### **GULF ANALYSIS PAPER**

## Iran's Maritime Evolution

by Joshua C. Himes

# In 2007, Iran's Supreme Leader directed the Islamic Republic of Iran Navy (IRIN) and the Iranian Revolutionary Guard Corps Navy (IRGCN) to restructure their operating areas and strategic missions. The U.S. Navy and regional navies must adapt to the resultant new realities of Iranian naval power.

#### **KEY FACTS**

**SUMMARY** 

- Both the IRIN and IRGCN have redoubled efforts at domestic production of weapons, military platforms, and supporting command and control capabilities.
- The IRGCN has aggressively improved its asymmetric warfare capabilities by building its inventory of smaller fast ships and lethal assets. This emphasis forms the backbone of its deterrence strategy within the Gulf.
- The IRIN's role outside the Gulf helps expand a more strategic Iranian "soft power" mission, reflecting a long-term vision for greater power projection.

As Iraq and Afghanistan fade from the headlines, Iran is likely to re-emerge as the preeminent security concern in the Middle East for the United States and its allies. Iran's intransigence over its nuclear ambitions, its support for Shia opposition forces in the region, and material support for terrorist organizations are challenges that will likely persist for the foreseeable future. For all the public emphasis on Iran's land-based operations, however, Iran's maritime reorganization strategy and naval evolution will likely drive its most consequential regional engagements.

Tehran launched a naval reorganization strategy in 2007 that redefined the primary duties and operational areas for both the Islamic Republic of Iran Navy (IRIN) and Iranian Revolutionary Guard Corps Navy (IRGCN). The timing of the reorganization coincided with a change in IRGC leadership at a time when Tehran was under increased international pressure. For many Iranian leaders, including Supreme Leader Ayatollah Ali Khamenei, Iran's regional prominence and prosperity are contingent on its naval expansion and development.<sup>1</sup>

The reorganization strategy focused on two key elements. First, it launched a modernization initiative aimed at expanding and upgrading Iran's domestic military production capabilities. Second, it clearly defined the strategic responsibilities and missions of the IRIN and IRGCN. Since the establishment of the IRGCN in 1985, the two navies shared overlapping responsibilities in the Caspian Sea, Persian Gulf, and Gulf of Oman. The reorganization ended the duplication, giving the IRGCN sole responsibility for defense within the Persian Gulf, and giving the IRIN responsibility outside of the Gulf, projecting Iranian power far beyond Iran's shores.

While most analysis emphasizes the IRGCN's growing lethality and asymmetric capabilities, the IRIN's "soft power" responsibilities are equally important. According to

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In conjunction with its Gulf Roundtable series, the CSIS Middle East Program writes periodic policy papers addressing key economic and security issues in the Gulf region. The reports are distributed prior to a corresponding Gulf Roundtable to help inform the debate and generate discussion. Launched in April 2007, the Gulf Roundtable series convenes monthly and assembles a diverse group of regional experts, policymakers, academics, and business leaders seeking to build a greater understanding of the complexities of the region and identify opportunities for constructive U.S. engagement. Topics for discussion include the role of Islamist movements in politics, the war on terror, democratization and the limits of civil society, the strategic importance of Gulf energy, media trends, trade liberalization, and prospects for regional integration. The roundtable defines the Gulf as the United Arab Emirates, Saudi Arabia, Oman, Qatar, Bahrain, Kuwait, Iraq, and Iran and is made possible in part through the generous support of the Embassy of the United Arab Emirates.

Figure 1. The Gulf and surrounding areas



Source: BYU Geography Department, http://www.geog.byu.edu/ Assets/Maps/mideast2.pdf.

IRIN Commander Rear Admiral Habibollah Sayyari, Iran aspires to influence the strategic maritime triangle that extends from the Bab al-Mandab to the Strait of Hormuz and even across the Indian Ocean to the Malacca Strait. Iran clearly sees its future hinging on its ability to project naval power far beyond its immediate neighborhood. Iran's evolving naval strategy requires that U.S. military planners and regional navies reconsider planning assumptions about Iran's tactical and strategic capabilities and depth and adapt their strategies accordingly.

