq for its invasion of Iran. Examining Operation Morvarid shows that when applied, the institutional strategy model proves the Artesh had adequately and strategically deployed its forces in the correct application and time to achieve strategic objectives.

The tactical level of Operation Morvarid demonstrated Iran's superior tactical capabilities at sea. The tactics used by the Artesh showed a level of complexity that would be lacking for most of the war in Iran's ground forces. The tactics chosen for Operation Morvarid's had depth and pre-
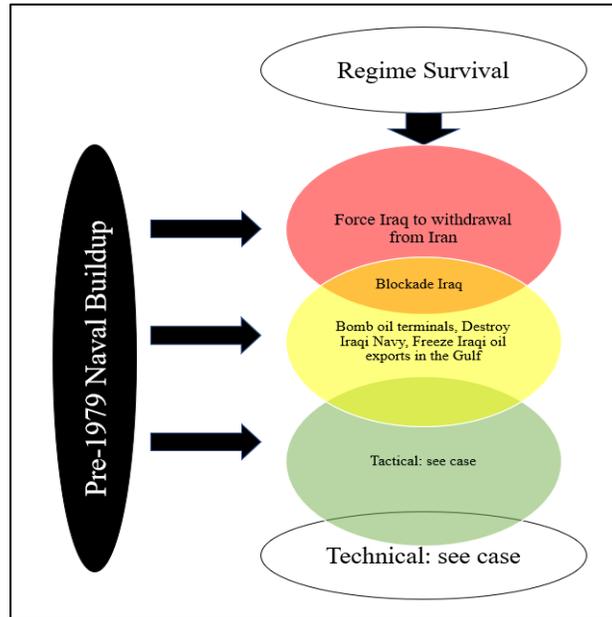


*Figure 2.2*

planning through reconnaissance and probing of Iraq's responses and resolve in the northern Persian Gulf. Aside from superior technical skills, the IRIN knew Iraq would take the bait and deploy their navy in large numbers after surprising them at the oil terminals and hiding the *Joshan* and *Paykan* in the burning wreckage. The Artesh used Iraq's impulsive and aggressive nature against them by baiting them to fight a superior force.

The Artesh's timing in deploying the air force made sure to catch the Iraqi Navy in the open. After weeks of probing Iraq's responses to incursions in Iraqi waters, the Artesh was able to correctly assess the lack of anti-ship skill from Iraq's Air Force. Iran had confidence their pilots would be able to strike Iraqi naval assets and take on Iraq's Air Force simultaneously through the proper application of F-4s and F-14s. The technical level of the institutional strategy model also affirmed the pre-1979 naval buildup.

Mentioned earlier in the analysis of Operation Morvarid was Iran's superior technological advantage with their missiles and boats. Under the Shah, Iran had access to the world's top military technology and a blank check. This made third world Iran the most advanced military in the region. Soviet supplied Iraq was unable to match the level of technology Iran's air force and navy possessed in 1980. The F-14 Tomcat was one of the most sophisticated weapons platforms on the planet and Iran's pilots outmatched their Iraqi counterparts in almost every way. Iran's pilots also had training in air-to-sea strikes. Iraq's pilots did not possess this level of tactical and technical skill and therefore was unable to provide the Iraqi Navy with proper air cover and support.

The institutional strategy of the Iran was superior to Iraq's in every way at sea and in the sky. This operation shows what the Artesh was capable of when planning, training, and the efficient combinations of force are applied against an adversary. Under the Shah, Iran never fully engaged in external operations on the scale of Operation Morvarid. This operation provides a starting point for future analysis on the ways the revolution and new Islamic Republic altered the Artesh. The institutional strategy model shows a high level of preparation and military competency in the Artesh's training doctrine and weapon systems acquisitions.[32]

The lessons from Operation Morvarid could not break the jockeying and infighting at the senior levels of Iran's government in Tehran. The senior political leadership was involved in a bitter internal struggle between the secular revolutionary forces, who tended to yield to more professional military advice, and the clerical revolutionary forces, who valued advice from an anti-anything-Shah point of view. Operation Morvarid's legacy is more so a bitter reminder of the

---

[32] When comparing the successfulness of this combined-arms operation with the strategies of the war, it becomes obvious that on some level the professionality of the Artesh was replaced with inexperienced and ideological decisionmakers.

looming strategic and operational failures of Iran's political elites to develop attainable goals matching with the correct application of force and technology available.

*Operational Analysis 1: Naval Warfare - Operation Praying Mantis*

In the late 1980s Iran was struggling to make any headway with endless offensives into southern Iraq. Tens of thousands of Iranian soldiers lost their lives in waves of assaults into staunchly fortified Iraqi positions. Iran stubbornly continued to attack Iraq and present its war strategy as an all or nothing vision of an absolute necessity to topple the Saddam regime and continue the Islamic Revolution across the Levant. Part of the propaganda against Saddam was harsh language towards the Arab kingdoms in the Gulf and their western backers, notably the United States, France, and the United Kingdom. Included in this language was the occasional threat from Iran to close the Strait of Hormuz to choke off the oil flowing to Western powers (Razoux, 2015) (Talmadge, 2008). The war eventually devolved to Iran and Iraq attacking commercial tankers transiting the Persian Gulf.

In July 1987, the United States agreed to escort Kuwaiti oil tankers through the Persian Gulf (Talmadge, 2008). A game of cat and mouse ensued over the next 8 months between American forces deployed in the Persian Gulf and Iran. The Artesh Navy became the face of Iran's confrontation against the United States. Iran had many possible avenues of attack against the United States Navy, but they chose a method of attack that allowed a degree of deniability.[33] Iran would mine certain commercial transit routes in the Persian Gulf. These aquatic mines were placed around Kuwait and the UAE, and to some degree of success. Iran was able to slow shipping to a

---

[33] Such a tactic would evolve into a staple of Iran's confrontation against the West. The beginning of Iran's gray zone strategy was born.

halt when a new mine field was discovered by American ships.[34] Back at the front, Iran was involved in relentless offensives attempting to take Basra. Operation Karbala 4 and Karbala 5 lasted through the last week of December 1986 to April 1987 (Zabih, 1988) (Murray & Woods, 2014).[35] These disastrous offensives by Iran, stretched their forces thin and cost them large amounts of resources. Nevertheless, Iran struggled to take advantage of opportunities from the Iraqi command's incompetence.

After punching through Iraqi lines to control land all the way from the border to the outskirts of Basra, Iran halted their advance. Winter set in and the large losses incurred by Iran would only yield them a few kilometers away from their overall objective, Basra. The weather soon became a factor and Iran would spend the rest of 1987 launching low level attacks and settling back into a war of attrition to wear down the Iraqi defenders around Basra. 1987 also impacted the "Tanker War" with 87' becoming the zenith of attacks on commercial tanker vessels (see Appendix A).[36]

---

[34] This increase in Iranian mining activities worried American military leaders and soon by July 1987 the US presence had increased to nine ships. In addition to these nine ships a US Navy battle group was stationed in the Arabian Sea and the USS Missouri battle group was on its way to the region (Wise, 2007).

[35] In these series of offensives Iran thrust their forces against a sophisticated and heavily fortified defensive line around the Basra area. Iran would suffer major losses and gain little strategic goals (Ward, 2014) (Murray & Woods, 2014).

[36] The US saw the possible fall of Basra and the increase in attacks on maritime commercial traffic in the Persian Gulf as a potential reshaping of the regional order in the Middle East (Federal Research Division Library of Congress, 2008).

Beginning on 23 July 1987 the US Navy commenced Operation Earnest Will (Gibson, 2010). In response to Operation Earnest Will's announcement, Iranian president (and future Supreme Leader) Ali Khamenei vowed that Iran would "strike a blow" against the United States for its alliance with Kuwait (Wise, 2007). US Navy ships started escorting Kuwait ships re-flagged as American vessels. The following day, re-flagged Kuwait Oil Company ship MV *Bridgeton* struck an underwater mine 32 kilometers west of Farsi Island (Kelley, 2007). The explosion was so powerful that a shockwave was felt on the USS *Kidd* and *Crommelin* (Wise, 2007, p. 71). Following this mining attack, the US Navy started Operation Prime Chance. Prime Change included all the vessels involved in Earnst Will in addition to two Navy SEAL platoons (Team 1



The newly reflagged *Bridgeton* gets under way. (PH2 Pixler, U.S. Navy photo)

*Figure 2.4 (US Navy)*

and Team 2, Special Boat Teams (Unit 11, 12, 13, 20, 24), 160th Special Operations Aviation Regiment, 174th Military Intelligence Company, 513th Military Intelligence Brigade, and 1st Battalion 2nd Marines (United States Special Operations Command, 2007) (Cordesman & Wagner, The Lessons of Modern War, 1990, pp. 574-575) (Razoux, 2015). Operation Prime Chance culminated in the *Iran Ajr* incident on 21 September 1987.

This situation was a key changing point for US policy towards Iran's behaviors in the Persian Gulf. The US Navy witnessed first-hand the planting of underwater mines by the Artesh Navy from the deck of a converted military landing craft. US Navy SEALs and special operation aviation units then interdicted, attacked, and took over the vessel, exposing to the world Iran's culpability in mining of commercial vessels in the Persian Gulf. Just a few months later Iran would strike back. October 1987, the French Navy discovered another minefield off the coast of Fujairah Emirate UAE, the following day Iran probed Saudi Arabian waters by sending fifty small IRGC gunboats right up to the Saudi Arabian maritime border. King Fahd and Minister of Defense Prince Sultan scrambled the Saudi Navy and dispatched twenty F-15 and Tornado fighter jets (Razoux, 2015). Days later 8 October 1987 three IRGC gunboats, escorted by an IRIN PF-103 class corvette attempted to attack the US Navy barge *Hercules*. The barge identified these joint IRGC-Artesh vessels and deployed three helicopters. Once the IRGC gunboats fired on the navy helicopters, the US Navy countered by sinking one and damaging the other gunboats (Wise, 2007) (Razoux, 2015). 16 October 1987, Iran attacked again. A silkworm missile was launched from Iranian occupied al-Faw striking the wheelhouse of Sea Isle City, a recently re-flagged Kuwait Oil Tanker Company ship. American crew members of the ship were wounded, this attack was a final straw for US President Ronald Reagan who ordered an immediate response (Razoux, 2015). The Iranians had forced Reagan's hand and furthered support for the White House's Persian Gulf policy.

On 19 October 1987, the US Navy commenced Operation Nimble Archer. This operation was a limited strike on Iranian oil platforms, the whole attack took about 85 minutes (Cordesman & Wagner, 1990). US Navy SEALS, four destroyers, two guided-missile cruisers, two F-14s, and an E-2C jet moved into position to destroy two Iranian oil platforms. These platforms only produced around 18,000 barrels a day, but they held radar and intelligence gathering equipment

used by the IRGC Navy (Cordesman & Wagner, The Lessons of Modern War, 1990). The US Navy quickly and efficiently destroyed these platforms. Many of the United States' allies put out messages of support for the American's action, Iran's actions had isolated what little diplomatic lifeline and support they had left in Western Europe. Italy, Belgium, Netherlands, France, Germany, and the UK now all moved ships in the Gulf to counter the naval mine threat.

Iran responded to this attack by shelling an isolated area in Kuwait and further deepening diplomatic ties with the USSR. On October 22 Iran launched a Silkworm missile at a Kuwaiti oil-loading facility while IRGC units infiltrated the Kuwaiti island of Bubiyan (Razoux, 2015). Throughout the rest of October IRIAF F-4 harassed US convoys moving through the Gulf, but Iran kept itself from direct confrontation with the United States. November was a different story.

November was full of more low-level Iranian attacks on tankers. Artesh Air Force F-4s picked up their strikes on commercial vessels and IRGC Navy speedboats continued to hunt for non-US convoyed tanker ships. On November 16, the IRGC Navy hit the *Esso Freeport* an Exon owned ship, between November 20-25 US and UK de-mining efforts detected a total of 17 mines around Farsi Island and Bahrain (Cordesman & Wagner, The Lessons of Modern War, 1990). Going into December 1987, the Iran-Iraq War's major theater became the Persian Gulf. For the first time in late 1987, the IRIN deployed frigates to attack shipping moving through the Gulf. This marked a major shift in Iranian "Tanker War" tactics. Only through the air was the Artesh involved in attacking commercial shipping while the IRGC used their speedboats to attack, but December 1987 marked a change. The Artesh Navy and Air Force, would become more involved in how Iran conducts its operation in the Persian Gulf. For the rest of the winter Iran and Iraq mostly conducted

Air operations against one another. The IRIAF continued to show its dominance against Iraqi pilots while the situation in the Gulf quieted down.[37]

The United States Navy and other American forces involved in the Persian Gulf underwent a series of changes, new ships rotated in, and a change command occurred with Admiral Less replacing Admiral Bernsen. One of the new ships was the guided missile frigate USS *Samuel B. Roberts* which entered the Gulf on February 2nd (Wise, 2007).[38] The IRGC, Artesh, and senior Iranian political leaders continued to make a very risky strategic mistake in the Gulf, provoking a series of naval encounters with the United States. Cordesman and Wagner assert that Iran's overall military strategy lacked a basic understanding of war; that "few wars ever end in the destruction of the enemy's forces; they end when a combination of political and military factors destroys the enemy's ability to continue fighting." (Cordesman & Wagner, The Lessons of Modern War, 1990, p. 358).

Around the same time Iraq launched a major offensive to take back the al-Faw peninsula, the chickens of provocations towards the US Navy came home to roost. On 13 April 1988 IRGC speedboats laid a new minefield and the next day the USS *Samuel B. Roberts*, enroute to Bahrain, hit one of these mines. The explosion was so powerful it almost ripped the *Samuel B. Roberts* in half. The keel broke and the ship's engines tore from their mounts, the crew had to tie the two halves together with steel wires to keep the ship from breaking into two (Wise, 2007). On 18 April 1988, Iraqi forces launched a major offensive against Iranian forces on al-Faw, the morning of 18

---

[37] The IRIAF successfully executed many ambushed with air-superiority fighters. Captain Hossein Khalili shot down three Mirage F-1s on February 9th with his F-14 Tomcat. On February 15th Captain Ismaeli downed a Tu-16 heavy bomber. Over the next few weeks IRIAF pilots took down four more Mirage F-1s (Razoux, 2015) (Bishop & Cooper, Iranian F-14 Tomcat Units Combat, 2004). The Artesh Air Force proved time and again that its pilots had superior skills and tactics against the better equipped Iraqi Air Force.

[38] By April the *Samuel B. Roberts* conducted thirteen convoys and was a firsthand witness to the brutality from the IRIN frigates *Sahand* and *Sabalan*. These two Artesh commanded guided-missile frigates deliberately fired on the bridges of commercial tankers, trying to kill as many crewmen as possible (Wise, 2007) (Crist, 2013).

April 1988 the US commenced Operation Praying Mantis in retaliation of Iran's mine hitting the *Samuel B. Roberts*.[39]

The United States military forces in the Gulf region split into four task forces. Task force one was led by the carrier USS *Enterprise*, its mission was to provide air cover and it did this by laying an extensive air screen over the Gulf with EW planes (Cordesman & Wagner, The Lessons of Modern War, 1990). The second task force was made of the amphibious assault ship *Trenton*, four anti-sub LAMPS (light airborne multi-purpose systems) helicopters, and two destroyers the USS *Merrill* and *Lynde McCormick*. Task force two was set to assault two Iranian oil platforms. Task force three was tasked with destroying another oil platform, this third task force consisted of the guided missile cruiser USS *Wainwright*, two frigates *Simpson* and *Bagley* and a Navy SEAL team. Task force four contained two destroyers and one frigate, this task force's mission was to repel an Iranian naval sortie from Bandar Abbas (Razoux, 2015).

Iran for its contingent of forces has two IRIN frigates the *Sahand* and *Sabalan*, the missile boat *Joshan*, land-based Silkworm batteries, multiple IRGC Navy speedboats, and 5 F-4 Phantoms from the Artesh Air Force. Adding to these forces, were Iran's military personnel on two oil platforms. These platforms were outfit with SA-7s, ZSU-23-4 anti-aircraft guns, and other small arms (Symonds, 2005). The US Navy sequenced their attacks on the two oil platforms. At 9:01AM task force two gave the Saasan oil platform a five-minute warning to abandon the platform, this warning was promptly followed by the IRGC personnel on the Saasan. At 9:17AM the US Navy shelled the platform. Soon after the destruction of the Saasan, at 9:32AM task force three warned the Nasr oil platform located off Sirri Island. IRGC forces immediately opened fire on the

---

[39] The United States had no knowledge of Iraq's plans to invade al-Faw the same day Operation Praying Mantis commenced.

*Wainwright*. *Wainwright* responded by shelling the platform, in which part of the Iranians swiftly abandoned the oil platform with the rest choosing to sacrifice themselves and take on the US Navy. After a short battle the Iranian's downed a Sea Cobra attack helicopter before being eliminated. At 10:25AM these two oil platforms, about 100 miles apart, were destroyed (Cordesman & Wagner, The Lessons of Modern War, 1990) (Wise, 2007).

IRIN Commodore Mohammad-Hossein Malekzadegan ordered his naval units in the area to attack the closes American ship, dispatched the *Sabalan* and *Sahand*, and requested air support (Razoux, 2015). The IRGC responded at 12:15PM with three speedboats firing on a helicopter from the USS Simpson and on an American supply-boat *Willi Tide*. The IRIN responded a few hours later at 1:01PM. The *Joshan* closed to a 10-mile distance with the USS *Wainwright* and fired Sea Cat missiles. After launching counter-measures, the *Wainwright* and *Simpson* returned fire with four missiles disabling the *Joshan*. Soon after US frigates *Bagley* and *Simpson* approached, collected IRIN survivors, and proceeded to sink the *Joshan* with their cannons. At 1:52PM two IRIAF F-4 Phantoms came within striking distance of the *Wainwright* and almost got knocked out of the sky. At this point Iran's attempt to counter the US Navy's actions were uncoordinated and undisciplined. The IRGC and Artesh's responses seemed random and unplanned.

The afternoon of 18 April 1988 continued much like the morning did for Iran. At 2:23PM American A-6 jets spotted three IRGC speedboats attacking the Mubarak oil platform, a UAE operated platform, and received White House authorization to attack the IRGC boats (Carmen, 2021) (Cordesman & Wagner, The Lessons of Modern War, 1990) (Wise, 2007). Experts then disagree on what happens next regarding the directives the remaining IRIN ships got. One account claim Iran's forces ignored orders to withdraw (Razoux, 2015, p. 447). Another account says United States forces acquired intelligence through intercepted Iranian communications, the IRIN's

frigates were ordered to attack (Cordesman & Wagner, The Lessons of Modern War, 1990). Regardless the *Sahand* was heading straight for the destroyer *Joseph Strauss* and the frigate *Jack Williams*. One A-6 and six A-7 Corsairs from the USS *Enterprise* came into range of the *Sahand* and in a coordinated attack the USS *Joseph Strauss* fired a Harpoon missile and the sole A-6 dropped laser-guided Skipper bombs at the IRIN *Sahand* (Wise, 2007) (Razoux, 2015). An hour later the naval aviators would fire Harpoons and Walleye bombs into the *Sahand* (Razoux, 2015). Soon after the destruction of the *Sahand*, Silkworm missiles from Qeshm Island were fired at the *Jack Williams* and the *Joseph Strauss* forcing the two US Navy ships to activate counter-measures. The frigate *Gary* then dodged two Silkworms fried in the Strait of Hormuz (Razoux, 2015).

