



Houthi Attacks Highlight Need for Developing Regional Integrated Air Defenses

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On October 31—amid the Israel-Gaza war—Israel used its Arrow air defense system to intercept a ballistic missile en route to Eilat in southern Israel likely fired by the Iran-backed Houthis in Yemen, and on October 19, the Houthis fired a barrage of cruise missiles and drones over the Red Sea toward Israel. The U.S. Arleigh Burke-class destroyer USS Carney intercepted four missiles and thirty drones and Saudi Arabia intercepted one missile. These attacks provide a stark reminder of the deadly “ring of fire” that Iran and its proxies have established around America’s troops and partners in the Middle East. However, Saudi Arabia’s interception of a missile headed toward Israel underscores the potential and benefits in terms of earlier warning and response time against threats that expanding regional air defense integration and cooperation would provide, even as apparent progress toward Israel-Saudi normalization pauses during the ongoing war.

To address the widespread threat from the Iranian regime, and to keep the prospect of Israel-Saudi normalization alive, the United States should build on the recent bilateral U.S.-Saudi Red Sands counter-unmanned aircraft systems exercise and develop multi-lateral exercises to advance the implementation of an integrated air and missile defense (IAMD) system in the region.

What Happened?

- On October 31, the IDF [announced](#) that its Arrow air defense system intercepted a ballistic missile likely launched by the Iran-backed Houthis in Yemen toward the southern Israeli city of Eilat, marking the first use of the system since Hamas’s October 7 terrorist onslaught in Israel that killed more than 1,400 Israelis, mostly civilians, and the ensuing war.
- On October 19, the Houthis [fired](#) five missiles and thirty drones in Israel’s direction.
 - » The USS Carney [intercepted](#) four of the missiles and several of the drones, and an October 24 *Wall Street Journal* [report](#) indicated that Saudi Arabia intercepted the fifth missile.
 - » The October 19 Houthi attack coincided with a [spate](#) of strikes—[at least 28](#) since October 17—by Iran-backed groups against U.S. troops in Iraq and Syria. During seven of these attacks, Iran-backed groups launched roughly a dozen drones in total.
- Several weeks before the Houthis’ October 19 attack, on September 25, the group launched a drone, also called an unmanned aircraft system (UAS), that [killed](#) four Bahraini servicemen in Saudi Arabia.

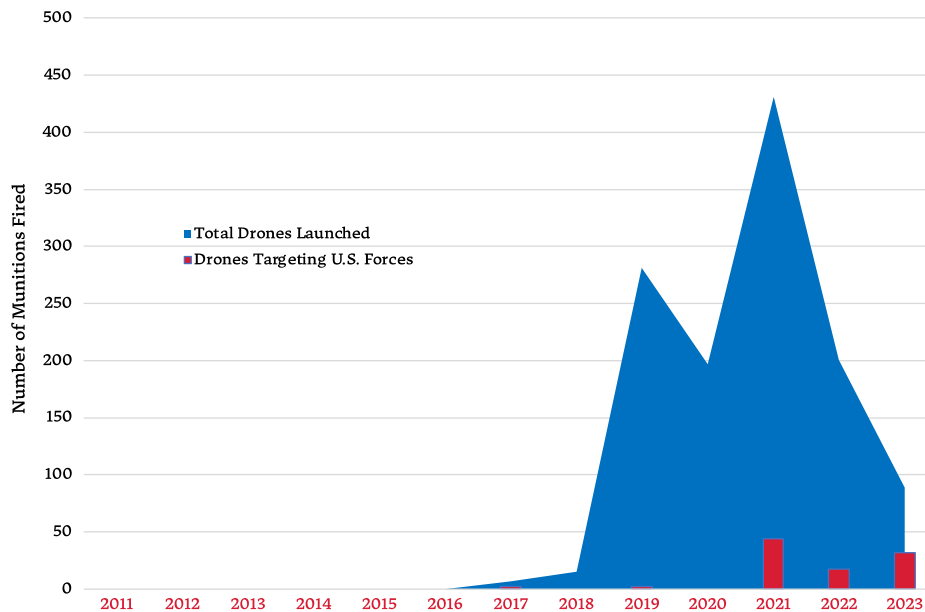
- Under the auspices of the Riyadh-based Red Sands Integrated Experimentation Center, the United States and Saudi Arabia [conducted](#) the Red Sands 23.2 military exercise to counter unmanned aircraft systems (UAS) at the Shamal-2 Range in northeast Saudi Arabia from September 8-12. It was the second such exercise between the two countries. The Red Sands facility was [built](#) to host tests for counter-UAS (C-UAS) and integrated air and missile defense (IAMD) capabilities.
 - » Red Sands director Col. Robert McVey [told](#) *Breaking Defense* that the three goals of the exercise were to strengthen U.S.-Saudi military relations, test cutting-edge technologies, and develop C-UAS procedures and bolster joint U.S.-Saudi preparedness for defending against the UAS threat.
 - » Approximately 600 U.S. and Saudi soldiers [participated](#), and *Al-Monitor* [reported](#) that U.S. personnel employed 5.56 rifle rounds, shoulder-fired and precision-guided missiles, Stinger and Hellfire missiles, 30-millimeter guns, Coyote interceptors, BLADE counter-drone systems, MS-LIDS, AKPWS, and the FS-LIDS' and LMADIS' systems, which interdict mock drone attacks. The exercise also [involved](#) U.S. and Saudi Apache helicopters, Saudi F-15s, and U.S. and Saudi joint tactical aircraft controllers (JTAC).