#### IRAN'S NAVAL FORCE STRUCTURE

Prior to the fall of the Shah, the IRIN served as Iran's preeminent maritime force, and its mission was to secure the country's maritime borders. The 1979 Iranian Revolution dealt the IRIN two blows. First, the revolutionaries shelved plans to create a blue-water force that would help project Iranian power further afield. Second, they sought to put a check on all of Iran's conventional military forces by creating the Iranian Revolutionary Guard Corps (IRGC) to operate alongside them.<sup>2</sup> By 1985, the IRIN was forced to share the waters of the Gulf with the newly created naval arm of the IRGC.3 The IRGCN's orientation toward unconventional and asymmetric fighting was forged in the late 1980s, through the Tanker Wars with Iraq and during

Operation Praying Mantis, when U.S. and Iranian naval forces engaged in direct combat.4

For more than two decades, the IRIN has been a poor cousin to the IRGCN. The IRIN operates roughly the same naval equipment that formed the core of the Shah's Navy in the 1970s, with approximately 200 ships and about 18,000 personnel. With limited domestic repair and overhaul facilities, the IRIN has faced readiness and endurance challenges, although domestic production capability appears to be improving.

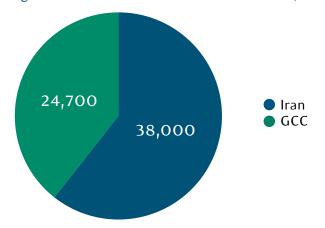
The IRGCN, meanwhile, has grown to approximately 20,000 personnel, including about 5,000 marines (see figure 2 for IRIN and IRGCN personnel totals). Inventory estimates range widely from hundreds to several thousand ships and small craft. The IRGCN also maintains an established coastal defense brigade structure to manage anti-ship missile elements. As part of their focus on asymmetric warfare and flexible operations, the IRGCN has developed a decentralized Command and Control (C2) structure that rewards aggressive, independent-minded decisionmaking.<sup>5</sup> The growing prominence of the IRGCN mirrors the larger rise of the IRGC from a force that defends the clerical establishment to a quasi-praetorian<sup>6</sup> role as the clerical leadership's first line of defense against internal and external challenges.

Iran's revamped naval structure improves Iranian command and control by minimizing overlapping operating areas, mitigating a potential vulnerability that an adversary could exploit in combat. Giving the IRGCN primary responsibility in the Gulf amplifies the natural benefits of a small, fast, unconventional force operating in its own backyard. Meanwhile, the new structure allows the more professional IRIN to operate blue-water platforms outside the limited confines of the Gulf and to focus on expanding its regional reach. This division of operating areas adds complexity and depth to Iranian maritime defense, as the IRIN can use the Gulf of Oman to deploy surface, subsurface, and cruise missile defenses along the southeastern coast well beyond the Strait of Hormuz.

#### MODERNIZATION AND DOMESTIC PRODUCTION

Iranian changes go beyond deployments and extend all the way into military production. Iran's foreign acquisition and domestic production trends since 2007 illustrate an

Figure 2. Naval Personnel in Iran and the GCC, 2010



Sources: Author's estimates; Anthony Cordesman, "The Gulf Military Balance in 2010," http://csis.org/files/publication/100422\_ GulfMilBal.pdf.

emphasis on self-reliance and asymmetry. Simultaneously, Iran has realigned existing naval bases and built new IRIN and IRGCN bases, creating a line of defense to prevent adversaries from accessing the Strait of Hormuz and the Persian Gulf. Admiral Sayyari addressed this strategy in October 2008 at the opening ceremony of the new IRIN naval base at Jask, a small fishing port 300km east of Bandar Abbas, claiming that "a new line of defense has been established to the east of the Strait of Hormuz...and if necessary we can prevent any enemy ship from entering the Persian Gulf."7

Given its subordinate role, the modernization of larger vessels in the IRIN's fleet has been less dramatic than the acquisitions of the IRGCN. Although domestic production of the Jamaran (Mowj) frigate8 and the addition of several upgraded Combattante-II (Sina class) frigates may replace aging ships, there is no parallel increase in surface ship end-strength. This may reflect a belief that the IRIN can accomplish its expanded presence in the Gulf of Aden and Arabian Sea, a secondary priority for Iran, without a dramatic improvement in acquisitions.

Still there are noteworthy improvements. The most compelling changes in IRIN order of battle fall in the subsurface and cruise missile categories. The IRIN's inventory of only three Kilo class submarines remains small, and is unlikely to expand until a follow-on contract is secured with delivery of possibly three more modern (636 variant) Kilo or Amur class submarines possibly as

early as 2015.9 However, the production of mini-subs (*Yono* class) has increased considerably.