At 6:18PM the IRIN frigate *Sabalan* fired a Sea Killer missile at the *Jack Williams* and Sea Cat missiles at the A-6 Intruders flying overhead (Cordesman & Wagner, The Lessons of Modern War, 1990) (Razoux, 2015). The US Navy A-6 Intruders quickly responded and dropped laser-guided Skipper bombs on the *Sabalan*, one destroyed the engine room, and another wrecked the stern (Razoux, 2015). Washington then called the dogs off and halted the attack against Iran before the situation got even hotter.

Assessing the actions of the Artesh's and Iran's response to the US's actions shows the fragility of Iran's command structure and their ability to interpret and disseminate accurate information in a timely manner. Mentioned earlier in this section, Iraq attacked at almost the same time as the US commenced Operation Praying Mantis. Iran interpreted this as the United States and Iraq launching a coordinated attack against Iran (Symonds, 2005). Further impacting Iran, was the complete disarray their command structure was in after being utterly shocked from Iraq's successful surprise attack on al-Faw. It remains unclear what Iran's motive was for taking on the obviously superior US forces. It has been suggested IRGC commander Mohsen Reza'i demanded

that the IRIN respond (Symonds, 2005). In any case, the late sortie by the *Sabalan* and the *Sahand*, seemingly suicide mission of the missile-boat *Joshan* against the USS *Wainwright* and *Simpson*, and the IRGC speedboat attacks conducted in groups of three suggest Iran's response was impulsive and uncoordinated at best.

Iran's grand strategy during Operation Praying Mantis is regime survival. Feeling completely cornered by a major Western naval presence and isolated diplomatically by the international backing Iraq received in the war's late stages, Iran's sense of security was reaching catastrophically low levels as their enemies gained position diplomatically, militarily, and geopolitically, while Iran became weaker by losing military hardware and increasing their already isolated situation diplomatically.[40] Operationally, Iran was wholly incoherent, the bifurcated military organization and command and control (C2) structure of the IRGC and Artesh showed its weakness with Iran's response to the US.

---

[40] At this point in the war with Iraq and the devolving situation in the Persian Gulf, Iran lost most of their outlets of support in Europe. The UK closed Iran's weapons purchasing office in London, France increased their naval presence in the Persian Gulf to be a larger contingent than the UK's. Traditionally weak naval powers like Belgium and the Netherlands send naval assets to counter Iran's actions in the Gulf, and Iran lost the narrative of sympathy many European states felt towards because of Saddam's decision to invade Iran against the norms of international law.
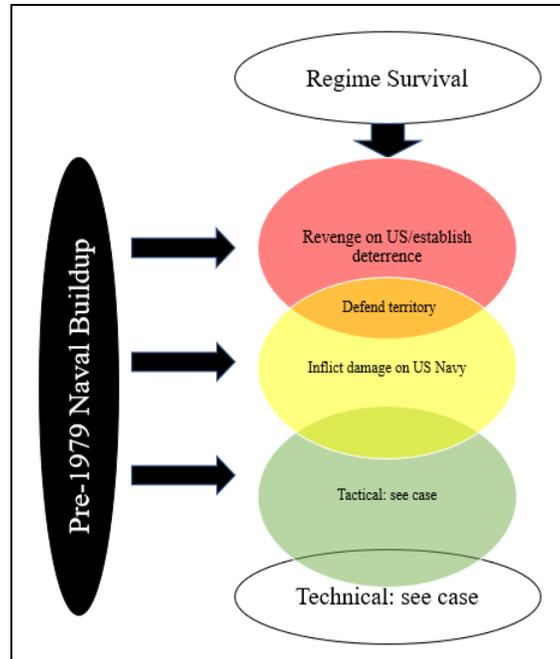
*Figure 2.5*

The design of Operation Praying Mantis is very similar to Operation Nimble Archer. This was intentional, the United States wanted to establish deterrence and warn the Iranians off from further mining in the Persian Gulf. Like Nimble Archer, the US opened Praying Mantis with warnings to Iranian military personnel stationed on the targeted oil platforms. The US was attempting to show Iran that for every mining incident of a US Navy aligned ship, an Iranian oil platform would pay the price. Iran's reaction to launch untimed and random assaults by various naval and air assets gives the impression that local commanders were calling the shots as apposed to a centralized military command structure. The US was able to communicate from the USS *Enterprise* to the Middle East Task Force commander on *Coronado*, to commander of USCENTCOM in Tampa, Florida, who then contacted the Secretary of Defense and the Joint Chiefs. The Chairman of the Joint Chiefs contacted the National Security Advisor who then reached the President. The United States had clear and concise orders while Iran was dealing with

the complications of their regional bifurcated command structure in the eastern Persian Gulf between the local IRGC and IRIN commander.

Analysis shows Iran's execution of a counter-attack against the United States had little hope from the start. This is based on four factors: Iran was outnumbered and out classed by the US Navy's superior training, technology, and C3I structure. Not only did these factors stack up against the Artesh and IRGC, but the orchestration of Iran's responses was a series of tactical mistakes. Iran responded at sporadic times with small forces against superior weapons platforms. Examples of these heavily outmatched confrontations are the fast attack craft (FAC) *Joshan* against the cruiser USS *Wainwright* and frigate USS *Simpson*, the IRIN frigate *Sahand* against 1 A-6, 7 A-7s, and the guided-missile destroyer USS *Joseph Strauss*.

Comparing the institutional analysis model of Operations Morvarid to model for Operation Praying Mantis shows the IRIN and Iran's military leadership concluded the wrong lessons from Iran's successful operation against Iraq just eight years before.[41] The significant strategic and tactical difference from Morvarid to Praying Mantis are so vast it begs the question if the Artesh and/or Iran's military leadership even developed contingency plans if the United States was going to respond to their mining campaign and harassment strategy of US ships in the Persian Gulf. Iran's almost arrogant attempt to fight the US Navy, a force that outnumbered them and had better technology, begs to question if ideological hatred of the United States caused Iran's leadership to react dogmatically. The pre-1979 institutional strategy was sound and made Iran the most powerful

---

[41] The institutional strategy in the late 1980s for the Artesh remained the pre-1979 naval build up because even though Iran had acquired silkworm anti-ship missiles, these systems were mostly employed by the IRGC and not fully implemented into the IRIN's training and doctrine.

navy native to the Persian Gulf, this strategy never calculated that it would be fighting its top ally and weapons supplier, the United States.

Iran has multiple lessons it can study from its IIW naval operations, first naval mines are effective. Next, land-based anti-ship missiles are an effective deterrent. Naval commandos are a useful tool in the small size of the Gulf with its densely built oil infrastructure. Lastly, outside powers are willing to act in the Persian Gulf to protect their energy interests. These three lessons present possible changes in the institutional strategy the Artesh/Iran would need to develop after the war with Iraq. Iran needed to implement weapons acquisition programs that are cost effective and that allow it some level of deniability. Deniability gives Iran the capacity to refute their involvement more easily so outside powers' threshold of insecurity will not increase, potentially leading their level of regional naval involvement to expand.

Moving to land warfare, the Artesh in the beginning months of the war was disorganized but still had many functioning armored vehicles and helicopters. As the war went on and Iran became more internationally isolated, the ability to repair and acquire parts and vehicles became more difficult. Knowing this, it is important to examine the operations of the Artesh in the early years of the war. The next case in this chapter is the important battle, the siege of Abadan. This strategically located city is the gateway to taking all of Iranian Khuzestan Province. This battle additionally has many important elements to examine from joint warfare, urban combat, to army aviation capabilities.

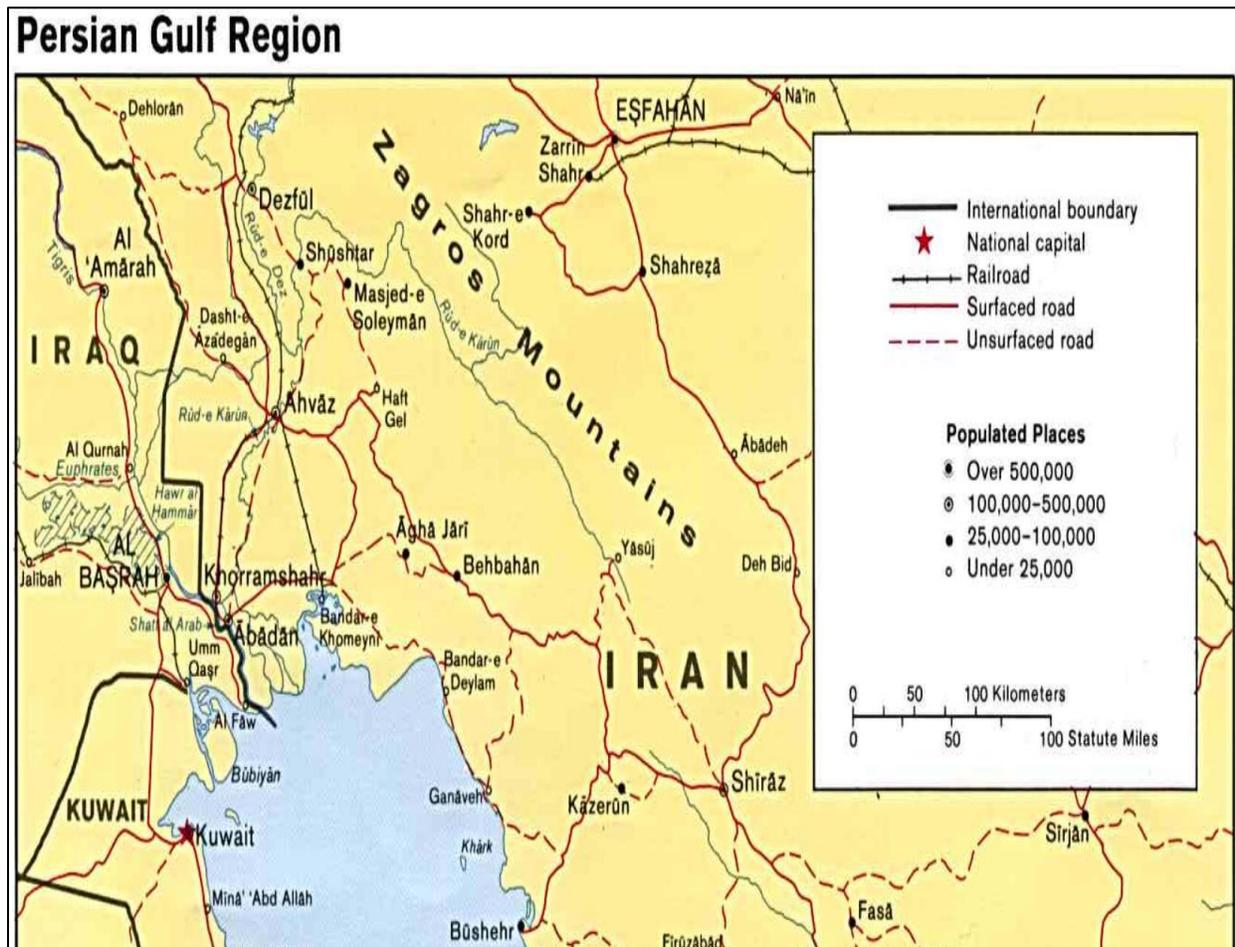*Operational Analysis 2: Land Warfare - Siege of Abadan*



Figure 2.6 (University of Texas Libraries, 1981)

This section examines Iran's defense of Abadan in the first phase of Iran-Iraq War.[42] Iran's defense at Abadan was strategically critical for its success in halting Iraq's advance deeper into Khuzestan. Abadan's position on Iran's road system made it the gateway for reaching Ahwaz and the ports of Bandar Khomeini and Bandar Mahshahr. The geographical location of Abadan made it an attacking force's nightmare. An island and a city, Abadan was naturally enveloped by the

---

[42] Phase one of the war plays out in the last few months of 1980 during Iraq's invasion. It would not be until 1982 that Iraq was removed from Abadan.

Kuran River, Shatt al-Arab, and the Bahmanshir River with 300,000 residents in the city.[43] This battle shows how the Artesh reacted to the initial stages of Iraq's invasion. In the early days of the war Iran's command and logistics were in shambles, the revolution's toll depleted the Artesh of officers and left its vehicles dormant of maintenance. Now faced with a 2,000-kilometer front with an enemy penetrating deeper into the country each day, the Artesh needed to mobilize in a highly challenging, revolutionary political environment with no clear command structure or direction.

Between September 22 to 28, 1980 Iraq infiltrated 80 kilometers inside Iran's borders and the 3rd Armored Division had reached the outskirts of Khorramshahr (Woods, Murray, Nathan, Laila, & Venegas, 2011, p. 130). Bogged down in urban warfare the 3rd Armored Division requested reinforcements, soon after the 33rd Special Forces Brigade arrived and together they look half the city but were unable to take the far side of Khorramshahr near the Kuran River (Razoux, 2015). Since Iraq had not encircled Khorramshahr and Abadan Island, Iran was able to resupply their forces in the area. Reinforcements brought the forces in the city of Abadan to 10,000 Artesh infantry, a mechanized brigade, a mechanized battalion, a naval infantry unit, 50 tanks, and 5,000 IRGC (Zabih, 1988) (Ward, 2014). Abadan had been under consistent shelling since September 22 while Iraqi engineers began working on a pontoon bridge to cross the Kuran River (Cordesman & Wagner, 1990, p. 94).[44]

Iraq started its encirclement of Abadan by sending a mechanized division north of Khorramshahr, crossing an engineered pontoon bridge to eventually come down along the east bank of the Kuran River to cut Abadan off from roads to Ahwaz, Bandar Mashahr, and Bandar Khomeini. Iraq began setting up for an attack to start on October 10, but due to the insistence that

---

[43] The Bahmanshir River is a tributary of the Karun River that forms the east side of the Abadan Island.
[44] Iraq's engineering corps has proven to be very effective in constructing a pontoon bridge to move armored forces at night.

maneuvers occur at night to minimize casualties the crossing was not completed till October 14 (Cordesman & Wagner, 1990).[45] On October 15 Iran experience a major failure attempting to break the siege by sending armored forces from Ahwaz.

The Artesh's tank crews were operating technologically inferior British-made Chieftains against Iraqi Soviet-made T-55s (Razoux, 2015).[46] Though both countries lacked sufficient training and logistics to support sustained armored campaigns, they benefitted from mostly conducting operations in the vicinity of their borders in the case of Iraq and inside their own country in the case of Iran. Early in the war, the Artesh's 92nd Armored Division in Ahwaz was in bad shape and took an extended amount of time to reach full division strength (Ward, 2014). The October 15 skirmish cost the Artesh's 92nd Division a battalion-worth of armor after Iraq ambushed them off the road into mud, while simultaneously more Iraqi armor moved southwards on the east bank of the Kuran River.[47] As Iraq's forces became timid and unwilling to move large formations into the urban area of Abadan, it quickly became obvious that Iraq was unwilling to sustain the casualties and commit the forces necessary for taking Abadan, instead they settled for sieging the city and forcing it into submission.[48]

---

[45] The insistence on night maneuvers showed competence and planning because the pontoon bridge was later destroyed by Artesh Army Aviation and IRIAF aircraft.

[46] The Iraqi's captured 20 Iranian Chieftains and towed them back to Baghdad for display and propaganda purposes. Iraq also began to test various weapons against the Chieftains, and at one point fired sabot rounds at the tanks which went through the front armors and out the back. This led Salah Askar, Iraq's director of amor, to decline the British's offer for tanks remarking "We don't want your stupid tanks" (Woods, Murray, Nathan, Laila, & Venegas, 2011, p. 133).

[47] In retrospect many Iraqi generals came to think their decision to attack Abadan from behind along the Shatt al-Arab to be a mistake. There was confusion and inflexibility on the part of Iraq's high command. The original plan called for the 7th Infantry Division to cross the Kuran River and take Abadan from the back, but this division was quickly moved to the central sector for attacks near Diyala. From this point the Iraqi 23rd Brigade and 3rd Armored Division were responsible for attacking Abadan (Woods, Murray, Nathan, Laila, & Venegas, 2011, pp. 130-131).

[48] This is similar to what happened in Khorramshahr when Iraqi armored forces first entered the city and were unprepared for the dirtiness of urban combat (Dunn, 1997).

On October 18 Iraq endeavored to send the 23$^{rd}$ Brigade across a pontoon bridge to attack Abadan city from the rear. This assault was a slaughter, Iranian M-48 tanks and infantry machine-gun nets repelled the assaulting Iraqi forces pushing them back across the river. Meanwhile up the river in Khorramshahr, Iran was overwhelmed, and the brutal urban warfare campaign waged by the encircled forces in the city fell apart. Iraq was firing 300 cannons, pounding the city while their 3$^{rd}$ Armored Division's dismounted infantry and 33$^{rd}$ Special Forces Brigade took Khorramshahr with the help of 200 tanks (Razoux, 2015). The Iranian forces in Khorramshahr, Artesh and IRGC infantrymen, held out for weeks orchestrating brutal urban combat. These units held up Iraq's push into Khuzestan and caused Iraq to divert forces from the Abadan invasion that might have swung the battle for Abadan in Iraq's favor, potentially opening Khuzestan for full occupation (Ward, 2014). Iraq's lessons in Khorramshahr would plague them the rest of the war, Iraqi high command was unwilling to repeat the 24-day siege of Khorramshahr against the tenacity and spirit in which the Iranian forces showed in urban combat.
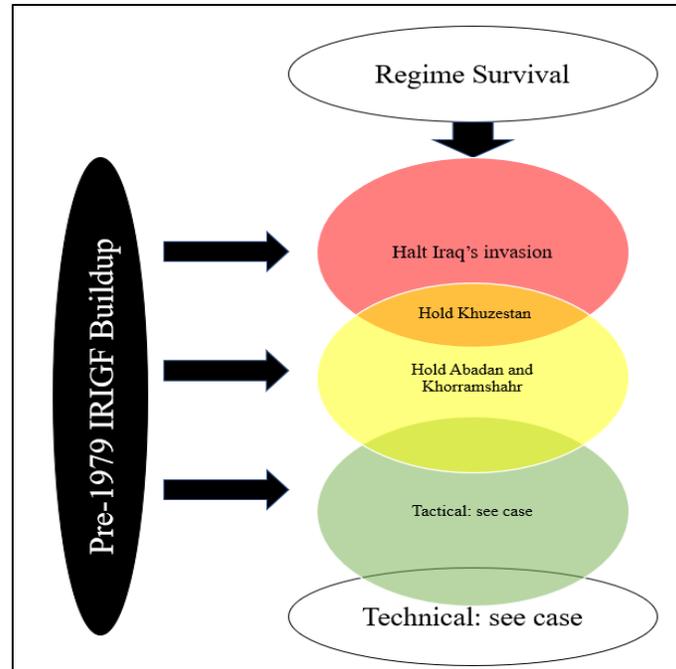
Figure 2.7

By not encircling Abadan Island, the Artesh was able to utilize IRIN assets to send reinforcements and supplies through Arvandkenar port on the Shatt al-Arab to Abadan and by night flying in supplies on helicopter (Cordesman & Wagner, 1990) (Razoux, 2015).[49] Iraq's plans for Khuzestan fully crumbled by not completing the encirclement of Abadan before winter. The marshes flood in the winter and allow for easier water-bound movements of supplies and men to support Iran's hold out in Abadan. Operation Marvarid also depleted Iraq of naval forces capable to cutting off the waterways around Abadan Island.[50] The Artesh's defense at Abadan showed many skills that early in the war, due to degradation from the revolution, Iraq thought more than likely could not materialize.

