

Countering the Iranian Missile Threat in the Middle East

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Brief Analysis

A mix of both defensive and offensive capabilities is needed in the Persian Gulf to counter the substantial Iranian rocket and missile threat.

This Sunday, October 21, a major two-week missile defense exercise will start in Israel involving both Israeli and U.S. military personnel. But Exercise Austere Challenge 12 has wider significance as it also highlights the efforts invested by the United States in building capabilities for allies in the East Mediterranean and Persian Gulf region to counter Iran's substantial rocket and missile threat.

For their part, Iranian leaders have repeatedly threatened to strike U.S. bases and coalition partners in the region with missiles in the event of a conflict, and have expressed confidence that their missiles could overwhelm current defenses. Thus, the commander of Iran's Islamic Revolutionary Guard Corps (IRGC), Maj. Gen. Mohammad Jafari, stated in September 2012 that U.S. missile defenses in the region "could only work for a few missiles, but when exposed to a massive volume of missiles ... [they] will not work." As a result, according to Gen. Qassem Soleimani, commander of the IRGC's Qods Force, the "enemies of the Islamic Revolution have been left hopeless and paralyzed due to the IRGC's missile ... might and power."

Iran's touted surface-to-surface missile advantage does indeed exist. Yet Israel's vulnerability to this threat is less than other U.S. regional allies, thanks to its three Arrow missile batteries, which can defend a relatively compact populated area against the several score Shahab-3 missiles that could reach such an area. Moreover, it is not clear whether Tehran has enough operational launchers or missile silos to carry out the massed launches that would be required to overwhelm Israeli defenses. (The involvement of Hizballah in a prospective war, with its tens of thousands of short-, medium-, and long-range rockets, would, however, be a game changer.) But Iran's numerical advantage is clearly becoming a problem in the Gulf, where Tehran could saturate U.S. and Gulf Cooperation Council (GCC) rocket and missile defenses with many of the hundreds of Shahab-1, -2, and -3 missiles and Fatah-110 and Zelzal rockets in its inventory. Thus, given Tehran's confident assessment of its missile capabilities, the danger exists that Iran might overplay its hand and miscalculate in the event of a crisis, with potentially grave implications for the region.

ROCKET/MISSILE DEFENSE LESSONS LEARNED

As suggested earlier, offsetting Iran's numerical missile advantage calls for a mix of defensive and offensive measures, drawing on the lessons of recent wars. Thus, the "Scud-hunting" experience of the 1991 Gulf War with Iraq underscored the difficulty of addressing a missile threat that is not successfully attrited through attack operations. (According to postwar assessments, not a single Scud missile was destroyed by U.S. Special Forces or airstrikes; as a result, forty-one missiles were launched against Israel, with nearly all getting through its then-rudimentary missile defenses.) However, in its 2006 war against Hizballah, the Israelis demonstrated the potential

of attack operations to counter rocket or missile forces. In the first successful preemptive strike against a large rocket complex, the Israeli Air Force destroyed over 90 percent of Hizballah's medium- and long-range Fajr-3 and -5 and Zelzal rockets, launchers, and storage sites on the first day of the war, demonstrating the importance of striking rocket and missile forces prior to their being launched.

AN INTEGRATED STRATEGY FOR COUNTERING THE ROCKET/MISSILE THREAT

U. S. missile defense doctrine calls for both active defense and attack operations. U.S. active defenses include the Patriot PAC-2 and -3 systems, the Terminal High-Altitude Area Defense (THAAD) system, and SM-3 missile interceptors. Overall, in the past two decades, U.S. and partner missile defenses in the Gulf have improved steadily. A combination of U.S. Patriot PAC-2 (used primarily against "air breathing" targets like aircraft and cruise missiles) and PAC-3 variants (designed to counter ballistic missiles) surround airfields in the region used by U.S. forces. The United States has a total of eight Patriot PAC-2 or -3 batteries in four countries -- Kuwait, Bahrain, the United Arab Emirates (UAE), and Qatar -- along with one to two Aegis cruisers in the eastern Mediterranean and two to three in the Persian Gulf, which could be augmented by a THAAD battery transported from the United States.

Moreover, the United States has attempted to enhance its regional partners' capabilities through a series of bilateral partnerships. Initiatives associated with such partnerships include the biennial missile defense exercises with Israel (i.e., Austere Challenge) aimed at coordinating U.S. missile defenses in the eastern Mediterranean with those of the Jewish state. Likewise, the recently established Integrated Air and Missile Defense (IAMD) Center in the UAE trains regional air-defense officers with the goal of enhancing interoperability, improving information sharing, and building trust. A broader aim of the center's activities is to establish regional partnerships and enhance missile defense cooperation with the United States. As for the existing missile defense capabilities of GCC states, most possess missile defense systems: Kuwait, Saudi Arabia, Bahrain, and the UAE each have the Patriot PAC-2, Kuwait and the UAE have ordered the Patriot PAC-3, and the UAE recently ordered America's most sophisticated interceptor, THAAD. This hardware is tied in to regional detection and tracking radar networks, which will soon include a highly capable Army Navy/Transportable Radar Surveillance and Control (AN/TPY-2) X band destined for Qatar. (Additional U.S. AN/TPY-2s are already deployed in Israel and Turkey.)

Attack operations in the Gulf would be conducted by U.S. strike aircraft and those of its regional partners. Currently in the Persian Gulf, the U.S. Air Force has two of the most capable expeditionary wings ever deployed, equipped with F-22 fighters, B-1 bombers, and F-15E and F-16 strike aircraft. Added to this are two to three carrier strike group formations, each equipped with more than fifty attack aircraft. Still other resources include Saudi F-15Ss and Eurofighters, and UAE F-16 Block 60 strike aircraft, equipped with precision munitions such as Joint Direct Action Munition (JDAM) GPS-guided bombs, and Storm Shadow cruise missiles. Since 2007, the UAE has hosted the semiannual Iron Falcon series, intensive monthlong exercises that have trained an entire generation of GCC air force pilots in joint tactics, techniques, and procedures, enabling them to better operate with U.S. forces. Finally, aerial attack operations might be augmented by long-range fires provided by U.S., UAE, and Bahraini Army Tactical Missile Systems (ATACMs), thereby enhancing the flexibility and responsiveness of coalition attack operations.

IMPLICATIONS AND RECOMMENDATIONS

By adopting an integrated missile defense strategy that employs both defensive and offensive measures, the United States and its regional partners could significantly diminish the threat posed by Iran's rocket and missile forces. Accordingly, the climate of intimidation and fear that Iran has attempted to create through harsh and menacing rhetoric, and the potential it engenders for Iranian miscalculation, should be countered by clear yet firm warnings by Washington that the United States and its regional partners have the means to counter Iran's rocket and

missile forces and to inflict unacceptable losses on Iran should it make the mistake of acting on its threats. These warnings should be reinforced by more frequent public demonstrations of the defensive and offensive capabilities of the United States and its regional partners. In taking such steps, Washington will bolster deterrence, assure its allies, and perhaps even convince Tehran that the best way to deal with the United States is by engaging it diplomatically.

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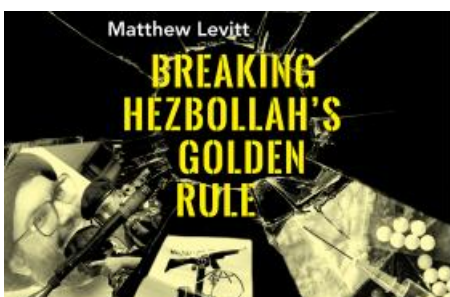
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