Ghadir (Yono) class submarines are likely designed to support coastal or chokepoint (to include the Strait of Hormuz) reconnaissance, mine-laying, interdiction and/or troop insertion. The lethal capability of mini-sub platforms was displayed off the Korean peninsula in March 2010 when a torpedo launched by a North Korean Yono class submarine sunk the South Korean corvette Cheonan. With the IRIN now responsible for waters outside the Strait of Hormuz, it is likely these assets will be used on the eastern side of the Strait and leverage both Jask and Bandar Abbas for logistics support. So far, the IRIN has commissioned 11 mini-sub units, up from 3 prior to 2007, with another 9 anticipated over the next two to three years. 10

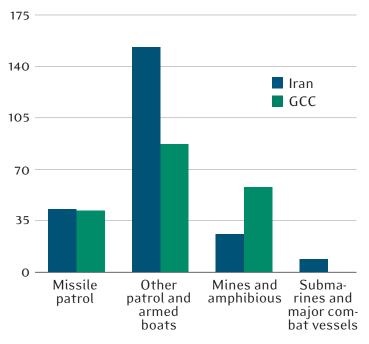
Production and/or import of the most lethal elements of the arsenal (mines, torpedoes and anti-ship missiles) are more difficult to assess. Although these assets were core to IRIN capabilities prior to the reorganization, Iran's weapons systems appear to be growing more technologically advanced and more powerful. The IRIN has highlighted the recent addition of new anti-ship cruise missiles into its inventory that will supplement existing missile stockpiles, 11 as well as an associated enhanced radar and command and control structure. 12 Based on press images from the unveiling ceremony, the missiles appear to be variants of the C-802 anti-ship cruise missile that Hezbollah successfully used to strike the Israeli Saar V Hanit in 2006. The extension of the box launcher reflects a slightly longer missile which may indicate longer range.

Whereas the IRIN's expansion has been modest and largely focused on the replacement of existing ships, the IRGCN inventory is expanding aggressively with emphasis of acquisition and production focused on speed, lethality, and quantity. In an August 2010 interview, IRGCN Commander Admiral Ali Fadavi contrasted the limited number of U.S. Navy ships with the hundreds at his disposal. He emphasized speed and stealth as the key elements that allow his vessels to reach their intended targets, and noted that they can employ either missiles or torpedoes in large numbers. He went a step further in his logic, explaining that "large vessels do not have a place in the main organization of the IRGCN...choosing large vessels means that you play in the enemy's court and under his rules."13 Recent press reporting indicates that the IRGCN will be the recipient of Ghadir mini-subs, much like those the IRIN is receiving, complicating the targeting and tracking of these units.<sup>14</sup>

Tracking specific numbers of IRGCN assets is substantially more challenging than tracking the IRIN due to their smaller size and multiple facilities within the Gulf. In fact, just about every meter of shoreline can be used to house IRGCN assets. Moreover, there has been an aggressive effort to modernize and upgrade high-speed vessels in the IRGCN inventory with missile/torpedo capability, as well as increase the number of modern fast inshore attack craft.15 The mid-August 2010 unveiling of 12 additional modern small craft that extend the IPS family (Peykaap/ Tir class) with missile/torpedo capability highlights this trend, as does the announcement of a domestic production line for Bladerunner high-speed vessels that will also be equipped with torpedoes or missiles/rockets, and at least twelve Bavar 2 "stealth" flying boats16 that could be used for reconnaissance or strike missions. Figure 3 shows the general balance of Gulf naval assets to which these sorts of production initiatives contribute.

There is also evidence that the IRGCN is enhancing its missile and radar capabilities. In February 2011, IRGC Commander Mohammed Ali Jafari announced that the IRGC is

Figure 3. Naval Assets in Iran and the GCC, 2010



Source: Anthony Cordesman, "The Gulf Military Balance in 2010."

manufacturing radars with 500km ranges and has finished studies on developing a 300km coastal radar and 60km shipborne radar. This announcement coincided with Iranian claims of new "smart" anti-ship ballistic missile capabilities. Should the IRGCN develop these naval assets, including "smart" anti-ship ballistic missiles, it will greatly complicate the deterrence calculus for U.S. and allied forces.