Iran showed tactical skills in urban warfare through various methods, two of these skills are deadly important to urban warfare success, creativity, and logistics. While in modern times the

---

[49] Arvandkenar is a small port village along the Shatt al-Arab.
[50] See the first operation in this case study.

Middle East has become a playground for urban warfare, some battles in the Iran-Iraq War involved harsh urban combat.[51] Many of the forces involved lacked adequate training for city fighting, but Iran showed great creativity in the urban setting. Creativity is important for concealing weapon systems, battle positions, and personnel from observation (Geroux & Spencer, 2022). The Artesh also showed competent logistics for reinforcing their forces in Abadan. The Artesh utilized combined arms operations with IRIN assets shipping supplies, armor, and infantry to strengthen Abadan; wounded and infantry were also transported via IRIGF Army Aviation (Cordesman & Wagner, 1990) (Razoux, 2015) (Hiro, 1991) (Zabih, 1988).

Iran continued to be outmatched technologically against Iraq's Soviet and French equipped forces. The Chieftain tanks proved to be ineffective against more numerous Iraqi armored forces. The Artesh also lacked the ability to place significant, if any, artillery in the region to better fend off Iraq from staging large forces over pontoon bridges. Additionally, the Artesh was unable to utilize their Army Aviation in proving close air support and sustained harassment of Iraqi forces, these would remain challenges for Iran throughout the war. The Artesh was able to take advantage of their training in infiltration and night maneuver tactics to harass Iraq's forces and resupply Abadan. The fruits of the Artesh's institutional strategy in technology was surprisingly, given the notoriously large amounts of money the Shah put into buying modern military technology, lacking against Iraq.

There was also much deficient in the institutional strategy regarding training and commanding the Artesh under the Shah. It quickly became obvious that Iran would be able to take advantage of Iraq's shortcomings to defend Khuzestan from further invasion instead of relying on

---

[51] Think about the US occupation of Iraq, Iraq's fight against ISIS, combat in Yemen, and Syria's civil war. These heavy urban conflicts differ from the Arab-Israeli Wars that signified a regional playground for maneuver warfare.

command and strategy development from the shah-era officers to outsmart the Iraqis (Hughes, 2015). By mid-October Iran had finally established a command structure and began to have some effectiveness in coordinating its forces (Cordesman & Wagner, 1990). It is likely the establishment of this command structure between the Artesh and IRGC enabled Iran to quickly resupply their forces in Abadan and initiate offensives around Susangerd and the Zargos Mountains to force Iraq in taking reinforcements away from the southern front in Khuzestan.

Overall, the Artesh showed flexibility and strength given the diminished state of their command structure and forces at the end of 1980. Six years later Abadan would become a launching pad for an incursion into Iraq. Operation Dawn 8 was a major victory for the Iran and notably the Artesh. In this operation the Artesh was able to show its operational planning capabilities to leaders in Tehran and bring Iran's land strategy a victory. This victory put Iraq further on the defensive and put Iran within striking zone of taking Basra, one of Iraq's major cities and a Shia shrine.

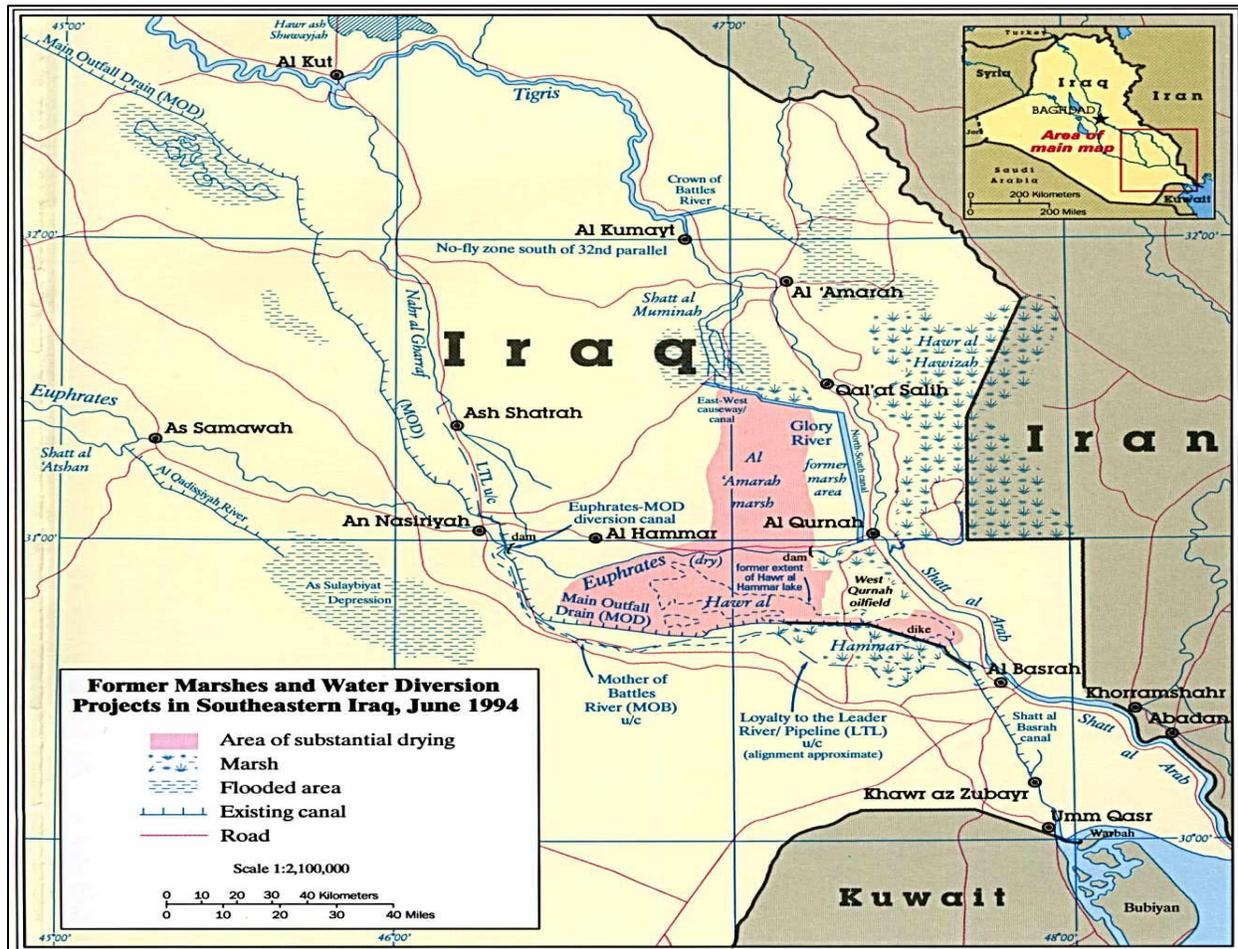*Operational Analysis 2: Land Warfare - Operation Dawn 8*



*Figure 2.8* (University of Texas Libraries, 1994)

In early February 1986 Iran began to formulate Operation Dawn 8, an invasion of Iraq's southern region and specifically the capture of the Al-Faw Peninsula. By this point in the war Iran had already been launching invasions into Iraq since 1982 but with little success. By 1984 the costs of these repeated offensives limited Iran's supply of ammo, weapons, and trained manpower and Iran did not launch another major offensive until February 1986. Iran's goals of toppling Saddam's regime were their driving factor in the political leaderships' continuation of the war. Iranian planners were trying to find some way to capture Basra and ignite a Shiite rebellion against Saddam's government, but the war material situation in 1986 was dire.

Iran could only mobilize 305,000 IRIGF and 350,000 IRGC across its entire front with Iraq. Iran only had around 1,000 operational tanks, 1,400 armored vehicles, 600-800 artillery weapons, and only 60-80 functional aircraft (Cordesman & Wagner, 1990, p. 217). Iraq possessed the main manpower advantage at this point in the war, Baghdad could mobilize 800,000 men and enjoyed a 4 to 1 advantage in tanks, armored vehicles, and artillery weapons. Iraq's air force also fielded 500 operational aircraft giving it a serious edge of Iran in firepower (Cordesman & Wagner, 1990, p. 217). At the beginning of 1986 Iran started to shift forces and supplies to the south.

Iran had moved half of the IRIGF into the marshes and southern coasts of the front between Abadan and Ahwaz and started stationing supplies in the vicinity (Janes Defence Weekly, 1986). The Artesh has developed a major offensive operation to take Al-Faw with five goals. One, block Iraq's land access to the Gulf. Second, set up a staging ground inside Iraq to attack Basra. Next, disrupt oil production in southern Iraq. Fourth cut off Iraqi access to Kuwait to stop Gulf Arab payments from transiting through southern Iraq. Lastly, support a Shiite uprising in southern Iraq (Zabih, 1988, p. 191) (Tucker-Jones, 2018).[52] Though Iraq now possessed more man power and better trained forces, the Artesh commanders formulated a plan that would provide them with many advantages in their attempt to take Al-Faw.

The first phase of the plan was to initiate a series of diversionary attacks over the southern front. The first thrust came near Qurnah and Iran launched human wave attacks for three days against superior Iraqi firepower, the second thrust came in the same area and was an armored attack on dry ground in the marshy area (Tucker-Jones, 2018). Next came an Iranian attempt to capture the northern Island of Majnoon, in all three cases Iran suffer heavy losses and yielded no tactical

---

[52] Kuwait's border with Iraq was a major land bridge to oil and money coming from Saudi Arabia and the southern Gulf Kingdoms. By threatening Kuwait's border Iran would convince Kuwait's King to reduce his support for Iraq and inadvertently help Iran's attrition strategy of strangling Saddam's regime eventually fostering his downfall.

success. But these attacks did fool the Iraqi commanders who moved some forces from the Al-Faw area to support units north of their location (Cordesman & Wagner, 1990). As heavy rains moved in Iran was able to take utilize this and make their move on Al-Faw.

On the night of February 10 under heavy rains IRIN SEALs and IRGC snuck across the Shatt al-Arab and began to infiltrate the Al-Faw Peninsula and after receiving a signal from the Iraqi side, Iran began to move thousands of troops across the river under the cover or artillery (Ward, 2014). Iraq's intelligence systems downplayed Iran's coming attack on the peninsula and the commander of the 26th Division was considered a poor commander who had his positions unprepared (Woods, Murray, Nathan, Laila, & Venegas, 2011). Iraq's high command also considered Al-Faw to be unimportant and did not think to increase its defenses even after intelligence intercepts showed Iran was preparing an attack in the area (Ward, 2014). Even if Iraq has reinforced this area, the terrain and size of the area makes armored combat extremely unfavorable thus Iran held the advantage in their human wave tactics and deep penetration night tactics. The IRIN 3rd Naval Infantry Brigade commenced pincer manuevers around the town of Al-Faw in coordination with IRGC while the main Artesh force has the critical objective of crossing from Abadan and cutting off Iraq's possible reinforcement of Al-Faw.

The 21st and 77th Divisions of the IRIGF crossed the Shatt al-Arab into the Iraqi town of Siba with great speed. Aside from the diversionary attacks, the 21st and 77th Divisions' attack was the most critical part of securing Al-Faw. Supported by attack helicopters and artillery their objective was quickly achieved and Iraq's forces on the peninsula were cut off from their reinforcements (Razoux, 2015) (Woods, Murray, Nathan, Laila, & Venegas, 2011).[53] After closing

---

[53] Future Chief of the Artesh General Staff, Major General Salehi was an officer in the 77th Division.

off the peninsula, part of the 21st Division would cut south into Al-Faw and help the 3rd Naval

Infantry Brigade and IRGC units clean out the last remaining pockets of Iraqi troops. Another

success was the 3rd Naval Infantry Brigades destruction of Iraq's Persian Gulf Radar thus blinding

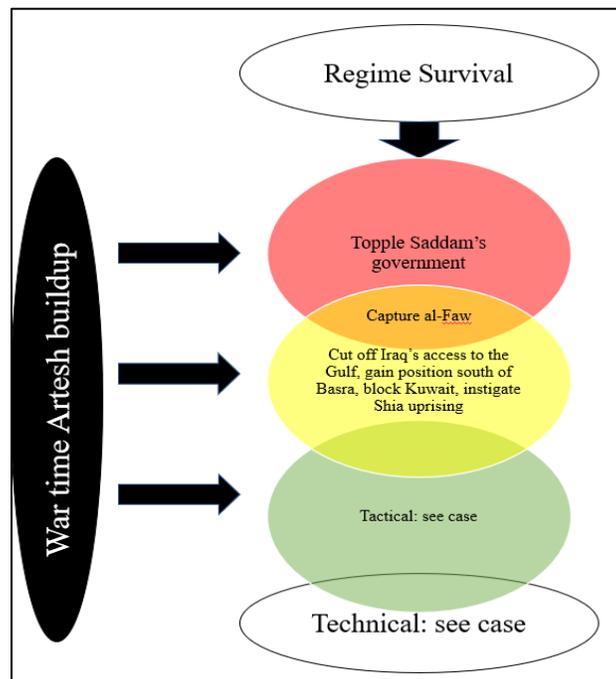Iraq's navy and air force operations in the Persian Gulf (Razoux, 2015).



*Figure 2.9*

After four days the Artesh-IRGC joint operation was a success, it had cut of Iraqi from land

access of the Persian Gulf, captured Al-Faw, cut off Kuwait from Iraq, and established a southern

front against Basra. Iran reached the Khor Abdallah waterway outside Kuwait's border and were

able to convince the kingdom to lessen support for Iraq.[54] This operation yielded new tactics and

operational skills that Iran developed throughout the course of the war. The IRIGF and IRGC had

learned to conduct maneuvers in the cover of darkness and bad weather to prevent the Iraqi Air

---

[54] By Iran reaching the borders of Kuwait, Saudi Arabia and the other Arab kingdoms began to Panic and began a new series of high-level meeting to formulate their future strategy. Many in the international community saw Iran's capture of Al-Faw as the potential turning point that would lead to the downfall of Saddam's government (Cordesman & Wagner, 1990).

Force from attacking and conducting reconnaissance of their movements.[55] By the time the weather had moved on, Iran has ten days to reinforce their positions and consolidate control of the river crossings to keep logistics and lines of communications open with their forces on al-Faw. Iran had captured 200 square kilometers of the al-Faw Peninsula and keep the bridges open, but Iran had failed to transfer effective amounts of heavy weapons across the Shatt al-Arab.[56]

The battle at al-Faw was solely planned by the Artesh General Staff and utilized the new institutional strategy of Iran's armed forces: joint operations with the IRGC, night infiltration, diversionary attacks, deep penetration of enemy weak points, disperse-dig in-and take cover from Iraq's air superiority, and utilize weather/geography. Iran displayed each of these operational and tactical capabilities in its success at al-Faw. It is though, hard to imagine Iran had the success it did if the weather had been clear and allowed for the Iraqi Air Force to pound their positions and track their movements. It is also interesting how Operation Dawn 8 might have turned out if Iraq had an effective intelligence digestion system and reinforced their positions on the peninsula. Iran's victory at al-Faw revealed the Artesh's institutional strategy had shifted from its pre-1979 orientation and the realities of the Artesh's political situation warranted conformity with the clerical government in Tehran.

*Conclusion*

The Artesh began the war with Iraq under a pre-1979 Shah-era institutional strategy that relied on unlimited access and funds to top Western weapons systems. This strategy was aimed at confronting Iran's rivals and stopping the Soviet Union in Central Asia and the Caucasus. Part of

---

[55] Iran also moved at night to prevent US satellites from picking up on their positions.

[56] It is likely three factors contribute to Iran's inability to move heavy weapons onto Al-Faw. One, their lack of supplies for heavy weapons, and two the terrain made tanks and armored vehicles useless, and lastly because Iran wanted to save their last stock of heavy weapons for offensives in the central sector of the frontline with Iraq.

this institutional strategy relied on Western advisors to manage and implement logistical and maintenance needs, in addition to training Iran's forces (Ward, 2014). But the fall of the Shah and the advent of war with Iraq forced the Artesh to engage in a new political environment, one that was often hostile to providing full support. In the beginning of the war, the Artesh was in shambles yet was able to calvinize enough forces and equipment to activate contingency plans. Following these operations chronologically to tack the changes in the Artesh's institutional strategy, it is natural that as the war progresses the Artesh would adapt and evolve its institutional strategy to a new political and strategic environment.

In the opening weeks of Iraq's invasion, the Artesh needed to organize and initiate defensive operations to halt Iraq's assault. At Abadan the Artesh was plagued with undermanned divisions and an unclear chain of command with the IRGC commanders. The Artesh's institutional strategy on the land was crippled by the flight of many Shah-era generals, the rise of the IRGC, and its maintenance breakdown during the revolution. In overcoming these setbacks the Artesh land forces need to show flexibility and strength to best combat Iraq's advance into Abadan. By engaging in semi-guerrilla style urban warfare, and diversionary operations north of Abadan, the Artesh dug in at Abadan forcing Iraqi to take more casualties than it was willing to commit. The diversionary counter-attacks achieved their goal of diverting Iraq's full force away from Abadan. The use of join-operations to conduct combined-arms logistical actions allowed Iran to take advantage of Iraqi shortcoming to resupply and reinforce Abadan. Overall, the Artesh showed flexibility, determination, and creativity at Abadan to halt Saddam's advance so the winter rains would bog down mechanized warfare in the Shatt al-Arab area. In the mouth of the Shatt al-Arab, the Artesh needed to disable the Iraqi Navy and cut off Iraq's access to Persian Gulf oil shipping.

A month later Operations Morvarid occurred and became one of the most impressive joint-operations of the war with many factors that contributed to its success. But the three main determinators leading to Iran's success laid with reconnaissance, timing, and the creation of a coherent chain of command in October. At the start of the war the IRIN spent weeks probing the response time, determination, and skill of the Iraqi Navy. In doing so the Artesh was able to ascertain tactical and operational information about the lack of anti-ship capabilities from the Iraqi Air Force. Already enjoying the technological superiority at sea and in the air, the Artesh likely knew their plan to disable Iraq's sea-bound oil terminals would be a success. Once this operation was put into motion the Artesh demonstrated a level of planning complexity and C3I that was lacking for the remainder of the war.

The battle at al-Faw in 1986 came on the backdrop of repeated failed major offensives. By 1986, the Artesh was depleted or manpower, equipment, and the IRGC had taken the lead in command and operations. Operations Dawn 8 was different, the Artesh was able to design a major offensive without any major interference from the IRGC and these operations went down in history as one of Iran's major military victories of the war. Like Operation Morvarid, Dawn 8 demonstrated complex planning, strategic, and tactical adaptations to the conditions of the war. By being able to evolve in wartime the Artesh kept itself relevant and an integral part of Iran's military.[57] The capture of al-Faw revealed the institutionalization of new tactics and strategies in the Artesh's institutional model. Night movements, amphibious landings, using weather and geography to its advantage, diversionary attacks, and deep penetration of weak spots on enemy

---

[57] Keeping relevance was a major political challenge for the Artesh. The IRGC had already supplanted the Artesh as the primary force for Iran's political leadership and the IRGC was getting the main brunt of Iran's war supplies.

lines all became main points of the Artesh's new institutional strategy for its infantry forces. At sea the IRIN expressed a lack of evolution and strategic coherence.