Why Is It Important?

- Saudi Arabia's timely interception of an Israel-bound projectile on October 19 highlights the importance of implementing a U.S.-led region-wide integrated air and missile defense (IAMD) network that provides improved interception and early-warning capabilities, as JINSA noted in its October 25 [update](#) on developments in the ongoing Israel-Hamas war.
 - » Though certain regional U.S. partners' [denunciations](#) of Israel after Hamas's horrific October 7 terrorist attack may lessen the immediate prospects of constructing regional IAMD, it remains a critical long-term aspiration.
 - » Focusing on IAMD now, while negotiations over Israel-Saudi normalization are paused due to the war, can also help preserve the prospects for future peace.
- The Houthis' decision to launch another attack after the October 19 barrage—even after the United States and Saudi Arabia demonstrated their air defense capabilities—underscores the persistence of the threat from Iran-backed groups and resulting need to entrench any regional IAMD architecture.
- Iran [proliferates](#) deadly projectiles to its proxy forces in Lebanon, Yemen, Iraq, Syria, and the Palestinian territories that now encircles U.S. forces, interests, and Israeli and Arab partners, in a “ring of fire.”
 - » Through its missile and drone arsenals, Iran has [achieved](#) “overmatch,” according to former CENTCOM Commander General Frank McKenzie, which is “the ability to overwhelm” other forces.
 - » The roughly 28 projectile [attacks](#) against U.S. personnel since October 17 by Iran-backed groups injured 21.
 - » Between 2021 and the October 7 outbreak of the Israel-Hamas war, Iran and its proxies [launched](#) more than 650 drones toward U.S. and Arab partners, with at least 70 of those drones targeting U.S. service member positions, according to [JINSA's Iran Projectile Tracker](#).
 - In total during that period, Iran-backed proxies launched roughly ninety attacks on U.S. service members in the Middle East, according to JINSA's tracker, including a

March 23 attack in which militants [launched](#) a self-destructing drone toward the Tanf Garrison in Syria, killing a U.S. contractor.

Iranian-linked Drones Launched Per Year Against U.S. Personnel, Arab Partners, and Interests in the Middle East 2011-Present

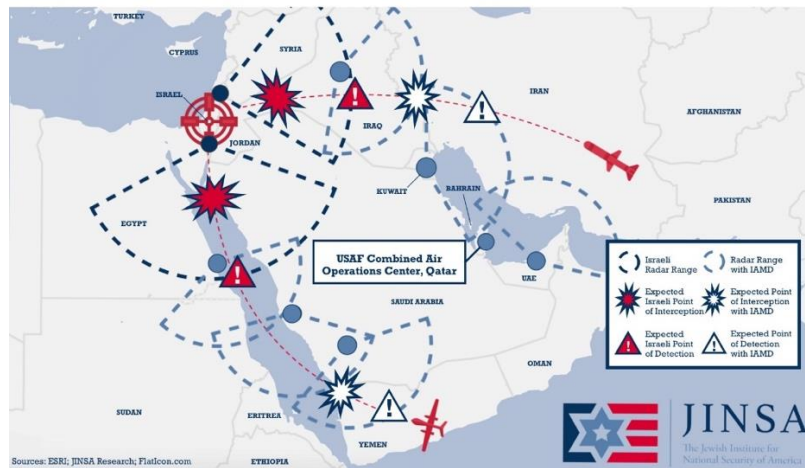


- » Iran’s September 14, 2019 [attack](#) on Saudi Arabia’s Abqaiq oil processing facility—the largest in the world—and Khurais oil field using seven cruise missiles and eighteen drones also underscores the enormity of the threat from Iran’s projectile arsenal to the global economy.
- In response to the Israel-Gaza war, the United States has [deployed](#) several assets to the Middle East to deter wider conflict, including the *USS Dwight D. Eisenhower* and the *USS Gerald R. Ford* carrier strike groups, the 26th [Marine Expeditionary Unit \(MEU\)](#), [roughly 900](#) troops on “prepare to deploy” orders, an F-16 Fighting Falcon aircraft [squadron](#), and the U.S. Defense Department also [announced](#) that it plans to send two Iron Dome batteries to Israel.
- However, the current approach toward air defense—including the [roughly twelve](#) air defense systems, [such as](#) a Terminal High Altitude Air Defense (THAAD) system and several Patriot batteries, that the United States is sending to [seven](#) countries to defend against Iranian threats—is sub-optimal.
 - » Systems like the Patriot batteries and the THAAD are not optimized toward intercepting small drones and are not cost-effective options.
 - Patriot missiles cost [around \\$4 million each](#), while Iranian drones cost only a few hundred to thousands to dollars.
 - » While Saudi Arabia helped protect Israel against the Houthi attack on October 19, there is no formal arrangement under which either party can rely upon the other to do so with regularity.
 - While the United States helps its partners with intelligence-sharing and neutralizing threats—as the *USS Carney* also demonstrated by neutralizing Houthi missile and drone threats on October 19—absent a formal integrated network, each nation must allocate resources so that it can secure itself individually. Individual protection is not

cost-effective, given the high cost of air defenses relative to cheap Iran-linked weaponry, and difficult to accomplish because of the Iranian regime's "ring of fire" by which its proxies can attack targets from a multitude of locations throughout the Middle East.