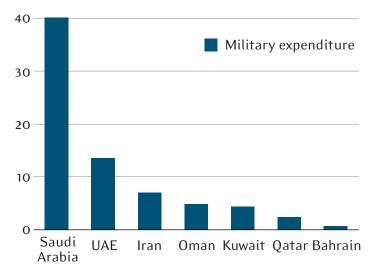
Overall, the challenge of tracking upgrades to fast attack craft, naval armaments and missiles will become increasingly difficult as domestic production evolves and less foreign acquisition is required. Admiral Fadavi announced on February 6, 2011<sup>19</sup> that Iran would soon construct a new line of high-speed small boats (85 knots) with missile capacity.<sup>20</sup> As recently as December 2010, Admiral Habibollah Sayyari commented that the IRIN has reached self-sufficiency in production of naval armaments, missiles and torpedoes,<sup>21</sup> and also claimed, "We have domestically produced all of the selected components onboard [naval] equipment that we have acquired in the past. Today, there is no need for reaching out to others [for help] because we can sustain our fleet's presence."22 The development of the Jamaran frigate and successful growth of Ghadir submarine production also indicate that Iran is expanding its production capability. The relative success of Iran's military modernization strategy raises broader questions about the effectiveness of international sanctions to limit Iran's military acquisitions and production, especially since Iran's defense expenditure outpaces that of many GCC countries (see figure 4).

#### **OUTREACH**

Combined with Iran's naval reorganization and modernization, Iran has pursued an extensive outreach campaign. The goals of the campaign are to persuade neighboring countries that Iran is a credible partner in maintaining maritime security, and that western nations are fuelling instability in the region.<sup>23</sup> With IRIN's new focus and purpose, Iran is pursing these activities with much more energy.

In June 2010, for example, Iran's military attaché to Turkey attended a Search and Rescue exercise in the Eastern Mediterranean. This was the first time Iran had sent an observer to participate in this type of event with Turkey. In December 2010, Rear Admiral Sayyari led a Navy delegation to Djibouti under the pretext of supporting regional antipiracy efforts. He left with agreements to support regional

Figure 4. Military Expenditure in the GCC and Iran, 2008 (billions of dollars)



Source: SIPRI Military Expenditure Database 2011, http://milesxdata.sipri.org.

counterterror efforts as well as to coordinate ship repair and maintenance functions.24

More dramatically, in February 2011 the IRIN sent two ships through the Suez Canal for a port visit in Latakia, a Syrian coastal city. The Iranian flagship Arvand, a corvette, and its supply ship *Kharg* transited the Mediterranean to Latakia ostensibly as part of a midshipmen training deployment before returning through the Suez Canal. It was the first time that Iranian naval ships transited the Suez Canal since the 1979 Islamic Revolution, demonstrating a willingness to push the limits of naval reach.

The IRIN strategy has been backed up with two years of anti-piracy operations in the Gulf of Aden as well as its historic deployment to Latakia, Syria. It is clear from Sayyari's recent comments that Iran seeks to expand its influence in international waters of the Indian Ocean as well, as part of its enhanced strategic policy to "display Iran's power in the world."25 His comments capture both a longstanding concern about U.S. and Coalition presence in the region as well as an understanding about the economic constraints Iran faces. Other senior IRIN leaders, like Rear Admiral Qasem Rostamabadi, the IRIN Deputy Operations head, have echoed the point, claiming that "we plan on having a presence off the coasts of India and inside the vital Malacca Strait."26

The implications of this strategy and Iran's presence in the area are significant. As Rostamabadi explains further, by expanding Iran's presence in the area "we will be able to completely oversee the transit of the world's energy and at that same time protect our own interests. At the same time, we will have greater deterrence power within this region when facing enemies and rivals of the Islamic Republic of Iran."27

#### EXPANDING CLOSER TO HOME

While the IRIN is expanding its operational footprint, the IRGCN strategy remains focused on increasing its lethality and complexity in the Persian Gulf and Strait of Hormuz. In addition to aggressively expanding its inventory of missile patrol craft to complement existing asymmetric strategic pillars of mine warfare and coastal defense cruise missiles, the IRGCN may be expanding its strategy with the integration of subsurface assets.<sup>28</sup> It is unclear how quickly this can happen in light of training, domestic production, and personnel constraints. With the IRIN focus more on the extended soft power role, it is possible that Ghadir and other minisub ventures will ultimately belong to the IRGCN, leaving the IRIN to operate with the Kilo/followon submarines in the blue-water environs.

