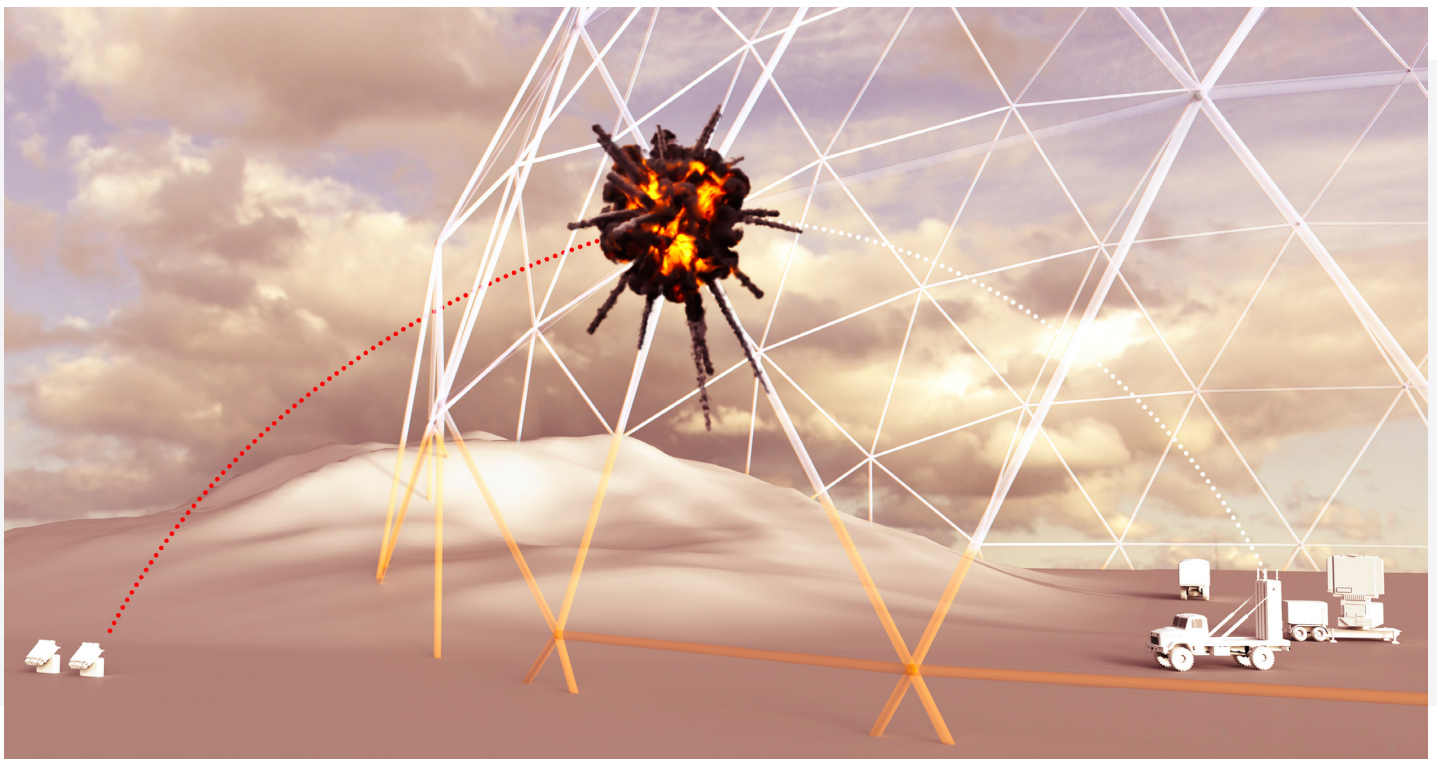


Build It and They Will Come: A U.S. Strategy for Integrating Middle East Air and Missile Defenses

May 2023





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The findings and recommendations contained in this publication are solely those of the authors, who participated in this policy project strictly in their personal capacities.