The IRIN's massive defeat at the hands of the US Navy during Operation Praying Mantis revealed a lack in effective wartime evolution on the part of the Artesh's naval forces. Outmatched technologically and outnumbered with in the air and on sea, the IRIN engaged the US Navy in a reckless and befuddled fashion. Sporadic counter-attacks against larger groups of US Navy ships and the inability to properly conduct naval maneuvers left the IRIN open for destruction. There is room to deflect blame in Iran's institutional naval strategy during the war. It was unable to gain access to any significant surface vessels during the war and was mainly built for dominating and countering its Arab neighbors. The pre-1979 institutional naval strategy of the IRIN did not account for possible operations against its main sponsor the United States. But with the breakdown of relations and initiation of hostilities between the US and Iran, the IRIN was in an extremely weak institutional, strategic, operations, tactical, and technological disadvantage. Ultimately the IRIN was unable to overcome these deficiencies and suffered a massive defeat in Operation Praying Mantis.[58]

Through analyzing these four operations, it can be assessed that, Iran's pre-1979 institutional strategy model was sound. When considering the main regional foe Iran was planning for was Iraq, the pre-1979 model was correct in many of its assumptions. Iraqi was weak at sea, American aircraft are superior to Soviet aircraft, joint-operations increases likelihood of success, and Iran has greater manpower resources than Iraq. When this plan fell apart was under the extreme

---

[58] Through this defeat the IRIN learned many valuable lessons that are discussed in Chapter 4.

circumstances surrounding the revolution from the lack of officers to the breakdown in supplies. With the war mostly being conducted on land, the IRIGF demonstrated the ability to evolve effectively during wartime. Often engaged in command power struggled with the IRGC, the Artesh still formulated success joint military operations like the battle at al-Faw. Where these operations lacked successes was in sustaining effective land offensive against Iraq's advantage in firepower. Effective is an important word here because Iran did maintain offensives against Iraq, i.e., human wave assaults. But these IRGC human wave assaults often muddied the waters of operational success by diverting manpower into costly actions and enabling flexibility on the battlefield. Overall, since 1979 the Artesh did evolve its institutional strategy, and often under difficult circumstances that if failed risked the Artesh rending itself obsolete and likely being absorbed into the IRGC.

After the war with Iraq the IRGC gained political and strategic prominence over the Artesh. A recent indication of the Artesh being morphed into an important frontline force of Iran's national security policy is the Artesh Navy (IRIN). In the 21$^{st}$ century Tehran has placed increasing significance on developing the IRIN. In 2007 the Artesh evolved its naval structure and compatibility with the IRGC Navy. In doing so, the Artesh was able to increase its influence in Tehran's political circles and increase its importance to Iran's national security. Through analyzing the IRIN's evolution since 2007 several key developments are identified about the future of Iran's naval tactics and strategic orientation.

**Chapter 3: 2007 Iranian Naval Reforms**

The IRIN is one of Iran's most important forces and represents the first line of defense against enemy forces from outside the Persian Gulf region coming to Iran. Since 2007 the Artesh Navy has engaged in a major expansion and evolution of its posture and role in Iran's national defense. Understanding these naval reforms reveals how the IRIN is now one of Iran's most technologically advanced forces and how is has simultaneously increased the political influence of the Artesh inside Iran's circles of power.

Since the Shah, naval strategy has become a mainstay in ensuring the economic and national security of Iran. Between the Persian Gulf and the Caspian Sea, Iran has a coastline of over 2,400 kilometers. Additionally, Iran is situated along the strategic Strait of Hormuz, one of seven global maritime choke points (GMCP).[59] 20% of global petroleum consumption and 30% of liquefied natural gas (LNG) are shipped through the Strait of Hormuz daily (U.S. Energy Information Administration, 2019) (Bahgat & Ehteshami, 2021). 76% of these exports are bound for Asian markets with China, India, Japan, South Korea, and Singapore being the largest customers (U.S. Energy Information Administration, 2019). Iran is the fifth-largest crude oil producer in OPEC and the third-largest natural gas producer, it is also the third-largest oil and second-largest natural gas reserve holder in the world (U.S. Energy Information Administration, 2022). This intertwines a close relationship between Iran's energy interests and its geopolitical situation.

---

[59] Besides the Strait of Hormuz, there are six other GMPCs, these are the Panama Canal, Strait of Gibraltar, Cape of Good Hope, Bosphorus Strait, Suez Canal, Bab-el-Mandeb Strait, and the Straits of Malacca.

Iran's economic and national security, are reliant on the continuous exportation of crude oil and related products through the Strait of Hormuz, making a naval presence a national imperative. The most important tool Iran possesses to ensure their exports are continuing is the Artesh Navy (IRIN) and the IRGC Navy (IRGCN). Iran has placed significance on controlling the Strait of Hormuz to keep foreign powers, namely the United States, from blockading its oil exports.
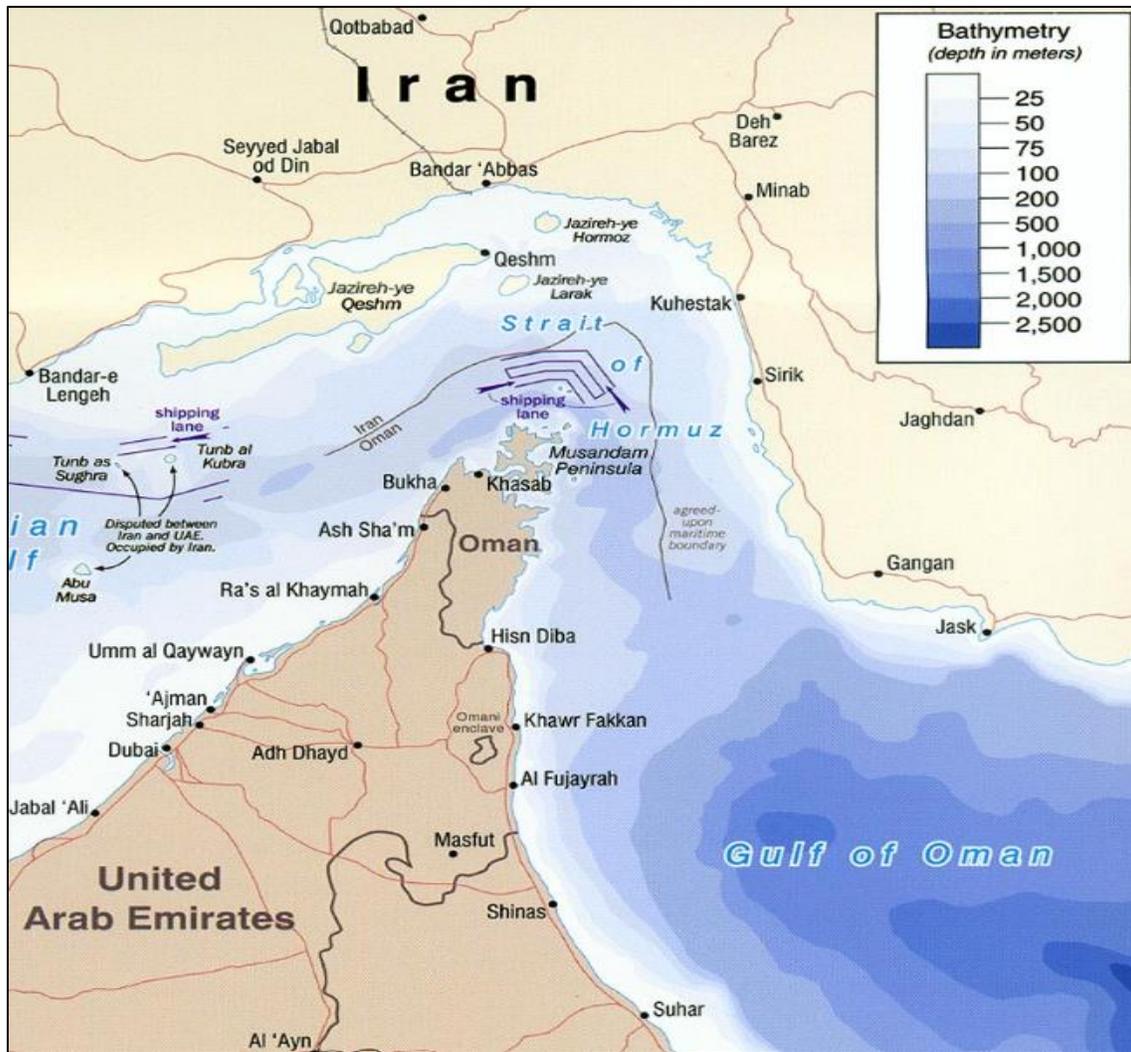


*Figure 4.1 (University of Texas Libraries, 2004)*

By analyzing the impacts of Iran's 2007 naval reform/expansion program and contrasting the IRIN's present-day organization, strategy, and tactics with pre-2007 levels conclusions can be drawn about the strategic thinking behind creating Iran's naval doctrine for the 21st century. The

lens of victory theory is used to assess the congruence between IRIN's organization, strategy, and tactics.

The organization of this section starts with an explanation of victory theory followed by a short walkthrough of Iran's navy from 1990 to 2006, after it assesses the main pillars of Iran's 2007 navy reforms and how these reforms evolved into the present-day. It concludes by contrasting the IRIN's 2007 victory theory to its present-day victory theory. This theory ascertains the vision of war Iran's navy deduced leading to its 2007 reorganization and expansion. The effectiveness of Iran's naval reforms and its congruence with its overall force posture and national security strategy are measured by comparing the IRIN's pre-2007 victory theory to its current victory theory in 2023.

### *Victory Theory*

Victory theory is a set of assumptions a military possesses regarding the nature of a future enemy threat. The two assumptions are 1. The nature of war, and 2. The vision of war. the first forms a series of beliefs a military makes about war's enduring characteristics. A military organization's vision of war is the "mechanism, methods, or modalities that is plans to use in war" (Gallo, 2018, p. 75).[60] The US Army defines war and warfare as "socially sanctioned violence to achieve a political purpose. Warfare is the mechanism, method, modality of armed conflict against an enemy. Warfare is how combatants wage war." (ADP 1-01, 2019, pp. 1-2). The theory applies three elements about the nature of war: it is inherently chaotic, it is a human endeavor, and it occurs

---

[60] Gallo mentions other scholars who discuss theory of victory but are not developing how the theory can be operationalized (Gallo, 2018, p. 75). Gallos directs readers to: Rosen, 1991; Jensen, 2016; Adamsky, 2010; Williamson Murray and Allan R. Millett, eds. Military Innovation in the Interwar Period (New York: Cambridge University Press, 1996); Emily Goldman, "Introduction: Military Diffusion and Transformation," in Emily Goldman and Thomas Mahnken, eds., The Information Revolution in Military Affairs in Asia (New York: Palgrave Macmillan, 2004), pp. 1-21.

among populations (ADP 1-01, 2019, pp. 3-1 - 3-2) (Gallo, 2018, p. 75). This chapter of the Artesh Navy's 2007 reforms follows Andrew Gallo's methods of victory theory. Gallo's five questions are modified for the Artesh Navy to identify characteristics of a its theory of victory (see Appendix A).

Before answering these questions, it is important to establish guardrails to keep this assessment from mistaking certain organizational changes as also doctrinal changes. Victory theory analysis must follow Rosen's cautioning that, innovations are changes in a doctrine that leave the essential workings of the force unaltered (Rosen, 1994). Rosen is showing that a doctrine remains unchanged unless the essential systems of an organization are changed. This theory provides a lens to discover and evaluate a military force's strategy, doctrine, and tactics. The five questions help acquire the full extent of the IRIN's 2007 reforms. They show how Iran and the IRIN view the two assumptions included in victory theory. It is through understanding this that the IRIN's strategy, doctrine, and tactics reveal themselves.

### *1990 – 2006*

The few years after the end of the Iran-Iraq War, Iran was confronted with multiple serious national security issues. First, their military stockpiles were greatly depleted; and second, the United States and its allies just defeated Saddam and liberated Kuwait in a matter of months. The speed to which the US and its allies defeated Saddam set off alarm bells in Tehran, not only had Iran lost tens of thousands of lives in their war with Iraq but they made little territorial gains during the war, and it became obvious that compared to US's ground forces Iran's military effectiveness was lacking. United States actions in Kuwait prompted the Iranians to seek a deterrent oriented strategic pluralism to develop a military doctrine best associated with their military force's

capabilities.[61] Iran set their goals on defending the regime, maintaining territorial integrity, and promoting their regional interests. These goals led Iran to pursue a better establishment of credible deterrence and a balance of power in the region (Ward, 2005).

The realization of this need for deterrence and balance of power came from conclusions learned after the Gulf War and the IIW, do not confront the United States on the conventional battlefield, cultivate proxies for an indirect approach, threaten to close the straits of Hormuz, and rely on indigenous arms (Chubin, 2009). Understanding this led Iran to tailor specific military technology for its naval branches. The acquisition of missiles and small boats mainly went to the IRGCN, while surface vessels, submarines, and advanced EW systems went to the Artesh. Due to sanctions and international isolation, Iran began seeking self-sufficiency in arms production and started creating a domestic network of arms manufacturers. The ideas of self-sufficiency became evident when Iran fielded its first domestically produced light-submarine in 2000 and the establishment of a T-72 assembly line for the domestic manufacturing of tanks (Cordesman, 2004).

After the Iran-Iraq War, Iran needed to rearm and develop its military industrial base. It was clear to Iranian military/political leaders that the international isolation of the wartime arms embargo on the military industrial base was not going to end. During the war Iran already began to implement a program of self-reliance. This process was greatly accelerated after the war but there remained one major obstacle, Iran lacked the technical expertise and manufacturing capabilities to develop and build heavy weapons systems. Another major self-sufficiency advancement of the Iranian military was the development of domestic military education and

---

[61] Strategic pluralism utilizes "a wide variety of military forces and weapons to meet a diversity of potential threats" (Huntington, 1957, p. 400).

internal debate.[62] During the 1990s, staff colleges, peer-reviewed military journals, and military-related universities expanded greatly in Iran. Each branch of the Artesh began developing various public university programs and staff colleges designated to train the next crop of Iranian officers and engineers.[63]

The strategic geopolitical advantage Iran has in the Persian Gulf led Iranian military planners to place great significance on the naval warfare with the IRIN quickly becoming the favored branch of the Artesh. This is apparent in the expensive weapons platforms, and faster development of strategy and tactics in the 1990s and 2000s. Iran has the largest coastline in the Gulf and hundreds of small islands and pocket-sized inlets to mask radar signatures and conduct popout-strike on ships transiting the Gulf. Operation Desert Storm made the Persian Gulf Iran's primary focus, signaling the need to further develop its naval forces.

Iran began replenishing its navy by upgrading its Silkworm missiles and acquiring advanced torpedoes from Russia and China. A major upgrade was the purchase of three Kilo-class submarines from Russia. Iran initially experienced technical issues with the submarines during naval exercises, but its naval relations with India and Pakistan helped solve these technical problems and soon it was test firing advanced wake-homing and wire-guided torpedoes (Eisenstadt, 1995). Throughout the 1990s the IRGCN and IRIN built up defensive infrastructure and missile installations along the Strait of Hormuz and the surrounding islands. By regional standards the IRIN was very active and possessed capabilities most Gulf Arab navies lacked. Iran

---

[62] During the Revolution and war with Iraq, internal debate about strategic objectives and tactics was normally lacking or a highly politicized and potentially dangerous affair.

[63] Outside of classified information that only a limited number have access to, much of what the West and the Middle East knows from Iran's military intentions originates from statements and articles in Iran's military journals and media.

is the only Gulf country to have submarines capabilities with its force of North Korean-style mini submarines and Kilo-class subs. Throughout the 1990s the IRIN and IRGCN regularly conducted naval exercises aimed at closing the Straits of Hormuz, mining vessels, and preventing an enemy's penetration of the Strait and Iran's coastline in case of invasion (Esienstadt, 1996).

Iran started leveraging its geographical advantages to establish a naval strategy based on, deterrence through a doctrine of guerrilla (IRGC), and conventional naval forces (IRIN) that can disrupt oil exports; and an arsenal of missiles and drones capable of establishing an anti-access/arial denial (A2AD) zone, along with power projection outside of the Persian Gulf. Aside from preparing for war this doctrine is orchestrated through a gray zone playbook that includes lethal and nonlethal actions.[64] These operations are typically intended to blur the lines between military and nonmilitary actions both lethal and nonlethal to still have tangible impacts on adversaries. Gray zone space involves competitive actions that create ambiguity between rival states through deniability and uncertainty about the nature of the conflict as a means to reduce an adversary's redlines or sidestep these limits. In 1997 the political environment in Tehran changed unexpectantly with the election of Hajjat-ol Islam Mohammad Khatami, seen as a reformer Khatami began changing the defense leadership structure.[65]

His election triggered the resignation of Mohsen Reza'i as the Commander of the IRGC on 9 September 1997. Reza'i served as the commander for sixteen years and is one of the most powerful individuals in Iran. Regarding the emerging importance of the navy in Tehran, Khatami

---

[64] Gray zone is the operational space between war and peace that is conducted, in most cases, below the threshold warranting the need for a conventional military response to an adversary's actions. For more on gray zone warfare see: Oliker, O. (2017). *Russian Influence and Unconventional Warfare Operations in the 'Grey Zone:' Lessons from Ukraine*. Center for Strategic and International Studies (CSIS); Eisenstadt, M. (2021). *Iran's Gray Zone Strategy*. PRISM, 77-97; Bunker, R. J., Dilegge, D., & Keshavarz, A. (2016). *Iranian and Hezbollah Hybrid Warfare Activities*. Small Wars Foundation.

[65] This was a major change in leadership with Khatami replacing Rafsanjani. Rafsanjani was the commander-in-chief during most of the war with Iraq and was the president after the war from 1989-1997.

appointed Rear Admiral Ali Shamkani as the defense minister. Shamkani was the commander of both the IRGCN and IRIN before his appointment. Shamkani's appointment signals the Persian Gulf is the highest priority in Iran's post-war defense strategy for the new century. An additional change in the naval command structure was the appointment of two separate commanders for the IRGCN and IRIN. Kenneth Pollack interprets this as a strategic political move on the part of Khatami to weaken the navies institutionally reducing their ability to oppose his reforms in the bureaucracy (Pollack K. , 1997). In the late 1990s retired Rear Admiral, Askhbus Dane-Kar presented the characteristics of Iran's doctrine in its top military journal *Saff* (Daneh-Kar R. A., 1999) (Daneh-Kar, 2000).