The IRGCN has also been backing the expansion of its assets in the Gulf with a focus on Gulf cooperation. In December 2010, the IRGCN dispatched several ships to Qatar as part of an effort to expand defense ties and cooperation with its neighbor. This followed senior Qatari participation in IRGCN drills during Exercise Great Prophet 5 in April 2010.29 The IRGCN attempted to build off its trip to Qatar by announcing plans to conduct joint military exercises in the Gulf to establish stronger security ties and boost unity via interaction with Iran's Sunni Gulf neighbors. Iran and Oman have conducted two joint exercises this year. Although limited to search and rescue drills, there is discussion of expanding to a more tactical exercise.<sup>30</sup> There have also been at least eight Iranian port calls to Oman over the past two years.<sup>31</sup>

Sayyari himself has emphasized efforts at Gulf cooperation:

We heavily publicize that our exercises are a message of peace and friendship and we announce that we are prepared to establish regional security with our brothers from the navies of the Persian Gulf's littoral states whom with we share a lot of joint interests....There is no need to have strangers present within the region because their presence is not to establish security but to ensure war and insecurity forever endures within the region.<sup>32</sup>

Ultimately, these efforts reflect both Iran's perception of its role as a critical regional power and Iran's emphasis on soft power expansion to deter potential aggression. Overtures may also be designed to split the GCC block—creating space between Oman and Qatar on one side and less-amenable Saudi Arabia, Bahrain, Kuwait, and the UAE on the other.33 The timing also coincides with the U.S. drawdown in Iraq and may represent an effort to fill a perceived void that Iran assesses is developing. Of greatest interest may be the evolving relationship with Djibouti based on the December 2010 visit and subsequent joint military agreement, providing Iran influence and potential presence at the strategic Bab al-Mandab chokepoint.

#### RECOMMENDATIONS AND CONCLUSIONS

Iran's evolving maritime strategy raises important questions for U.S. and Coalition forces. With the IRIN expanding its operating area, planners should consider threats from C-802 anti-ship cruise missiles operating beyond the limits of the Persian Gulf. At the same time, the IRGCN is likely to seek to use its greater autonomy in the Persian Gulf to shape the region in Iran's interests.

The growing sophistication of IRGCN lethality, speed, and mass provides a more complex challenge to any potential future conflict. But the longer term evolution of the IRIN and its expanding operating area provides Tehran a complementary naval capability that relies less on new missiles and more on influence and power projection. In responding to these combined and evolving challenges, U.S. strategy should focus on several key priorities.

First, the United States should enhance regional maritime partnerships and build upon existing maritime cooperation with GCC navies to counter the IRIN's soft power strategy and the IRGCN's asymmetric modernization strategy.34 U.S. naval force presence will likely remain limited in type and number for the foreseeable future. Yet the smaller, more agile forces of the GCC provide a comparable offset to Iran's influence and order of battle. Iran routinely cites speed and numerical advantage when comparing its arsenal to the standard and fairly predictable U.S. Carrier Strike Group (CSG) offering.35 Iran would certainly notice the arrival of a modified CSG that entered the Strait of Hormuz with an additional 10-12 escorts comprised of corvettes and patrol boats, operated by the Saudi, Emirati, or Bahraini navies. The naval component of the GCC Peninsula Shield Force would potentially be a useful mechanism to this end. In fact, one could envision a scenario in which GCC assets are strengthened to support a current operation, such as policing the Gulf of Aden transit corridor in support of UN anti-piracy operations, but ultimately support a strategy which counters Iran's expanding maritime presence.

Second, the United States must carry out a thorough and continuous evaluation of Iranian domestic production capacity and the legitimacy of Iranian claims of selfsufficiency in naval warfare. This must include a better understanding of how sanctions have or have not affected Iranian domestic manufacturing of naval weapons and military platforms. This also involves dedicated tracking of the progress of Iran's reorganization strategy. Construction and expansion of facilities at Asuluyeh in the Persian Gulf and at Jask and Chabahar in the Gulf of Oman are critical to a mature Iranian strategy that fully leverages IRIN capacity, and will be leading indicators of Iranian maritime progress.

Third, the United States should take the lead in refining Coalition Navy training and operations to reflect Iran's evolving maritime strategy. The growing capabilities and presence of the IRGCN within the Gulf increase the likelihood of a tactical incident with strategic ramifications. This could be calculated, or it could be the result of less professional or more zealous decisionmaking at lower command levels. Either possibility is more likely with the IRGCN leading maritime operations in the Persian Gulf. Ultimately, Coalition forces must be prepared for different threat environments and understand hostile intent in a far more complex environment.