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Preface

In January 2022, the Jewish Institute for National Security of America (JINSA) published *A Stronger and Wider Peace: A U.S. Strategy for Advancing the Abraham Accords*. The report heralded the Accords as an historic breakthrough and urged the U.S. government to seize the opportunity to start building a new Middle East defense architecture premised on bringing America's regional partners together in common cause to counter the growing menace from Iran. Among its top recommendations, the report called on Congress to pass legislation prioritizing the need for a region-wide air defense network to help deter and defeat the escalating missile and drone threat posed by Iran and its terrorist proxies.¹

Congress quickly took up JINSA's proposal by passing the Deterring Enemy Forces and Enabling National Defenses Act (DEFEND Act) of 2022 as part of its annual defense bill. The DEFEND Act, which received widespread bipartisan and bicameral support, requires the Secretary of Defense to submit within 180 days a U.S. strategy for building an integrated air and missile defense (IAMD) system in the Middle East.²

In anticipation of the Act's final adoption, JINSA assembled its own task force to examine the way forward on Middle East air defenses. Composed of retired U.S. flag officers with extensive regional experience and deep functional expertise, the task force's goal with this report is to make an important contribution to the development of U.S. strategy on regional IAMD in advance of the Secretary of Defense's own submission, and to assist Congress in conducting oversight and further advancing America's critical interest in better protecting U.S. forces and U.S. partners from Iran's expanding "ring of fire" around the region.

Broadly speaking, the structure of this report is drawn from the DEFEND Act itself and the list of issues it identifies for inclusion in a U.S. strategy. Those issues include a description of: the Iranian airborne threat, the current status of regional air defenses, the value-added of greater air and missile defense integration, obstacles to integration and recommendations for how they can be overcome, current efforts to forge greater integration and future steps, acquisition issues related to integration for both the U.S. and its partners, and any other issues deemed important to the strategy's successful implementation.

While relying heavily on the task force's expertise, this report has benefitted significantly from interviews with current and former U.S. officials, as well as defense and security leaders in Israel and several Arab states. Given the sensitive nature of those discussions, wherever information from them is used it is cited as an "interview with the authors," while keeping the source anonymous. Importantly, while the members of the task force endorse the report's analysis and recommendations, they do so strictly in their personal capacities.

I. Executive Summary

A. *Unprecedented Threats, Inadequate Defenses, and New Opportunities*

The United States and its Middle East partners now face an unprecedented threat to their interests in the form of the expanding missile and drone arsenals of Iran and its regional proxies. The current commanding general of U.S. Central Command (CENTCOM) has recently warned that the danger has grown exponentially in just the past few years. His immediate predecessor has said that the offensive strike power of the Iranian axis has achieved “overmatch,” not just with respect to its capability to overwhelm the air defenses of Iran’s neighbors but of those protecting U.S. forces deployed in the region as well.

Since 2019, a handful of U.S. troops and military contractors, as well as civilians in Saudi Arabia and the United Arab Emirates (U.A.E.), have been killed as a result of limited Iran-backed aerial attacks. Iranian missiles have also demolished large parts of a U.S. base in Iraq, while its drones temporarily took offline a huge chunk of Saudi oil production. Whether it was to come through a purposeful attack or as a result of Iranian miscalculation, the United States and its partners are effectively one successful strike away from potential catastrophe, resulting in mass casualties, destruction of critical infrastructure vital to the global economy, or both.

While replete with advanced American anti-missile platforms, U.S. partners (with the striking exception of Israel) have not managed to organize their air and missile defenses sufficiently—neither at the national level nor on a regional basis—to keep pace with the threat posed by the firepower of Iran and its proxies. Though the distinct operational advantages of region-wide integrated air and missile defenses (IAMD) are clear—in terms of enhanced early warning, tracking, and interception potential—and a subject of constant U.S. diplomatic interventions for more than a decade, political rivalries, suspicions, and animosities among U.S. partners have historically acted as a severe constraint on their willingness to engage in the levels of intelligence sharing and cooperation that meaningful air defense integration would require.