He outlined eight points, first being the strategic use of the Persian Gulf's geography to Iran's advantages, easier amphibious and naval attack on closely located enemy forces, and constraints on maneuverability in the Strait of Hormuz. Second, is the use of Islands for cover to increase the element of surprise and cover from radar. Next, he outlined the need to develop blockading abilities to reduce the flow of oil in the Gulf. Anti-ship missiles and naval mines should be an important element of Iran's naval repertoire. He indicated the use of commando forces to target enemy oil facilities and the use of small, fast boats to harass enemy ships. A strategic point Daneh-Kar presents is the geographical importance of the Gulf of Oman as Iran's first defensive boundary and specifically the use of submarines in this area. Lastly, is the need to develop offensive and defensive electronic warfare.

These points signal Iran's pursuit to increase its naval deterrence not by developing a force that can defeat its enemies, Iran knows it cannot compete with American military power, but by developing a force that makes its enemies fail to attain their goals. Years later *Saff* military journal

published an article depicting Iran's vision of war for future conflicts. This document caused eyebrows to raise in Western and Middle Eastern capitals for its inclusion of nuclear weapons.

In 2001, *Saff* published an article "What Future Wars Will Be Like", this article shows the internal debate on strategy and tactics within the Iranian military community during the post-IIW, post-Gulf War years. The article highlighted the need for joint operations, joint training, surveillance, mobility, and accurate firepower paired with a revised military strategy centered on defense, firepower, nuclear weapons, and more efficient communications (Ward, 2005) (Saff, 2001). Iran's nuclear program started to become a major issue in the new century. Pressure from the international community, namely the United States and Gulf Arabs for Iran to halt the program increased Iran's sense of insecurity. This same year the United States invaded Afghanistan and two years later invaded Iraq, placing American ground forces on either side of Iran in addition to a major naval presence in the Persian Gulf. This sense of insecurity caused Iran to further develop its navy to correspond with its desired strategy of deterrence through developing the capabilities for A2/AD, commercial oil export disruption, and power projection.

The IRIN became capable of power projection transitioning from a brown water to a blue water navy through the addition of large surface vessels, advanced EW technology, and better command, control, communications, and intelligence (C3I). This became possible after a 2007 strategic redesign of the IRGC Navy and the IRIN (Office of Naval Intelligence, 2017).

### IRIN 2007 Reforms

The 2007 reforms altered the role of the IRIN by creating geographical divisions of responsibilities between the IRIN and IRGC Navy (see Figure 5.2), expanding the IRIN's role of naval power projection, and initiating a major modernization program including new bases

(Himes, 2011) (Department of Defense, 2012). These changes also put the IRIN at the forefront of Iran's strategy for A2/AD in the case of amphibious invasion or naval attack (TRADOC G-2, 2016, p. 19). This reorganization also includes a new mission of power projection for the IRIN demonstrated by Iran's conventional navy's frequent journeys beyond the Persian Gulf and Arabian Sea.[66] The projection of power by the IRIN is a recent development for Iran and one the Supreme Leader and Iran's top naval commanders stress greatly.



*Figure 4.2 (Office of Naval Intelligence, 2017)*

Supreme Leader Ali Khamenei has repeatedly dubbed the IRIN Iran's strategic force and expressed the need for expansion. The first steps of expansion began with new leadership atop the IRIN with the appointment of Rear Admiral Habibollah Sayyari.[67] Sayyari served in the Imperial

---

[66] In July of 2021 two Iranian Ships participated in the 325th anniversary celebration of the Russian Navy in St. Petersburg (LaGrone, 2021).

[67] Sayyari is currently the Deputy Commander of the Artesh. This signifies a major boost in the influence the IRIN now has in Tehran (Rezaian, 2017). Sayyari has distinguished himself in the eyes of Ayatollah Khamenei and Iran's

Iranian Navy before the revolution, and he saw combat during the Iran-Iraq War as a Naval Commando. In addition to his wartime service, he has held commands of the 1st Marine Rifle Brigade, Manjil Marine Commando Training Center, Deputy 1st Naval District Commander, 4th Naval District Commander, Artesh Joint Staff Headquarters, and IRIN Deputy Commander from 2005-2007. Sayyari is well trusted in Tehran and considered a military professional compared to the more ideological Revolutionary Guard commanders (Office of Naval Intelligence, 2017) (Hime, 2011). He is also a very outspoken commander and regularly makes comments and gives press interviews stressing the importance of the IRIN and its ability to counter Iran's enemies.

Iran's military leaders also consistently speak about the IRIN's transformation and strategic importance. Reflecting on the 2007 reforms, Rear Admiral Sayyari stated:

> The greatest accomplishment that the IRIN has achieved in the recent few years was the force's upgrade from a costal navy limited to the Persian Gulf, Strait of Hormuz, and Sea of Oman into a strategic offshore navy. In the year 1386 (2007), when the commander-in-chief emphasized the formation of a strategi navy, we saw a metamorphosis in the Navy which caused this force to step out from its operational are of the Persian Gulf and Sea of Oman and achieve and effectual and operational presence in the wider space of the free seas. (Office of Naval Intelligence, 2017)

While attending Iran's 2014 Navy Week, Ayatollah Khamenei said "Given our vast maritime border and the enemy's huge investments in the area, our armed forces should continuously improve their readiness…Peacetime offers great opportunities for our armed forces to build up on preemptive capacities" (Balali, 2014). Aside from tough talk and bellicose statements attempting to bolster Iran's deterrence, the 2007 naval reforms increased the size and scope of the IRIN.

---

political elite, he has also been an effective lobbyist for the Artesh Navy and during his tenure the foundations of Iran's naval expansion came into fruition.

The accumulation of new surface and subsurface vessels, plus the division in areas of responsibility (AOR) propels the IRIN to be more compatible with Iran's desired strategy drawn from assumptions about their vision of war. The most important strategic element Iran's naval doctrine made congruent is its inception of a defense-in-depth capacity. Developing naval capabilities for defense-in-depth fulfills one of the pillars for Iran's vision of war. Iran sees the need for defense-in-depth in the naval sphere for three reasons, first it needs time to mobilize its armed forces, second to wage a war of attrition by raising enemies' casualties, and third to provide time to coordinate terror attacks with regional proxies.

The nature of Iran's terrain and force posture requires time to mobilize ground forces that are normally stationed in the west and northwest of Iran to move to southeast Iran for a possible enemy amphibious landing. Iran also is relying on a war of attrition model in the initial phases of a possible war to take advantage of their ability to absorb casualties while inflicting high costs on their enemies' armed forces because political cultures have shown a propensity for sensitivity in this regard, which Iran sees as a weakness. Third, Iran wants time to activate its terrorist proxies so they may launch attacks against adversaries' regional and global interests. Iran thinks that if it can sustain enough cost on the United States, they will backdown. Iran draws this conclusion from US's muddled responses after the 1983 Beirut bombings, Al-Qaeda's 1992 and 2000 bombings of US assets in Yemen, US withdrawal from Iraq in 2011, and recently the 2021 US withdrawal from Afghanistan.[68] But developing the assets for a defense-in-depth strategy is not just about military platforms, Iran seeks to use its geography against its enemies and secure its economy to fund its military machine.

---

[68] Iranian leaders also draw of Israel's experiences against Hezbollah in Lebanon during 1996 and 2006 (Ward, *Immortal: A Military History of Iran and its Armed Forces*, 2014).

The formation of a new naval base in Jask (IRIN second naval district) and the expansion of the port at Chah Bahar (IRIN third naval district) provide the IRIN sortie capabilities outside of the Persian Gulf and Strait of Hormuz (Borger, 2008).[69] The naval presence east of Hormuz helps secure Iran's imports and exports. The IRIN is specifically concerned with, what Iran has labeled, the Golden Triangle, this AOR forms a triangle with the Straits of Malacca, Bab al-Mandeb, and the Strait of Hormuz. Then Commander of the IRIN, RADM Sayyari stated "The Golden Triangle of Malacca, Bab al-Mandeb, and the Strait of Hormuz is an important triangle that is the area of the Artesh Navy's concentration based on the Leader's recommendation since 93 percent of the country's imports and exports are conducted through this route." (see Figure 5.3) (Office of Naval

---

[69] Jask Naval Base was opened in late 2008 and was inaugurated by IRIN Commander Admiral Habibollah Sayyari (Borger, 2008).

Intelligence, 2017, p. 25). Aside from non-energy commercial goods, part of Iran's naval expansion is to better secure its oil exports.

The 2007 naval reforms are not one dimensional, meaning Iran it not just expanding its naval capabilities for purely military purposes. The IRIN's new port in Jask is coupled with Iran's desire to be less reliant on shipping oil through the Strait of Hormuz. This stems from the lessons drawn fighting Iraq and the US Navy during the IIW.[70] So to alleviate their Persian Gulf shipping issues, Iran is massively expanding Jask port's energy export capacity. Iran envisions this port
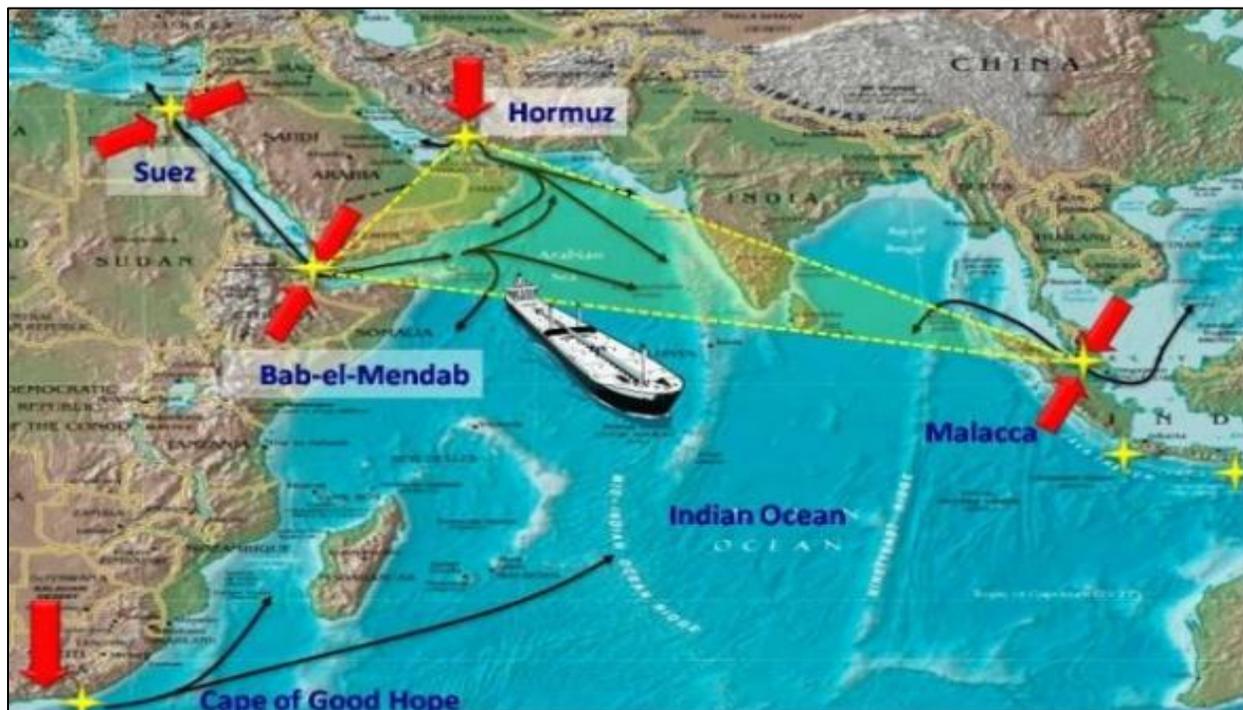


*Figure 4.3 (Khanzadi & Taleipour, 2019)*

being one of the largest energy export cities on the planet, shipping everything from LNG, crude oil, diesel fuel, bitumen, asphalt, and kerosene (Rashid, 2022). Also strategically important is the

---

[70] During the Iran-Iraq War, Iran was forced to ferry oil from the northern Persian Gulf down to Bandar Abbas so they can safely load commercial tankers outside of Iraq's striking distance. Another major issues with Iran's oil shipping during the war with Iraq is that it was easily boxed in by the US Navy. Operation Nimble Archer and Operation Praying Mantis showed Iran its Persian Gulf based oil terminals and pumping stations were greatly susceptible to enemy attack.

Goreh-Jask oil pipeline project. This would allow Iran to bypass Khrag Island's oil terminal and pump oil to Jask directly from Bushsher (Rashid, 2022).[71] Regarding what types of weapons platforms the IRIN intends to utilize for creating its defense-in-depth and power projection strategies, the accumulation of new ships and weapon systems is an ongoing mission.

Part of the IRIN's fleet consists of older, mid-sized surface combatants. The IRIN's pre-revolution ships includes three British Mark 5 Vosper (Alvand) class frigates, fourteen Combattante II (Kaman) guided missile boats, three Kaivan large patrol craft (LPC), and three PGM-71 LPCs (Nadimi, 2020). Iran also has domestic ship building capacity, a feat totally unthinkable after the war with Iraq. These ships are outfit with more modern EW systems though it is difficult to ascertain the true technical sophistication of these domestically produced vessels some with a history of technical problems disrupting journeys. Of the domestically built ships, Iran is continuing to construct Sina class LPCs and Mowj class frigates.

The Mowj class ships are reengineered Mark 5 Vosper class frigates modified to be the Artesh Navy's first helicopter-capable surface combatant, hosting a SH-3 Sea King helicopter (Singh, 2010) (Cordesman, 2016). These frigates host a multitude of weapons systems with the Noor long-range anti-ship missile (C-802), four SM-1 surface-to-air missiles, a 76mm Fajr-27 gun, and two 324mm light torpedo launchers.[72] These systems plus the helicopter capability set the Mowj class frigate up for anti-submarine warfare (AWS), surveillance, early warning, surface-to-surface warfare, and amphibious operations (Singh, 2010). There is a lack of uniformity in the

---

[71] The massive expansion of the Jask port is funded part of China's Belt and Road, specifically the String of Pearls strategy (Rashid, 2022).

[72] During Israel's 2006 war with Hezbollah, Hezbollah fired an Iranian made C-802 successfully hitting an Israeli *Sa'ar* class-5 missile ship. Though it is important to recognize that the Israelis disabled their ships anti-missile system because they were unaware of Hezbollah's anti-ship missile capability and they were worried about friendly fire (Cordesman, The Gulf: How Dangerous is Iran to International Maritime Security?, 2016).

three *Mowj* class ships showing Iran is experimenting and instituting new designs. The most recent commissioned ship, the *Shahad* is clearly a different design compared to the other two *Mowj* class ships with the *Shahad* having a different bridge design similar to modern naval designs.

Additionally, the *Shahad* continues to be updated with Iran's newer weapon systems. In late 2022 the IRIN unvailed the *Shahad*'s new air-defense systems with rotating missile launchers and new rotating phased-array antenna, this is a significant upgrade for the IRIN providing greater technical freedom for air-defense. When the *Shahad* was first launched it had two stationary air-defense launchers on the rear of the ship that were removed later and replaced by the new rotating launchers location on the front above the bridge (Binnie, Iranian navy upgrades frigate's air defences, 2022). While Iran's new frigates lack offensive firepower necessary to compete with Western designed vessels, the IRIN is experimenting equipping its new frigates with surface-to-surface missiles. The removal of the *Shahad's* rear air-defense launchers provides space for the IRIN to implement its desire for cruise missile launchers. Current Commander of the IRIN, Rear Admiral Shahram Irani stated Iran is in the process of equipping its frigates with Abu Mahdi cruise missiles to give the IRIN greater striking range. The Abu Mahdi cruise missile can travel around 1000km and utilizes a turbojet engine, which gives the navy capability to control the thrust of the engine to fly at different speeds and ranges (Navy Recognition, 2022). Iran has also developed domestic LPCs that possess similar firepower to their frigates. The Sina class LPCs are based on the Combattante II and possess four Noor missile launchers and a 76mm Fajr-27 gun (Nadimi, 2020) (Singh, 2010). Iran's most recent addition is the IRINS *Makran*, commissioned in early 2021 and provides valuable insight into the navy's strategy (Binnie & Pape, 2021)(Karimi, 2021).

The *Makran* signals Iran's intentions to expand its naval footprint and better ensure the defense-of-depth strategy is a reality (Bunyard, 2021). At 755 feet with a large open deck the

*Makran* is the IRIN's version of an American Expeditionary Mobile Base (ESB) (Sutton, 2020). Then Commander of the IRIN Rear Admiral Hossein Khanzadi said the large flight deck of the *Makran* holds six to seven IRIN RH-53D Sea Stallion and SH-3 Sea King helicopters (Newdick, 2021). In 2021 Tasnim News Agency published footage of helicopters and drones taking off from the flight deck, shortly before joining the IRIN's 75th flotilla that operated over 45,000 kilometers passing three continents (IFP News, 2021) (Tasnim News Agency, 2021). Aside from Iran's ESB, what sets the IRIN apart from other Gulf navies are its submarines and naval aviation assets.

Iran is the only Persian Gulf country to possess submarines and these assets once again complement Iran's geography. The Strait of Hormuz is the deepest part of the Persian Gulf which gives the IRIN a short tyranny of distance from its main submarine base in Bandar Abbas. The IRIN's three Kilo class submarines can deploy naval mines, fire advanced torpedoes, fire anti-ship missiles, and surface-to-surface missiles (Singh, 2010). Russia has helped Iran upgrade their submarines with cruise missile abilities of a target range up to 108 nautical miles (Singh, 2010).[73] The *Ghadir* submarine is a small submarine based on North Korean designs. Iran has considerably increased the diversity of functions for these small subs, they can aid in special operations with commando units, set mines, and fire missiles and torpedoes. The diesel engines give the *Ghadir* class submarines an added ability to move more silently, and the smaller ship design gives it more access throughout the shallow waters of the Persian Gulf. It is estimated the IRIN has 17 to 20 *Ghadir* submarines and that sonar systems were significantly upgraded in late 2022 (Cordesman, 2016) (Nadimi, 2020) (Navy Recognition, 2022). Iran's most impressive submarine development

---

[73] It is unclear what missile this would be from Iran's diversity of choices. The Jask-2 is Iran's most advanced submarine-launched anti-ship missile, but the Jask-2 has an engagement range of 15-25 nautical miles, and is outfit with a small warhead (Sutton, Fateh-Class Submarine, 2020).

is their domestically produced *Fateh* class submarine, which officially entered service in 2019 after being announced in late 2011 (Nadimi, 2020, p. 57) (Binnie, 2019).

The *Fateh* submarine is likely one of Iran's most complex weapons projects to date. Commissioned in 2019 at Bandar Abbas naval base, the *Fateh* is 157ft long and has four torpedo tubes compared its smaller cousin the *Ghadir's* two tubes (Binnie, 2019) (Sutton, 2020). The *Fateh* can dive to 200 meters and is outfit with a series of sensors, including an electro-optical system, optical periscope, and other electronic intelligence sensors for target-acquisition (Binnie, 2019). The IRIN's top submarine has also demonstrated its ability to fire submarine-launched surface-to-surface missiles like the *Ghadir* (Islamic Republic New Agency, 2019) (Binnie, 2020). Mentioned above, Iran is the only Persian Gulf country to possess a naval aviation element, this forces dates back to the Shah and is an important part of the IRINs ability to carry out its missions.