Finally, the United States could interact with the IRIN in an effort to promote greater maritime security and engage the Iranian regime. Regional stability ultimately relies on Iran playing a constructive regional security role. A policy of sanctions and isolation may be useful near-term tools, but Iran's geostrategic position should ultimately drive western policymakers to move beyond the current impasse toward cautious engagement. The Gulf of Aden counter-piracy task force is one such target of opportunity for greater communication and even maritime cooperation. It has a proven track record in bringing together over 20

nations to date for a common cause. Another opportunity would be to invite the IRIN to participate in a regional or international exercise. Pakistan just recently hosted Aman 2011, a five-day, 39-country exercise this June designed to address transnational threats and provide a common forum for information sharing and greater communication.

Iran's maritime strategy continues to mature and develop. The reorganization initiated in 2007 will drive IRGCN and IRIN operations and production in the years ahead and will present new challenges to U.S. naval planners and those operating in the region. U.S. and Coalition partners will need to remain vigilant and agile to respond to Iranian provocations and unexpected initiatives. One can reasonably question whether Iran is capable with its current inventory of executing this strategy. The quick response is that this vision is unrealistic; however, with a 15-year time horizon, a strategic vision, and a penchant for being underestimated, a second look is in order. After all, two IRIN ships just completed a historic transit to the Mediterranean, a Kilo class submarine has transited from Bandar Abbas and operated in the Red Sea, and the IRIN is on its 14th antipiracy patrol in the Gulf of Aden since late 2008—maritime milestones that no one would have predicted from Iran just a few years ago.

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#### **NOTES**

- 1. "Leader Urges Stronger Navy," PressTV, November 28, 2010, http://www.presstv.ir/detail/153013.html.
- 2. David Crist points out in Washington Institute for Near East Policy Policy Focus #95 that IRIN commanders from 1989 to 2005 were brought over from the IRGCN. See David B. Crist, Gulf of Conflict: A History of U.S.-Iranian Confrontation at Sea, Washington Institute for Near East Policy, Policy Focus #95 (June 2009), http://www.voltairenet.org/IMG/pdf/US-Iranian Confrontation at Sea.pdf.
- 3. Established in September 1985 as an independent entity alongside the IRIN.

- 4. Operation Praying Mantis was an April 18, 1988 attack by U.S. naval forces in retaliation for the Iranian mining of the Persian Gulf during the Iran-Iraq war and the subsequent damage to an American warship. By the end of the operation, elements of the American fleet had damaged Iranian naval and intelligence facilities on two inoperable oil platforms in the Persian Gulf, and sunk at least three armed Iranian speedboats, one Iranian frigate and one fast attack gunboat. One other Iranian frigate was damaged in the battle.
- 5. The term "mosaic defense" reflects this strategy which decentralizes the command structure and allows greater tactical autonomy by individual commanders. The March 2007 detainment of British sailors following a stand-off with IRGCN elements is a more recent example in which a senior IRGCN commander in the Northern Gulf was rewarded for action, although his actions were probably not approved prior by his chain of command. See Crist, Gulf of Conflict.
- 6. Elliot Hen-Tov and Nathan Gonzalez, "The Militarization of Post-Khomeini Iran: Praetorianism 2.0," *The Washington Quar*terly 34, no.1 (Winter 2011): 45-59. Available online at http:// twq.com/11winter/docs/11winter Hen-Tov Gonzalez.pdf.
- 7. Hossein Aryan. "A New Line of Defence: Iran's Naval Capabilities," IHS Jane's, January 27, 2009, http:// www.janes.com/products/janes/defence-security-report. aspx?ID=1065925942.
- 8. The second *Mowj* class corvette, *Veleyat*, is expected to be commissioned in 2012 according to AMI. A total of six units are expected by 2016, with two operating in the Caspian Sea. They will likely replace the older PF-103 and Alvand class corvettes that are currently in service.
- 9. AMI International, Worldwide Naval Projections Report, December 2010, http://www.amiinter.com/.
- 10. Ibid.
- 11. "Iran's Navy Receives New Cruise Missiles." United Press International, January 3, 2011, http://www.upi.com/Top News/ Special/2011/01/03/Irans-navy-receives-new-cruise-missiles/ UPI-42861294094362/.
- 12. Ibid. Of the three sites for cruise missile systems (light, independent and extensive), the third includes target detection, launch pads, radar guidance systems using a single C2 center.
- 13. "Navy commander details Iran's military capabilities," BBC Monitoring Middle East, August 28, 2010, http://www.monitor. bbc.co.uk/.
- 14. Jafari expressed the inherent value for the IRGCN of subsurface asymmetric capabilities in a 24 April 2011 Fars News interview: "Underwater is a good area (of activity) that is used by our forces but in an asymmetric and small-scale form, meaning that we are not seeking to build large and giant submarines since they are vulnerable." See "Commander Stresses IRGC Capability in Subsurface Asymmetric Warfare," Fars News Agency, April 24, 2011, http://english.farsnews.com/newstext. php?nn=9002040599.