- The insufficiency of current air defenses is particularly alarming as the potential rises for a multifront war by Iran and/or Hezbollah against Israel, as it continues to fight Palestinian terrorists in Gaza.
 - » The Iranian regime has threatened to expand the war if Israel's operations in Gaza continue. On October 26, at the United Nations General Assembly, Iranian Foreign Minister Hossein Amir-Abdollahian [warned](#), "I say frankly to the American statesmen, who are now managing the genocide in Palestine, that we do not welcome (an) expansion of the war in the region. But if the genocide in Gaza continues, they will not be spared from this fire."
- Constructing an IAMD architecture among the United States and its regional partners—as detailed in JINSA's report "[Build It and They Will Come](#)"—would help mitigate threats from Iran through enhanced early warning, tracking, and interception capabilities.
 - » Chiefly, this would [involve](#) connecting CENTCOM's Doha-based Combined Air Operations Center (CAOC) to participating countries' sensors and radars, enabling the fusion of data into a common operating picture (COP) and broad data-sharing throughout the coalition. This would increase participating countries' air domain awareness.
 - While the CAOC already provides sensor information to several regional partners, bilateral intelligence-sharing deals prevent the real-time dissemination of all intelligence to each U.S. partner. A full, maximally effective COP would allow the CAOC to disseminate the full threat picture over data links so partners can respond rapidly.
 - » In addition, each coalition member would benefit from installing a [greater quantity](#) of ground, air, and space sensors to maximize the air defense platforms' geographic coverage.
 - » Also of importance is [incorporating](#) innovative Israeli air defense technology into any nascent IAMD architecture, including at the Red Sands center to practice interoperability with Israeli platforms. Israel's air defense systems are exquisite, as the Arrow system's recent interception of an inbound ballistic missile demonstrated, and the country has achieved highly effective national integration among its platforms, underscoring the extent to which Israel's expertise can enable crucial knowledge-sharing for effective IAMD.
 - » JINSA recommended the development of an IAMD network in its January 2022 [report](#) *A Stronger and Wider Peace: A U.S. Strategy for Advancing the Abraham Accords*, which spurred the 2022 Deterring Enemy Forces and Enabling National Defenses Act (DEFEND Act). The inclusion of the DEFEND Act in the National Defense Authorization Act for FY 2023 [obligates](#) the Secretary of Defense to submit a plan for constructing IAMD in the Middle East within 180 days. Such a plan should have been submitted to Congress in September, but there is no indication that the Defense Department has done so.
 - In JINSA's report, it specifically outlined the benefits for early warning and interception that an IAMD network—in particular one involving Saudi Arabia—would provide for a potential Houthi attack against Israel through the Red Sea.

Individual vs Integrated Air and Missile Defense in the Middle East



- Although the bilateral Red Sands exercises are commendable, multilateral C-UAS exercises can advance the development of IAMD by [demonstrating](#) the efficacy of emerging air defense technologies and building common tactics, techniques, and procedures (TTP) needed to successfully operate an integrated system.
 - » The U.S.-Saudi drill and future similar multilateral efforts offer important forums for practicing the tactics, techniques, and procedures (TTP) necessary to operationalize the above architecture into an effective means to counter Iranian missile and drone threats.
 - » Allowing participating nations to observe and experience the benefits of IAMD, as well as the architecture’s resilience against threats such as cyber penetration, at Red Sands could allay the concerns of countries hesitant to integrate their platforms into a region-wide network.

What Should the United States Do Next?

- Complementing its current air defense deployments to the Middle East, the Biden administration and Congress should [quickly approve](#) funding to replenish Tamir interceptors—which the United States and Israel coproduce—for Israel’s Iron Dome system.
- Congress should authorize and appropriate the funding necessary to enable the Red Sands facility to host future multilateral, in addition to bilateral, exercises that highlight the benefits of emerging air defense technology and enable coalition members to drill the necessary TTPs.
 - » The United States should also urge Saudi Arabia to expand the Red Sands facility to accommodate future multilateral exercises.
- As JINSA argued in [“Build It and They Will Come.”](#) the Biden administration should work to establish a “secure, effective, real-time, and region-wide COP” among Israel and Arab partners who are willing to connect their sensors digitally to CAOC and share information in real-time across the coalition—practices that willing partners should hone at the Red Sands facility. The administration should view this as a long-term goal, even as the Israel-Hamas war presents complications in the near-term.
- The United States should look for opportunities to [leverage](#) Israeli defense technologies to advance IAMD and to widen the circle of Arab countries that have normalized relations with the Jewish state.