Part of Iran's 2007 navy reforms is the understudied evolution of the IRIN's Navy Aviation components. The IRIN has a variety of helicopters from Sikorsky CH-53 Sea Stallions, Sikorsky SH-3 Sea Kings, Mil Mi-17s, a variety of Bell Hueys, and twin-prop planes (International Institute for Strategic Studies, 2021). These naval air assets provide Iran the ability to conduct ASW patrols, quickly plant naval mines, transport commando units, and also attack enemy ships (Navy Recognition, 2023). The most lethal of Iran's naval aviation assets are the Mil Mi-17, these helicopters are now outfit to fire Iran's Noor and Qader anti-ship missiles (Navy Recognition, 2023). These upgrades to Iran's surface vessels, underwater force, and naval aviation assets are not without challenges.

The 2007 Artesh Navy's reforms are meant to accomplish two main goals, one bring congruence between the IRIN and Tehran's desired naval doctrine, and two establish the IRIN as a power projection capable force. The orchestration of these two goals reveals how Iran views its

navy and also provides future insight into the IRIN's upcoming manifestations. Iran is not afraid of being ambitious, testing the limits of their military-engineering abilities, and bucking the trends of modern military doctrine with new tactics and strategies. Under construction right now at the Bandar Abbas shipyard is a drone and helicopter carrier. This ship is different from the *Makran*, Iran's ESB, in that its constructing a large cantilever flight deck off the port side. This addition may indicate Iran's plans to deploy runway-based drone at sea (Sutton, 2022). The possible future naval deployment of Iran's most advanced drones would be a powerful weapon and increase the striking distance of the IRIN well beyond the Sea of Oman. Nonetheless, Iran's advancements since 2007 are not without shortcomings and challenges.

Iran has consistently experienced issues with maintenance and readiness (Ward, 2014). The *Kilo* class submarines occasionally experience technical issues in the warm waters of the Persian Gulf and have spent ample time in dry dock for retrofitting of new systems and materials for better application in the Gulf (Sutton, 2021). After 2017 many of the IRIN's readiness issues became public. The biggest setback occurred was while Admiral Hossein Khanzadi was at the helm of the IRIN.

In 2017 Hossein Khanzadi replaced longtime IRIN Commander Habibollah Sayyari who moved up the ladder to become the current Deputy Commander of the Artesh (Rezaian, 2017). During Khanzadi's tenure the IRIN faced a series of serous mishaps, it lost three vessels to non-combat incidents, and faced shipbuilding difficulties. On January 10, 2018 the *Mowj* class frigate *Damavand* sunk after hitting a jetty during a storm in the Caspian Sea port city of Bandar Anzali, in May 2020 the support vessel/patrol boat *Konarak* was hit by a friendly anti-ship missile, and on June 2, 2021 one of Iran's largest ships the replenishment ship *Kharg* caught fire and sunk outside

of Jask (Sutton, 2021).[74] In addition to lost ships, IRIN had their most recent construction of a

*Mowj* class frigate fall off the blocks during scheduled flooding of its dry dock. The ship then

rested at 60 degrees stopping itself from capsizing (Sutton, 2021). Khanzadi would soon be

replaced by Shahram Irani on August 17, 2021, Irani is the first Sunni to achieve a high-ranking

position within Iran's armed forces (Brodsky, 2021). Further indicating the importance of Iran's

navy in the leadership circles of Tehran, Ayatollah Khamenei wrote of Shahram Irani's

appointment:

> Because of the commitment and good record and the proposal of the Chief Commander of
> the Army, I appoint you as the Commander of the Navy of the Army of the Islamic Republic of Iran
> by awarding the rank of Admiral. Serious and worthy efforts are expected to utilize the Navy, the
> Army, the armed forces, and the country to advance the Navy vigorously, to upgrade the capacity
> with full readiness based on the growth and excellence of human capital. (Iran Press, 2021)

As Ayatollah Khamenei suggest Iran seeks to "advance the Navy vigorously", but how do these

advancements impact IRIN doctrine and strategy? The next section of this case study will answer

Gallo's five questions and provide Iran's assumptions about its vision of war and its nature of war.

Through these answers the posture of the IRIN can be understood, is Iran's conventional navy

defensive or offensive? How does the IRIN plan to confront an adversary in war?

*Conclusion*

Analyzing Iran's 2007 naval reform reveals Iran's overall strategy and doctrine at sea, these

reforms also show how important the navies (IRIN and IRGCN) are in Tehran's desire to secure

the survivability of the regime and keep oil flowing in the Golden Triangle. The IRIN possesses a

---

[74] The *Khrag* was an extremely important ship for the IRIN, it accompanied every long-range journey from the
Atlantic to journeys in the Pacific. Along the voyages the *Khrag* provided fuel, food, fresh water, and ammunition
(Worldview Stratfor, 2014). These journeys represent a major demonstration of Iran's naval capabilities and project
force outside of its normal naval neighborhood. Given this, the loss of the *Khrag* significantly set back Iran's plans
for power projection. These power projection journeys also act to shore up support inside Iran and can help IRIN
leaders convince the political leadership in Tehran that their return on investment in the Artesh Navy is paying off.

theory of victory around preventing and adversary's navy from breaching the Strait of Hormuz and/or causing an adversary to fail in reaching their objectives. The Artesh Navy has consistent assumptions about the nature and vision of war from their procurement and weapons programs, documents and speeches by political leadership, and leadership of the IRIN. The naval leadership has developed five assumptions about the nature of war, each with its own historical foundations and challenges that continue to impact Iran's military forces.

The first assumption is the need for joint operations and during the Iran-Iraq War, the Artesh and IRGC continued to disagree on the strategies and tactics Iran would need to defeat Iraq. These disagreements instigated infighting amongst the high-ranking officers, and this plagued Iran's war efforts against Iraq. After the war Iran's political elites sought to mend the gap between the Artesh and IRGC, eventually this political debate settled on the requirement that new Artesh and IRGC leadership to stress the need for joint operations. In the naval realm, Iran decided that for better correlation between strategy and their navies, joint operations needed to complement the strengths and weaknesses of each force. This may explain one of the contributing factors to the division of AOR under the 2007 naval reforms. To support joint operations, the IRIN wants to utilize mobility and firepower.

Iran's experiences in the "Tanker War" and the United States' military operations in Iraq and Afghanistan convinced the military planners in the Artesh that overwhelming firepower can shift the tide of battle.[75] A main feature of the 2007 reforms involved the research and development of new weapons systems and platforms. The Artesh Navy is constantly flirting with new weapons

---

[75] It can also be said that current lessons from the Russo-Ukraine war signal Iran's assumption about mobility and firepower are correct. The application of HIMARS and Western European-style mobile artillery by Ukraiian forces against Russia has helped Ukraine sustain defenses and counter Russia's overwhelming artillery forces. (BBC, 2022) (Mansoor, 2023) (Psaropoulos, 2022) (Danylyuk, Reynolds, Watling, & Zabrodskyi, 2022)

and testing these systems with their ships and submarines. Aside from land-based anti-ship missiles, Iran continues to advance their ship-bound firepower and naval aviation firepower.[76] Mobility, often interpreted as speed is not the case for the IRIN. Speed is more so the strength of the IRGCN, but the IRIN possesses advanced mobility through their submarines, the *Makran* ESB, and their future drone aircraft carrier. Next, the IRIN's leadership assumes intelligence and quick communications will play a significant factor in determining the nature of war.

In the first case study, the US Navy benefited from almost instant communications between officers in the Persian Gulf, through the various combatant commands, to the Pentagon, and lastly the White House. This rapid, satellite-based communication system allowed the US Navy to rapidly respond to Iran's provocations after the US Navy destroyed Iranian oil platforms. Meanwhile, Iran's command structure lacked cohesion and speed. The sporadic attacks with uncoordinated forces proved highly ineffective and costly against the more organized American force. This display of cohesion and C3I by the United States showed Iran the power of effective command, control, communications, and intelligence.[77] From this lesson Iran has commenced researching ways to equip their forces with intelligence gathering and communications systems. To this day Iran continues to struggle with communications, though it has become a main focus of the modernization efforts (Ward, Immortal: A Military History of Iran and its Armed Forces, 2014). [78] For the IRIN this came in the form of better EW systems for their surface and subsurface

---

[76] The IRGC, IRGCN, and IRIN have been using land-based anti-ship missiles since the Iran-Iraq War. In fact, the Silkworm missile was a major concern for the US Navy when developing their plans for operations in the Persian Gulf during the "Tanker War".

[77] During the Iran-Iraq War, reconnaissance was the exception rather than the rule (Cordesman & Wagner, 1990). The intelligence gathering during the war was mainly conducted through HUMINT, SIGNT, OSINT, and aerial surveillance of a more limited nature (Woods, Murray, Nathan, Laila, & Venegas, 2011) (Cordesman & Wagner, 1990).

[78] One notable exception is the June 20, 2019, downing of a U.S. Navy RQ-4 Global Hawk over the Persian Gulf. The IRIADF (Artesh Air Defense Force) and IRIN detected and tracked the RQ-4, relaying targeting information to the joint air defense command center. This targeting information was distributed to an IRGC 3rd Khordad surface-to-

vessels, the IRIN also developed a more sophisticated reconnaissance plan for their naval aviation arm. Iran's assumptions about the nature of war are compatible with their vision for the next war. Iran's admiralty developed 5 distinct factors about their vision of war.

Admiral Daneh-Kar outlined these factors in 1999, Iran then worked diligently to make these a reality.[79] The IRIN believes its mechanisms, methods, and modalities of war should envision, attacks on oil exports, submarine warfare in the Sea of Oman, using its geography to its advantage, the power of mines and anti-ship missiles, and the utilization of advanced EW. These lessons, like many of its assumptions about the nature of war, derive from its war with Iraq, the "Tanker War", and the United States' wars in Afghanistan and Iraq, reinforcing their A2/AD and defense-in-depth strategies.

Attacks on oil exports are not only a mainstay in Iran's gray zone playbook but are a critical part of the IRIN's identity. Iran's constant threating to close the Strait of Hormuz is aimed at attacking oil exports of the Gulf Arab Kingdoms.[80] Iran learned that the Gulf Kingdoms' wealth is a powerful weapon against their interests in the region and can potentially threating the survivability of the regime.[81] To keep these Kingdoms from overstepping Iran's redlines, the IRGCN and IRIN has established a strategic level of deterrence specifically aimed at oil exports. Part of Iran's plan to establish deterrence involves taking advantage of their geography, in the

---

air missile (SAM) system that shot down the RQ-4 (Nadimi, 2019). This joint operation demonstrates the effective coordination between two militaries typically in competition with one another.

[79] For reference look in the "*1990-2006*" subsection of this chapter.

[80] For more on Iran's threats about the Strait of Hormuz see: (Himes, 2011), (Esquivel, 1997), (Witoschek, 2012), (Carl, 2020).

[81] The Arab Kingdoms in the Gulf are consistently funding factions hostile to Iran, these funds are been traced to Syria, Iraq, Yemen, and groups inside Iran (Reuters Staff, 2012) (Todman, 2016) (Gause, 2007) (Juneau, 2016) (Guzansky & Nissim-Louvton, 2022) (Baloch, Kakar, Kakar, & Zaman, 2018).

naval realm Iran wants to use their position along the Strait of Hormuz to create a defense-in-depth. Iran has three main tools for their defense-in-depth strategy.

The first tool is their fleet of submarines which can sortie out into the deep water where the Strait of Hormuz meets the Sea of Oman to adding another layer to Iran's A2/AD strategy. Second tool of their defense-in-depth strategy is land-based anti-ship missiles. These missiles are housed in infrastructure to protect the missile instillations from ariel attacks and on mobile systems to make their positions harder to track. The last tool is the newest asset for the IRIN, the *Makran* ESB and future drone carrier. These two converted oil tankers add an extended air element for the navy that stretches their land-based drone and helicopter weapons systems into ship-based systems far from the Strait of Hormuz into the India Ocean. Naval mines have become a critical part of Iran's vision of war, they see these weapons as a cheap and effective alternative that can slow an enemy down and create layers for A2/AD.[82] The last part of Iran's naval vision of war involves EW systems.

EW systems are a major part of Iran's current research and development and still a main strategic weakness of theirs. Many of their developed radar and target acquisition systems are used for both land and sea forces. But these systems are largely untested in combat and have strategic limitations. The main strategic EW limitation for the IRIN is their lack of airplane-based radar capabilities for maritime patrol and anti-submarine warfare.[83] During the "Tanker War" the United States was able utilize maritime patrols for better target acquisition, early warning detection, reconnaissance, and while Iran does have limited aircraft for these applications their development

---

[82] Naval mines have been an Iranian naval weapon since the "Tanker War" – see case study 1.
[83] The IRIN does have helicopter-based anti-submarine EW capabilities but the radar and travel ranges on helicopters are limited compared to maritime patrol aircraft.

in this regard is lacking.[84] Following what the 2007 naval reforms reveal about Iran's theory of victory, Gallo's second question queries about factors affecting this theory.

Impacts on Iran's theory of victory emanating from a shift in balance of threats and a rise of new powers revolves around a recent development, the expansion of Gulf Arab navies. While the Gulf Arabs began improving their navies of late, this is mostly a reaction to Iran's expanding power in the naval realm (Waldwyn, 2018). The Gulf Arabs realizing that they are becoming outmaneuvered at sea by Iran not only gives Iran affirmation that their calculation of naval expansion was correct but also affirms their theory of victory that the sea will play a major part in their success, or their adversaries lack there off.[85] But Iran has flexibility in responding to these shifts through their gray zone playbook to either probe for weaknesses in these adversaries or ramp up operations to counter and attack. Iran is greatly considering their adversaries intentions and capabilities, whether that be the United Staes or Saudi Arabia, the IRIN is tailored to counter these navies doctrines through exposing their weaknesses. It does remain to be seen if their IRIN and IRGCN seek victory against their Arab neighbor's navies compared to their "do not lose" strategy versus the United States. Gallo's third question hits on a main topic of this case, when does a new theory of victory lead to doctrinal change for the IRIN?

Based on the IRIN's acquisition of new ships, weapons, submarines, and supporting equipment, paired with their leadership's statements, and IRIN actions, their doctrine has remained consistent since their defeat in the "Tanker War". Iran's changes took decades and sucked

---

[84] For more on Iran's radar capabilities see: (DIA, 2019) (Egozi) (Military Studies and Analysis Institute, 2005) (Clawson, 1994).
[85] For more about the Gulf Arab's naval expansion see: (Waldwyn, 2018) (Fish, 2022) (Muspratt, 2018).

resources out of their internationally isolated economy.[86] Though there remains one caveat in their doctrine that does not completely impact Iran's theory of victory, power projection. Iran's naval forces were unable to project power outside of the Persian Gulf until recently and this projection currently does not have any real impact on their vision of war. Their demonstration of power are meant to secure propaganda victories at home and in the region and expand their illicit activities with allies outside of the MENA region like Venezuela and Russia. Iran reached the point of embarking on organizational change in place of additional doctrinal change. Confident in their choices of how to fight an adversary, Iran divided their navies AOR and gave each a clear set of missions. The 2007 naval reforms help Iran secure regime survival and oil exports in addition to fitting the IRIN into its desired theory of victory.[87]

**Chapter 4: Conclusions**

The three cases reveal how the Artesh has evolved in wartime and in times of no war.[88] By using institutional strategy theory to measure the holistic approach of war the Artesh was operating on it shows Iran's changes in wartime conditions. Process tracing followed the Artesh's foreign policy application with powers Iran enjoys somewhat friendly and cooperative relations with. Lastly, victory theory demonstrates the assumptions Iran's navy holds about its nature of war and vision of war.

---

[86] There remains a wide debate being Iran watchers about the real costs for their military buildup and expenditures. These questions remain due to lack of transparency in their budget, mistrust of their stated numbers, and Iran's know illicit activities around the world.

[87] Though IRIN commanders have clearly been elevated in Iran's general staff structure and national security establishment (former IRGCN and IRIN commander Ali Shamkhani now Secretary of the Supreme National Security Council and former IRIN commander Sayyari now Deputy Commander of the Artesh) it remains unclear the extent of IRIN commanders' influence in Iran's overall security planning and amongst the political elites in Tehran. What is clear is that the Supreme Leader and the Supreme National Security Council have placed a great significance on Iran's naval capabilities.

[88] It is important to note here that instead of saying "peace time" it says time of no war. Iran does not consider itself in a state of peace with the region. It has a siege mentality and believes it is constantly under assault from outside powers attempting to topple the regime. Thus, Iran believes it is in a state of hybrid war.

During the beginning of the Iran-Iraq War the pre-1979 institutional strategy of the Artesh held several correct strategic, operational, tactical, and technological foundations. Strategically, the was with Iraq over the Shatt al-Arab was likely the spot for war. operationally, the Artesh would need to possess a strong navy and air force to support land operations. Tactically, the Shah-era plans had trainer their pilots and sailors better than their Iraqi counterparts. Lastly, technologically, the Shah's access to Western weapons set the air force and navy above their regional competitors' forces. The Artesh no longer found itself the political favorite of the leadership in Tehran with the fall of the Shah and the breakdown of the Artesh in the wake of the 1979 revolution.

This loss of political capital and the clouding of command structure with the IRGC forces the Artesh to evolve to a new political environment. Throughout the IIW Tehran consistently placed the IRGC above the Artesh in leading major military operations. These operations sometimes led to major defeats, in the case of Operation Praying Mantis and Iran's extremely costly offensives between 1984-1987. Where the Artesh proved its ability to effectively assume command and initiate joint-operations was at al-Faw. The attack on al-Faw showed how the Artesh had changed its institutional strategy between 1979-1986. These changes took on the face of greater emphasis on night operations, C2, diversionary attacks, and better training of infantry to cope with a lack of air defenses.[89]

Where the Artesh demonstrated a lack in effective institutional change is their naval strategy during the IIW. In the opening stages of the war with Iraq, the IRIN showed severe

---

[89] This lack of air defenses was so critical that if Iraqi actually had an effective air force they might have been able to achieve more battlefield success. This also showed Iran the need to develop anti-air defenses as it became obvious during the US invasions of Iraq and Afghanistan that the United States possessed the ability to launch unrelenting bombardment from the sky with extreme effectiveness in disabling an adversaries C2.

advantage over Iraq, but where the IRIN lack the correct changes was against the US Navy. Before Operation Praying Manits, the IRIN and IRGCN conducted many operations against defenseless tanker ships transiting the Gulf, once the United States became involved in providing protection to a limited number of ships the IRIN lacked the ability to properly respond in an effective manner. The political leadership of the IRIN was dominated by the IRGC and the clerical leadership in Tehran. After the United States began Operation Praying Mantis, Iran's naval leadership attempted to counter the US attack with what can be compared to an emotional outburst. The Artesh and IRGC lost many ships, aircraft, and personnel with their randomized, uncoordinated, incoherent reactions to the US Navy. Though the "Tanker War" taught the IRIN many valuable lessons about how to wage future naval operations in the Persian Gulf, these came at a high cost.