- 15. It is difficult to provide definitive numbers against this problem, but this information is based on comparing multiple OOB counts of the core small boat assets (especially RADM Fadavi's discussion of IPS and Bladerunner variants) that make up the modern inventory as compared to 2007 inventory.
- 16. "Stealth Flying Boats Join IRGC Fleet," Islâmi Davet, September 29, 2010, http://www.islamidavet.com/ english/2010/09/29/stealth-flying-boats-join-irgc-fleet/.
- 17. "Iran Mass Producing Smart Ballistic Missiles: IRGC Chief," *Tehran Times*, February 8, 2011, http://www.tehrantimes. com/Index view.asp?code=235399.
- 18. "Commander: IRGC Mass-Producing Anti-Ship Ballistic Missiles," Fars News Agency, February 7, 2011, http://english. farsnews.com/newstext.php?nn=8911181179.
- 19. "Iran Seeking to Increase Speed of IRGC Vessels to 80-85 Knots," Fars News Agency, February 6, 2011, http://english. farsnews.com/newstext.php?nn=8911171175.
- 20. Fadavi highlighted the effort to mount missile launchers, among other weapons, onto the domestic version of the UK Bladerunner.
- 21. "Commander: Navy Self-Sufficient in Production of Naval Equipments," Fars News Agency, December 7, 2010. http:// english.farsnews.com/newstext.php?nn=8909161034.
- 22. "Interview with IRIN Commander Rear Admiral Sayyari," Mehr News Agency, October 19, 2010.
- 23. See, for instance, this statement by Rear Admiral Sayyari: "littoral states of the Persian Gulf should certainly welcome the gesture of joint maneuvers with Iran...we heavily publicize that our exercises are a message of peace and friendship and we announce that we are prepared to establish regional security with our brothers from the navies of the Persian Gulf's littoral states whom with we share a lot of joint interests...there is no need to have strangers present within the region because their presence is not to establish security but to ensure war and insecurity forever endures within the region." Ibid.
- 24. "Iran, Djibouti Agree on Naval Cooperation," Fars News Agency, January 11, 2011, http://english.farsnews.com/newstext. php?nn=8910211562.
- 25. Fars News Agency covering Admiral Sayyari at the welcome home ceremony for PF-103 class patrol ship Naghdi.
- 26. Maritime Organization conference interview in August 2010 by Deputy for Operations of the IRIN, Rear Admiral Rostamabadi, http://www.pmo.ir/home-en.html.
- 27. Ibid.
- 28. General Fadavi and Jafari have both alluded to this effort indicating that current Yono or a similar small/asymmetric submarines will be operated by the IRGCN as part of their mosaic defense.
- 29. "Foreign Military Delegations Witness Iran's War Games,"

- Tehran Times, May 11, 2011, http://www.tehrantimes.com/ index View.asp?code=219229.
- 30. "Iran, Oman Wrap Up Joint Naval Exercises," Fars News Agency, February 10, 2010, http://english.farsnews.com/ newstext.php?nn=8911210778.
- 31. IRNA, January 31, 2011.
- 32. "Interview with IRIN Commander Rear Admiral Sayyari," Mehr News Agency, October 19, 2010.
- 33. Both Bahrain and Kuwait have recently expelled Iranian diplomats for espionage and the UAE remains at odds with Iran over several disputed islands.
- 34. GCC navies operate both within the Persian Gulf area as well as in the Gulf of Oman and Gulf of Aden.
- 35. A typical deployed CSG includes one CVN, three or four DDG/CGs, a FFG and auxiliary.

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