Victory theory showed how Iran's naval ideas shifted from the IIW to the present. Iran's new naval reforms are meant to support its assumptions about the nature of war and its vision of war. Iran assumes the nature of war in the naval domain will emphasize joint-operations, mobility, firepower, intelligence, and quick communications; while it envisions attacks on oil exports, submarine warfare, naval mines and anti-ship missiles, EW, its geographical advantages as the best way to fight the next war at sea. Aside from its gray zone operations the IRIN is attempting to add power projection to its institutional strategy. The navy, both IRGCN and IRIN, are quickly becoming the most favored force in Tehran. Its evolution since 2007 is still in the works and Iran is continuing to develop and implement new weapons and

The Artesh since 1980 has conducted significant evolutional changes to its institutional strategy. These changes are often aligning the Artesh with the lessons Iran learned during the IIW and from the US invasions of Iraq and Afghanistan. Questions remain about the future of the Artesh's changes, but one thing is certain power projection is becoming a factor in the way Iran

interacts with its neighbors and attempts to accomplish its regional goals. The power projection of the IRIGF against Turkey and Azerbaijan signifies a serious shift in its historical application. The advent of IRIN flotillas to the Atlantic and Pacific oceans shows the golden triangle is not the only place the IRIN wishes to conduct operations. These shifts show Iran is currently embarking on a military evolution and buildup to achieve its goals of regional hegemony.

## Appendix A

Commercial Ship Numbers

| Number of Ships attacked | By Iraq | By Iran |
|---|---|---|
| 1981 | 5 | 0 |
| 1982 | 14 | 0 |
| 1983 | 8 | 0 |
| 1984 | 25 | 14 |
| 1985 | 31 | 13 |
| 1986 | 57 | 41 |
| 1987 | 83 | 79 |
| 1988 | 29 | 31 |
| Total: | 252 | 178 |
| Total for both Iran and Iraq: | 430 | |

(Razoux, 2015)

**Appendix B**

Gallo's Five Questions

1.  What is the IRIN's theory of victory?

    a.  What assumptions does it have about the nature of war?

    b.  How does the IRIN envision the next war?

2.  Do shifts in the balance of threat, development of military technology, rise of new powers, capability change, change in an adversary's intentions, a crisis or war affect the IRIN's theory of victory?

    a.  How does it perceive and respond to shifts?

    b.  What determines a reevaluation of existing theory of victory?

    c.  To what degree do Iranian leaders consider the intentions and capabilities of foes?

    d.  How does the IRIN prioritize threats?

3.  When does a new theory of victory lead to a doctrinal change?

    a.  What are costs and benefits of changing a doctrine?

        i.  How does the IRIN weight the costs?

    b.  Is organizational structural change contemplated in place of or in addition to doctrinal change?

    c.  What factors are considered by IRIN and Iranian leaders when they initiate doctrinal change?

4.  How do civilians impact the methods to reexamine victory theory and introduce doctrinal change?

    a.  Is civilian interest in line with IRIN interests?

    b.  If political elites want change but Artesh/IRIN elites do not what results?

    c.  If Artesh/IRIN elites want change but political elites do not what results?

    d.  Do IRIN leaders act in expectation of political elites' interference?

5.  When doctrinal change is introduced do internal factors affect the IRIN's new doctrine's character?

    a.  What goals do Artesh/IRIN leaders have for a new doctrine?

    b.  How does Artesh/IRIN cultural characteristics affect the nature of doctrinal change?

    c.  How does the IRIN compete with the IRGCN over technology, mission, and funding?

**References**

Abdorrahman Boroumand Center for Human Rights in Iran. (n.d.). *One Person's Story Bahram Afzali*. Retrieved January 1, 2023, from Abdorrahman Boroumand Center for Human Rights in Iran: https://www.iranrights.org/memorial/story/-4343/bahram-afzali

ADP 1-01. (2019). *Doctrine Primer.* Washington DC: Headquarters, Department of the Army.

Ahmed Moonakal, N. (2022, October 27). *The Pluse - Economy - South Asia: The Challenges and Limitation in India-Iran Relations*. Retrieved September 12, 2022, from The Diplomat: https://thediplomat.com/2022/10/the-challenges-and-limitations-in-india-iran-relations/

Ahmed, Z. S., & Akbarzadeh, S. (2020). Pakistan caught between Iran and Saudi Arabia. *Contemporary South Asia, 28*(3), 336-350.

Ajili, H., & Rouhi, M. (2019). Iran's Military Strategy. *Survival, 61*(6), 139-152. Retrieved from https://www.iiss.org/publications/survival/2019/survival-global-politics-and-strategy-december-2019january-2020/616-11-ajili-and-rouhi

Alam Rizvi, M. M. (2012). Evaluating the Political and Economic Role of the IRGC. *Strategic Analysis*, 584-596.

Aliza, M. (2007). *Blood and belief the PKK and the Kurdish fight for independence.* New York: New York University Press.

Al-Rodhan, K., & Cordesman, A. H. (2006). *The Gulf Military Forces in an Era of Asymmetric War: Iran.* Washington DC: Center for Strategic and International Studies.

Amanat, A. (2017). *Iran a Modern History.* New Haven: Yale University Press.

AP. (2019). *Iran announces joint border security force with Pakistan.* Tehran: AP.

AP. (2020, June 19). *Baghdad summons Turkey, Iran over bombing of Kurdish rebels in northern Iraq*. Retrieved from Al-Arabiya News: https://english.alarabiya.net/News/middle-east/2020/06/18/Baghdad-summons-Turkey-Iran-over-bombing-of-Kurdish-rebels-in-northern-Iraq

Aziz, H., & Cevik, S. (2022). *Turkish and Iranian Involvement in Iraq and Syria.* German Institute for International Politics. Retrieved from https://www.swp-berlin.org/10.18449/2022C58/

Bahgat, G., & Ehteshami, A. (2021). *Defending Iran.* Oxford: Oxford University Press.

Balali, M. (2014). *Khamenei tells Iran armed forces to build up 'irrespective' of diplomacy.* Reuters. Retrieved from https://www.reuters.com/article/uk-iran-military-idUKKCN0JE0NH20141130

Baloch, D. M., Kakar, A. M., Kakar, S. A., & Zaman, D. A. (2018). Saudi-Iranian Relations; The Proxy Conflicts and Impications for Balochistan. *Balochistan Review, 38*(1), 141-149. Retrieved February 17, 2023, from http://web.uob.edu.pk/uob/Journals/Balochistan-

Review/data/BR%2001%202018/141-149%20Saudi-Iranian%20Relations;%20The%20Proxy%20Conflicts%20and%20Implications%20for%20Balochistan,%20Sher%20Ali%20Kakar.pdf

Basit, S. (2019). Explaining the impact of militancy on Iran-Pakistan relations. *Small Wars & Insurgencies, 29*(5-6), 1040-1064.

BBC. (2022, August 22). Ukraine: What are Himars missiles and are they changing the war? Retrieved February 16, 2023, from https://www.bbc.com/news/world-62512681

Binnie, J. (2019, 18 February). *Iran commissions Fateh submarine*. Retrieved February 14, 2023, from Janes: https://www.janes.com/defence-news/news-detail/iran-commissions-fateh-submarine

Binnie, J. (2020, September 16). *Iran claims longer range submarine missile*. Retrieved February 14, 2023, from Janes News: https://www.janes.com/defence-news/news-detail/iran-claims-longer-range-submarine-missile

Binnie, J. (2022). *Iran unveils longer-range SAM.* Janes. Retrieved December 23, 2022, from https://www.janes.com/defence-news/news-detail/iran-unveils-longer-range-sam

Binnie, J. (2022, November 29). *Iranian navy upgrades frigate's air defences*. Retrieved Feburary 15, 2023, from Janes News: https://www.janes.com/defence-news/news-detail/iranian-navy-upgrades-frigates-air-defences

Binnie, J., & Pape, A. (2021, January 13). *Janes: News: Iranian navy commissions converted tanker*. Retrieved from Janes: https://www.janes.com/defence-news/news-detail/iranian-navy-commissions-converted-tanker

Bishop, F., & Cooper, T. (2000). *Iran-Iraq War in the Air 1980-1988.* Atglen, PA: Schiffer Publishing.

Bishop, F., & Cooper, T. (2004). *Iranian F-14 Tomcat Units Combat.* Ospery Publishing.

Borger, J. (2008, October 29). Iran opens new naval base at the mouth of Persian Gulf. *The Guardian*. Retrieved February 12, 2023, from https://www.theguardian.com/world/2008/oct/29/iran

Brandon, J. (2008). Iran's Kurdish Militants Under Pressure from Joint Turkish-Iranian Assaults. *Terrorism Monitor, 6*(21). Retrieved from https://jamestown.org/program/irans-kurdish-militants-under-pressure-from-joint-turkish-iranian-assaults/

Brodsky, J. M. (2021, August 18). *Appointment of a New Iran Navy Commander Follow Recent Mishap*. Retrieved February 15, 2023, from Iran International: https://old.iranintl.com/en/iran/appointment-new-iran-navy-commander-follows-recent-mishaps

Bunker, R. J., Dilegge, D., & Keshavarz, A. (2016). *Iranian and Hezbollah Hybrid Warfare Activities.* Bloomington, IN: Small Wars Foundation.

Bunyard, J. (2021). *What a New Naval Vessel Says About Iran's Ambitions at Sea.* Newlines Institute for Strategy and Policy. Retrieved from https://newlinesinstitute.org/iran/what-a-new-naval-vessel-says-about-irans-ambitions-at-sea/

Byrne, K., & Byrne, M. (2022). *Worlds Apart: A Documentary History of US-Iranian Relations, 1978-2018.* Cambridge: Cambridge University Press.

Carl, N. (2020, September 22). *The growing Iranian threat around the Strait of Hormuz.* (American Enterprise Institute) Retrieved February 17, 2023, from Critical Threats: https://www.criticalthreats.org/analysis/the-growing-iranian-threat-around-the-strait-of-hormuz

Carmen. (2021, November 25). *Market Data: Mubarek Conventional Oil Field, UAE.* Retrieved Feburary 1, 2023, from Offshore Technology: https://www.offshore-technology.com/marketdata/mubarek-conventional-oil-field-uae/

CENTCOM. (2017, March 9). *CENTCOM Posture Statement.* Retrieved from CENTCOM: https://www.centcom.mil/ABOUT-US/SASC-POSTURE-STATEMENT-2017/

CENTCOM. (2018, March 13). *CENTCOM Posture Statement.* Retrieved from CENTCOM: https://www.centcom.mil/Portals/6/Documents/Transcripts/Votel_03-13-18.pdf

CENTCOM. (2019, February 5). *CENTCOM Posture Statment.* Retrieved from CENTCOM: https://www.centcom.mil/Portals/6/Documents/Transcripts/Votel020519.pdf

CENTCOM. (2021, April 22). *CENTCOM Posture Statement.* Retrieved from CENTCOM: https://www.centcom.mil/Portals/6/Documents/Transcripts/04222021SASCCENTCOMandAFRICOMTranscript.pdf

CENTCOM. (2022, March 15). *CENTCOM Posture Statement.* Retrieved from CENTCOM: https://www.centcom.mil/ABOUT-US/POSTURE-STATEMENT/

Cevik, S. (2022). *Turkey's Military Operations in Syria and Iraq.* German Institute for International and Security Affairs. Retrieved September 12, 2022, from https://www.swp-berlin.org/en/publication/turkeys-military-operations-in-syria-and-iraq

Chausovsky, E. (2020). *Turkey Challenging Russia's Monopoly in the South Caucasus.* DC: Center for Global Policy.

Checkel, J. T. (2008). Process Tracing. In A. Klotz, & P. D, *Qualitatvie Methods in International Relations* (pp. 114-127). New York: Palgrave MacMillian.

Chubin, S. (2009). Extended Deterrence and Iran. *Strategic Insights, 8*(5).

Clawson, P. (1994). *Iran's Strategic Intentions and Capabilities.* Washington DC: Institute for National Strategic Studies at the National Defense University. Retrieved January 15, 2023, from https://apps.dtic.mil/sti/pdfs/ADA278559.pdf

Cordesman, A. H. (2004). *Iran's Evolving Military Forces.* Washington DC: Center for Strategic and International Studies.

Cordesman, A. H. (2016). The Gulf: How Dangerous is Iran to International Maritime Security? In S. Bruns, & J. Krause (Eds.), *Routledge Handbook of Naval Strategy and Security* (pp. 103-117). London: Routledge.

Cordesman, A. H., & Kleiber, M. (2007). *Iran's Military Forces and Warfighting Capabilities.* Westport, Conn: Praeger Security International.

Cordesman, A. H., & Wagner, A. R. (1990). *The Lessons of Modern War* (Vols. Volume 2: The Iran-Iraq War). Boulder, Colorado: Westview Press Inc.

Crist, D. (2013). *The Twilight War.* New York: Penguin Books.

Czulda, R. (2020). Defence industry in Iran - between needs and real capabilities. *Defense and Security Analysis*, 201-217.

Daneh-Kar, R. A. (1999, December 21). Operational Doctrine of the Navy of the Islamic Republic of Iran. *Saff*(235).

Daneh-Kar, R. A. (2000, February 20). Operational Doctrine of the Navy of the Islamic Republic of Iran. *Saff*(238).

Danylyuk, O. V., Reynolds, N., Watling, J., & Zabrodskyi, M. (2022). *Preliminary Lessons in Conventional Warfighting from Russia's Invasion of Ukraine: February-July 2022.* Royal United Services Institute. Retrieved February 16, 2023, from https://static.rusi.org/359-SR-Ukraine-Preliminary-Lessons-Feb-July-2022-web-final.pdf

Department of Defense. (2012). *Annual Report on Military Power of Iran.* Washington DC: Department of Defense.

Department of Defense. (2016). *Department of Defense Dictionary of Military and Associated Terms.* Washington DC: Joint Doctrine Publications.

DIA. (2019). *Iran Military Power.* Washington DC: Defense Intelligence Agency.

Dunn, B. J. (1997). *The First Gulf War and the Army's Future.* Association of the United States Army. Arlington: The Institute of Land Warfare. Retrieved from https://www.ausa.org/sites/default/files/LWP-27-The-First-Gulf-War-and-the-Armys-Future.pdf

Egozi, A. (n.d.). Iran's Air Defence System. *Asia Pacific Defence Reporter*, 32-33. Retrieved February 17, 2023, from https://www.inss.org.il/wp-content/uploads/sites/2/systemfiles/Iran's%20air%20defence%20system.pdf

Eisenstadt, M. (1995). *Iran's Naval Buildup in the Gulf: An Assessment.* Washington DC: The Washington Institute for Near Easy Policy. Retrieved February 11, 2023, from https://www.washingtoninstitute.org/policy-analysis/irans-naval-buildup-gulf-assessment

Eisenstadt, M. (2021). Iran's Gray Zone Strategy. *PRISM*, 77-97.

Esienstadt, M. (1996). *Iranian Military Power: Capabilities and Intentions.* Washington DC: The Washington Institute for Near East Policy. Retrieved February 11, 2023, from https://www.washingtoninstitute.org/policy-analysis/iranian-military-power-capabilities-and-intentions

Esquivel, J. M. (1997, December 5). Iran and the Strait of Hormuz: Vayring Levels of Interdiction. 94. Monterey, California: Naval Postgraduate School. Retrieved February 12, 2023, from https://core.ac.uk/download/pdf/36702143.pdf

Farhang, R. (1997). *Iranian Persepctives on the Iran-Iraq War.* Gainesville: University Press of Florida.

Farrokh, K. (2011). *Iran at War: 1500-1988.* Osprey Publishing.

Farzanegan, M. R. (2012). Military Spending and Economic Growth: The Case of Iran. *Defense and Peace Economics*, 247-269.

Federal Research Division Library of Congress. (2008). National Security. In F. R. Congress, G. E. Curtis, & E. Hooglund (Eds.), *Iran: A Country Study* (pp. 255-289). Washington DC: Library of Congress.

Fish, T. (2022, March 8). Gulf Naval Recapitalisation. *Asain Military Review*. Retrieved January 15, 2023, from https://www.asianmilitaryreview.com/2022/03/gulf-naval-recapitalisation/

Foreign Broadcast Information Service. (Otcober 15 1980). *Daily Report.* FBIS.

Future for Advanced Research and Studies. (2022, December 12). *Mutual Aims Turkish-Iranian targeting of Iraq's Kurds*. Retrieved from Future for Advanced Research and Studies: https://futureuae.com/en-US/Mainpage/Item/7846/mutual-aims-turkish-iranian-targeting-of-iraqs-kurds

Gall, C. (2009, July 11). Another Insurgency Gains in Pakistan. *The New Yor Times*. Retrieved from https://www.nytimes.com/2009/07/12/world/asia/12baluchistan.html?ref=world

Gallo, A. A. (2018). *Understanding Military Doctrinal Change During Peacetime.* New York City: Columbia University Graduate School of Arts and Sciences.

Gause, F. G. (2007, March). Saudi Arabia: Iraq, Iran, the Regional Power Balance, and the Sectarian Question. *Strategic Insights, 6*(2). Retrieved January 15, 2023

Geroux, J., & Spencer, J. (2022). *Defending the City: An Overview of Defensive Tactics From The Modern History of Urban Warfare.* West Point: Modern War Institute. Retrieved from https://mwi.usma.edu/defending-the-city-an-overview-of-defensive-tactics-from-the-modern-history-of-urban-warfare/

Gharehbaghian, M. (1987). Oil Revenue and the Militarization of Iran: 1960-1979. *Social Scientist, 15*(5), 87-100. Retrieved 12 16, 2022, from https://www.jstor.org/stable/3517317

Gibson, B. R. (2010). *Covert Relationship: American Foreign Policy, Intelligence, and the Iran-Iraq War 1980-1988.* Santa Barbara: Preager.

Glaser, C. L. (2010). *Rational Theory of International Politics: The Logic of Competition and Cooperation.* Princeton University Press.

Gunter, M. M. (1998). Turkey and Iran Face off in Kurdistan. *Middle East Quarterly*, 33-40.

Gunter, M. M., & Yavuz, M. H. (2020). The October 2019 Turkish Incursion Into Kurdish Syria: Its Background & Broader Implications. *Middle East Policy*, 86-101.

Guzansky, Y., & Nissim-Louvton, I. (2022). *Seven Years Later: Is the War in Yemen Nearly Over?* INSS. Retrieved February 17, 2023, from https://www.inss.org.il/publication/yemen-war/

Hashim, A. S. (2012). The Iranian Military in Politics, Revolution and War, Part One. *Middle East Policy*, 98-116.

Hashim, A. S. (2012). The Iranian Military in Politics, Revolution and War, Part Two. *Middle East Policy*, 65-83.

Hime, C. J. (2011). *Iran's Two Navies.* Washington DC: Institute for the Study of War. Retrieved February 12, 2023, from http://www.admiraltytrilogy.com/read/Irans_Two_Navies.pdf

Himes, J. C. (2011). *Iran's Maritime Evolution.* Washington DC: Center for Strategic & International Studies.

Hiro, D. (1991). *The Longest War: The Iran-Iraq Military Conflict.* New York: Routledge.

Hughes, D. G. (2015, April). Demythologizing Dhofar: British Policy, Military Strategy, and Counter-Insurgency in Oman, 1963-1976. *The Journal of Military History*, 423-456.

Huntington, S. P. (1957). *The Soldier and the State.* Cambridge, Mass: Harvard University Press.

IFP News. (2021, January 12). Makran Foward Base Ship Joins Iran's Navy Fleet. IFP News. Retrieved February 14, 2023, from https://www.youtube.com/watch?v=8qgo2EDfq48

International Institute for Strategic Studies. (2021). Chapter Seven: Middle East and North Africa. In IISS, *The Military Balance* (Vol. 121 (1), pp. 314-377). The International Institute for Strategic Studies. doi:10.1080/04597222.2021.1868796

Iran Press. (2021, August 17). *Leader appoints Second Admiral Shahram Irani as Commander of Army's Navy*. Retrieved February 15, 2023, from Iran Press: https://iranpress.com/content/45381/leader-appoints-second-admiral-shahram-irani-commander-army-navy

Iranidoost, K. (2021, October 25). *Iran, Pakistan to increase cooperation on military training*. Retrieved from Mehr News Agency: https://en.mehrnews.com/news/180032/Iran-Pakistan-to-increase-cooperation-on-military-training

Islamic Republic New Agency. (2019, February 17). *Iran most advanced domestically-build submarine joints fleet*. Retrieved February 14, 2023, from Islamic Republic News Agency: https://en.irna.ir/news/83212874/Iran-most-advanced-domestically-built-submarine-joins-fleet

Jenkins, G. H. (2012). *Occasional Allies, Enduring Rivals: Turkey's Relations with Iran.* Washington DC: Central Asia - Caucasus Institute Silk Road Studies Program. Retrieved from https://silkroadstudies.org/resources/pdf/SilkRoadPapers/2012_05_SRP_Jenkins_Turkey-Iran.pdf

Joint Chiefs of Staff. (2017). *Joint Operations* (Vols. Joint Publication 3-0). Washington DC: Government Printing Office. Retrieved from Joint Chiefs of Staff.

Juneau, T. (2016, May). Iran's policy towards the Houthis in Yemen: a limited return on a modest investment. (R. I. Affairs, Ed.) *International Affairs, 92*(3), 647-663. Retrieved from https://www.jstor.org/stable/24757629

Karimi, N. (2021). *Iran holds missile drill in the Gulf of Oman amid tensions.* Associated Press. Retrieved February 14, 2023, from https://apnews.com/article/lifestyle-business-iran-iran-nuclear-persian-gulf-tensions-c35793aa8aebb5f70c104ed528ba00ed

Kelley, S. A. (2007, June). Better Lucky Than Good: Operation Earnest Will as Gunboat Diplomacy. Monterey, California, United States: Naval Post Graduate School. Retrieved January 24, 2023

Khanzadi, H., & Taleipour, M. R. (2019). Development Model of Roles of I.R. of Iran Navy. *Scientific Quarterly Journal of Defense Strategy, 17*(1), 49-82. Retrieved February 16, 2023, from https://ds.sndu.ac.ir/article_597_306c913c234c8f39f6c4ba96cfc7bf55.pdf?lang=en

Kissinger, H. A. (1954). Military Policy and Defense of the Grey Areas. *Foreign Affairs, 33*(1), 416-428. Retrieved 12 16, 2022, from https://go.openathens.net/redirector/liberty.edu?url=https://www-proquest-com.ezproxy.liberty.edu/scholarly-journals/military-policy-defense-grey-areas/docview/1290271402/se-2

Klotz, A., & Parkash, D. (2008). *Qualitative Methods in International Relations.* New York: Palgrave MacMillan.

LaGrone, S. (2021). *Iranian Navy Flotilla Wraps up Four-Month Atlantic Deployment, Pledges more International Operations.* United States Naval Institute News. Retrieved from https://news.usni.org/2021/09/10/iranian-navy-flotilla-wraps-up-four-month-atlantic-deployment-pledges-more-international-operations

Larrabee, S., & Nader, A. (2013). *Turkish-Iranian Relations in a Changing Middle East.* Arlington: RAND.

Lefebvre, J. A. (2019). Iran's Scramble for Sub-Saharan Africa. *Insight Turkey*, 133-150.

Maj. Bergquist, R. E. (1988). *The Role of Airpower in the Iran-Iraq War.* Montgomery, Alabama: Air University, Maxwell Air Force Base, Airpower Research Institute. Retrieved from https://www.airuniversity.af.edu/Portals/10/AUPress/Books/B_0025_BERGQUIST_AIRPOWER_IRANIRAQ.pdf

Mansoor, S. (2023, January 4). Why U.S. HIMARS Rockets Are Becoming Increasingly Decisive for Ukraine. *Time Magazine*. Retrieved February 16, 2023, from https://time.com/6244479/himars-rockets-ukraine-russia/

McCurdy, D. (2008). Turkish-Iranian Relations: When Opposites Attract. *Turkish Policy Quarterly*, 87-106.

McInnis, M. J. (2017). *Iranian Concepts of Warfare.* Washington DC: American Enterprise Institute.

Military Studies and Analysis Institute. (2005). *Iranian made radars: Revelation of the Beasts.* Military Studies and Analysis Institute. Retrieved February 17, 2023, from https://msai.ir/wp-content/uploads/2020/02/Iranian-radars.pdf

Mohammadifar, B. G. (2003, May 19). Interview with Ground Forces Commander, Brigadier General Nasser Mohammadifar. (V. o. Network, Interviewer)

Monitor, M. E. (2020, June 30). Iran insists that air strikes in northern Iraq coincided 'by chance' with Turkey's. *Middle East Monitor*.

Monitor, M. E. (2021, January 15). Iran to step up border security in coordination with Turkey. *Middle East Monitor*.

Murray, W., & Woods, K. M. (2014). *The Iran-Iraq War: a military and strategic history.* New York: Cambridge University Press.

Muspratt, A. (2018, August 20). *Saudi Naval Expansion Programme II: Modernising the Royal Saudi Navy.* Retrieved January 15, 2023, from Defense iQ: https://www.defenceiq.com/air-land-and-sea-defence-services/news/snep-ii-modernisation-of-saudi-arabias-navy

Nadimi, F. (2017). *Iran's National Army Reorganizes.* Washington DC: The Washington Institute for Near East Policy.

Nadimi, F. (2019). *Iran Develops Air Defesen Capability for Possible Regional Role.* Washington DC: Washington Institute for Near East Policy.

Nadimi, F. (2020). *Iran's Evolving Approach to Asymmetric Naval Warfare.* Washington DC: The Washington Institute for Near East Policy. Retrieved Februray 12, 2023, from https://www.washingtoninstitute.org/media/591

National Security Council. (1970, November 7). *National Security Devision Memoranda archives.* Retrieved 12 16, 2022, from Richard Nixon Presidential Library and Museum: https://www.nixonlibrary.gov/sites/default/files/virtuallibrary/documents/nsdm/nsdm_092.pdf

Navy Recognition. (2022, October 26). *Iran to equip its Moudge-class frigates with Abu Mahdi crusie missiles*. Retrieved February 15, 2023, from Navy Recognition: https://www.navyrecognition.com/index.php/naval-news/naval-news-archive/2022/october/12406-iran-to-equip-its-moudge-class-frigates-with-abu-mahdi-cruise-missiles.html

Navy Recognition. (2023, February 15). *Iran Navy equips its Mil Mi-17 helicopters with Maham-II mines*. Retrieved February 15, 2023, from Navy Recognition: https://www.navyrecognition.com/index.php/naval-news/naval-news-archive/2023/february/12835-iran-navy-equips-its-mil-mi-17-helicopters-with-maham-ii-mines.html

Network, O. E., & OEDIN. (2023, January 6). *Operations Envrionment Data Integration Network*. Retrieved from A TRADOC Web Site: https://odin.tradoc.army.mil/

Newdick, T. (2021, January 12). *The War Zone: Iran Commissions its Massive Oil Tanker Turned Sea Base Into Service*. Retrieved February 14, 2023, from The Drive: https://www.thedrive.com/the-war-zone/38673/iran-commissions-its-massive-oil-tanker-turned-sea-base-into-service

Ng, J. (2022). Exporting Imperialism: Arms, Iran, and the Military-Industrail Complex, 1969-1979. *Diplomatic History, 46*(2), 320-348. Retrieved 12 16, 2022, from https://doi.org/10.1093/dh/dhab095

Office of Naval Intelligence. (2017). *Iranian Naval Froces A Tale of Two Navies.* Washington DC: Office of Naval Intelligence.

Pant, H. V. (2009). Pakistan and Iran's Dysfunctional Relationship. *Middle East Quarterly, 16*(2), 43-50.

Parvin, M. (1968). Military Expenditure in Iran: A Forgotten Question. *Iranian Studies, 1*(4), 154-160. Retrieved 12 16, 2022, from https://shibbolethsp-jstor-org.ezproxy.liberty.edu/start?entityID=https%3A%2F%2Fshibboleth.liberty.edu%2Fidp%2Fshibboleth&dest=https://www.jstor.org/stable/4310015&site=jstor

Pollack, K. (1997). *Iran: Shaking Up the High Command.* Washington DC: The Washington Institute for Near Easy Policy. Retrieved February 11, 2023, from https://www.washingtoninstitute.org/policy-analysis/iran-shaking-high-command

Pollack, K. M. (2004). *Arabs at War.* Nebraska University Press.

Psaropoulos, J. (2022, July 26). 'The Russians have nothing equivalent': How HIMARS help Ukraine. *Al Jazeera*. Retrieved February 16, 2023, from

https://www.aljazeera.com/news/2022/7/26/the-russians-have-nothing-equivalent-how-himars-help-ukraine

Rahimov, R. (2021, October 16). War Games Shine Light on Deep-Running Iran-Azerbaijan Tensions. *Eurasia Daily Monitor, 18*(152). Retrieved from https://jamestown.org/program/war-games-shine-light-on-deep-running-iran-azerbaijan-tensions/

Rashid, Y. (2022). *The Strategic Importance of Jask Port.* Ankara: Center for Iranian Studies Ankara. Retrieved February 12, 2023, from https://iramcenter.org//d_hbanaliz/The_Strategic_Importance_of_Jask_Port-WebPDF_v2.pdf

Razoux, P. (2015). *The Iran-Iraq War.* (N. Elliott, Trans.) Cambridge, Massachusetts: The Belknap Press of Harvard University Press.

Reuters. (2020). *Turkey deploying Syrian fighters to help ally Azerbaijan, two fighters say.* Reuters.

Reuters Staff. (2012, June 23). Saudi Arabia and Qatar funding Syrian rebels. *Reuters*. Retrieved February 17, 2023, from https://www.reuters.com/article/us-syria-crisis-saudi-idUSBRE85M07820120623

Rezaian, L. (2017, November 5). *Leader makes new appointments in Iran's Army*. Retrieved February 15, 2023, from Mehr News Agency: https://en.mehrnews.com/news/129228/Leader-makes-new-appointments-in-Iran-s-Army

Rosen, S. P. (1994). *Winning the Next War: Innovation and the Modern Military.* Ithaca, NY: Cornell University Press.

S Gulden, A. (2014). Turkey and Iran: Between Friendly Competition and Fierce Rivarly. *Arab Studies Quarterly, 36*(1), 6-26.

Saff. (2001). What Future Wars Will be Like. *Saff, #239*(March 21 - April 20, 2001), 17-20.

Saikal, A., & Vestenskov, D. (2020). Iran's National Security and Operational Capability. *Scandinavian Journal of Military Studies*, 18-30.

Shahbazov, F. (2022, December 16). Iran's Drone Exports to Armenia Could Undermine Peace Process in Karabakh. *Eurasia Daily Monitor, 19*(188). Retrieved from https://jamestown.org/program/irans-drone-exports-to-armenia-could-undermine-peace-process-in-karabakh/

Singh, A. (2010). "Dark Chill in the Persian Gulf" - Iran's Conventional and Unconventional Naval Forces. *Maritime Affairs, 6*(2), 108-132.

Sinkaya, B. (2018). The Kurdish question in Iran and its effects on Iran-Turkey relations. *British Journal of Middle Eastern Studies, 45*(5), 840-859.

Sukman, D. P. (2020). Chapter 8: Institutional Strategy. In N. K. Finney (Ed.), *On Strategy: A Primer* (pp. 99-113). Ft. Leavenworth: Combat Studies Institue Press.

Sutton, H. (2020, September 16). *Fateh-Class Submarine*. Retrieved February 14, 2023, from Covert Shores: http://www.hisutton.com/Fateh-Class_Submarine.html

Sutton, H. (2020, December 21). *Irans Navy New Ship Makran On sea Trials*. Retrieved from Covert Shores: http://www.hisutton.com/Irans-Navy-New-Ship-Makran-On-Sea-Trials.html

Sutton, H. (2021, December 16). *Foreign Forces: Iran's Drive to Modernize Navy Faces Latest in String of Setbacks*. Retrieved January 15, 2023, from United States Naval Institute News: https://news.usni.org/2021/12/16/irans-drive-to-modernize-navy-faces-latest-in-string-of-setbacks

Sutton, H. (2022, December 30). *Iran's First Carrier Expected to be Launched in 2023*. Retrieved February 15, 2023, from Covert Shores: http://www.hisutton.com/Iran-IRGC-Drone-Carrier-Update.html

Symonds, C. L. (2005). *Decision at Sea: five naval battles that shaped American history.* Oxford: Oxford University Press.

Talmadge, C. (2008). Closing Time: Assessing the Iranian Threat to the Strait of Hormuz. *International Security*, 82-117.

Tasnim News Agency. (2021, September 14). *Politics News: Tasnim News Agency*. Retrieved from Tasnim News Agency: https://www.tasnimnews.com/en/news/2021/09/14/2571410/iran-to-manufacture-new-large-warship-destroyers

Tehran Times. (2021, October 13). *Iran. Pakistan agree to expand security ties, help establish peace in Afghanistan*. Retrieved from Tehran Times: https://www.tehrantimes.com/news/465990/Iran-Pakistan-agree-to-expand-security-ties-help-establish

Tehran Times. (2021, August 25). *Pakistan Navy stresses strengthening joint cooperations with Iran*. Retrieved from Tehran Times: https://www.tehrantimes.com/news/464326/Pakistan-Navy-stresses-strengthening-joint-cooperation-with-Iran

Todman, W. (2016). *Gulf States' Policies on Syria.* Center for Strategic and International Studies. Retrieved February 17, 2023, from https://www.jstor.org/stable/resrep23307

TRADOC G-2. (2016). *Threat Tactics Report: Iran.* Newport New, VA: U.S. Army Training and Doctrine Command.

U.S. Energy Information Administration. (2019). *The Strait of Hormuz is the world's most important oil transit chokepoint.* Washington DC: U.S. Energy Information

Administration. Retrieved from
https://www.eia.gov/todayinenergy/detail.php?id=42338#

U.S. Energy Information Administration. (2022). *Country Analysis Executive Summary: Iran.*
Washington DC: U.S. Energy Information Administration. Retrieved from
https://www.eia.gov/international/content/analysis/countries_long/Iran/pdf/iran_exe.pdf

United States Special Operations Command. (2007). *20 Year History.* Tampa: United States
Special Operations Command.

University of Texas Libraries. (1980). *Perry-Castaneda Library Map Collection: Middle East
Maps: Kuwait: Al Basrah Region*. Retrieved from University of Texas Libraries:
https://maps.lib.utexas.edu/maps/middle_east_and_asia/al_basrah_iraq_80.jpg

University of Texas Libraries. (1980). *Perry-Castañeda Library Map Collection: Pakistan Maps*.
Retrieved from University of Texas Libraries:
https://maps.lib.utexas.edu/maps/middle_east_and_asia/pakistan_ethnic_80.jpg

University of Texas Libraries. (1981). *Perry-Castaneda Library Map Collection: Middle East
Maps*. Retrieved from University of Texas Libraries:
https://maps.lib.utexas.edu/maps/middle_east_and_asia/persian_gulf_region.jpg

University of Texas Libraries. (1994). *Perry-Castaneda Library Map Collections: Iraq -
Marshes*. Retrieved from University of Texas Libraries:
https://maps.lib.utexas.edu/maps/middle_east_and_asia/iraq_marshes_1994.jpg

University of Texas Libraries. (2002). *Perry-Castaneda Library Map Collection: Turkey Maps* .
Retrieved from University of Texas Libraries:
https://maps.lib.utexas.edu/maps/middle_east_and_asia/turkey_east_rel_2002.jpg

University of Texas Libraries. (2004). *Perry-Castaneda Library Map Collection: Middle East
Maps*. Retrieved February 15, 2023, from University of Texas Libraries:
https://maps.lib.utexas.edu/maps/middle_east_and_asia/iran_strait_of_hormuz_2004.jpg

Ur Rehman, Z. (2014). *The Baluch insurgency: linking Iran to Pakistan.* Norwegian
Peacebuilding Resource Centre.

Vatanka, A. (2017). *Iran and Pakistan: Security, Diplomacy and American Influence.* I.B.
Tauris.

Vatanka, A. (2017, December). The Trajectory of the Iranian Military. *MES Insights, 8*(6).
Retrieved from
https://www.usmcu.edu/Portals/218/MES/Insights/MES_insights_v8_i6_hi_.pdf?ver=201
8-11-29-120720-297

Waldwyn, T. (2018). *Qatar, Saudi Arabia and the UAE: expanding naval horizons?* IISS.
Retrieved January 15, 2023, from https://www.iiss.org/blogs/military-
balance/2018/10/qatar-saudi-arabia-uae-naval-horizons

Walt, S. M. (2013). *Revolution and War.* Ithaca: Cornell University Press.

Ward, S. R. (2005). The Continuing Evolution of Iran's Military Doctrine. *Middle East Journal*, 559-576.

Ward, S. R. (2014). *Immortal: A Military History of Iran and its Armed Forces.* Washington DC: Georgetown University Press.

Watch, H. R. (2021). *Iran: Killings Near Pakistani Border.* Beirut: Human Rights Watch.

Wise, H. L. (2007). *Inside the danger zone: the US Military in the Persian Gulf 1987-1988.* Naval Institute Press.

Witoschek, M. I. (2012). SLEEPING BEAUTY OR CINDERELLA? IRAN'S CONVENTIONAL MILITARY - THE ARTESH - AND THE EVOLUTION OF ITS LEGITIMACY OVER THREE DECADES OF THE MULLAHS REGIMES. 114. Canada: Canadian Forces College. Retrieved from https://www.cfc.forces.gc.ca/259/290/298/286/witoschek.pdf

Woods, K. M., Murray, W., Nathan, A., Laila, S., & Venegas, A. M. (2011). *Saddam's Generals.* Alexandria, Virginia: Institute for Defense Analysis.

Worldview Stratfor. (2014, February 11). *The Iranian Navy: A Symbolic Show of Force in the Atlantic*. Retrieved February 15, 2023, from Worldview: https://worldview.stratfor.com/article/iranian-navy-symbolic-show-force-atlantic

Yossef, A. (2021). Military Doctrines in Israel and Iran: A Doctrinal Hybridity. *Middle East Journal, 75*(2), 243-263.

Zabih, S. (1988). *The Iranian military in revolution and war.* London: Routledge.

Zahid, F. (2017, July 14). Jaish al-Adl's Reemergence Threatens Iran-Pakistan Relations. *Terrorism Monitor*. Retrieved from https://jamestown.org/program/jaish-al-adls-reemergence-threatens-iran-pakistan-relations/

Zambelis, C. (2015, April 17). Iran Confronts Intensifying Insurgent Offensive in Sistan-Balochistan Province. *Terrorism Monitor*. Retrieved from https://jamestown.org/program/iran-confronts-intensifying-insurgent-offensive-in-sistan-balochistan-province/