Importantly, that may now be changing—first and foremost because of the qualitative shift in the scope and severity of the Iranian threat itself and the shadow of looming disaster that it now casts over the entire region as never before. That threat, in turn, has helped prompt two other critical changes in the geopolitical landscape that are helping drive the potential for greater regional cooperation: First, the Abraham Accords and the broader process of Israel’s improving security ties with many Arab states, including ones in the Gulf with which it has not yet formally normalized relations; and second (consistent with a recommendation JINSA reports made in 2018 and 2020), Israel’s shift into CENTCOM’s area of responsibility (AOR), where away from public view, the Israeli military is increasingly able to work alongside its Arab peers, exchange information, build trust and confidence, and discuss, plan, and train for a more cooperative future—most immediately in the air and missile defense domain, where Israel’s unparalleled experience, competence, and cutting-edge technological solutions are especially attractive to Arab states who find themselves face-to-face with an unprecedented Iranian challenge.³

B. The Need for U.S. Commitment, Modest Goals, and a Flexible Approach

Three key guidelines should shape efforts to take advantage of this decisive moment to advance IAMD. First, the imperative of visible U.S. political and military support. CENTCOM is the preferred strategic partner of every U.S. regional ally and the only force with the experience, capacity, and credibility to help overcome the historical resistance of the local states toward multinational cooperation. The president of the United States, in turn, is the only actor capable of reassuring the region's leaders that by taking the risks of joining a U.S.-led IAMD network to counter Iran—especially one including Israel—they will be helping consolidate Washington's long-term commitment to their security, rather than merely paving the way for its further pivot out of the Middle East.

U.S. efforts to pursue military integration in the region, including IAMD, cannot be removed from the larger post-Iraq, post-Afghanistan strategic context of declining confidence in U.S. staying power, political will, and commitment to the security and wellbeing of its traditional Middle East allies. Rallying them behind U.S.-led security initiatives like IAMD will prove more effective alongside a concerted effort to reaffirm Washington's enduring interest in, and commitment to, the region's stability and security.

A second important guideline for a strategy to promote IAMD is that it should avoid excessive ambition and be pursued on a step-by-step basis. Both the region's historical resistance to greater integration, as well as the inherent challenges that integration poses to even the world's best military organizations and alliances, argue for a degree of modesty in how far and fast IAMD can be advanced.

Finally, the effort to build IAMD should remain flexible and not allow the perfect to be the enemy of the good when it comes to the regional parties prepared to participate. While open to all relevant U.S. partners capable of contributing to the broader effort, CENTCOM should be prepared to move forward even if only a smaller subset of Arab states initially agrees to join the effort alongside Israel. Its aim should be to prove out the significant benefits of greater air defense integration over time to all its partners and remain open to adding the resources and capabilities of other prospective participants as their comfort and confidence in the system grows.

C. Early Progress and the Way Forward on IAMD

Importantly, CENTCOM is already applying these guidelines to its recent efforts in IAMD. Largely under the radar, it has made unprecedented progress over the past two years in assembling a coalition-of-the-willing, including Israel and at least six Arab partners, that is now meeting regularly at multiple senior command levels to discuss and plan future cooperation on air and missile defense and is already sharing threat information on a voluntary basis, albeit largely through the antiquated means of telephones, as part of a nascent early warning system against slower-moving drones—one that, while rudimentary, has already delivered security benefits for its participants.

While an important start, rising to the enormity of the Iranian challenge will require significantly more in the way of true region-wide integration. The first critical step is the establishment of a system that begins sharing threat data not at the speed of sound but closer to the speed of light or—more importantly—the speed of modern warfare.

It will require a willingness on the part of participating nations to connect their national sensors and radars digitally with CENTCOM's Combined Air Operations Center (CAOC) in Doha, Qatar, where the information can be almost instantaneously fused into a common operating picture (COP) for the broader region that is then shared, without restriction, with all coalition members. Success will require a major effort by CENTCOM to assuage longstanding concerns among its partners that such a digitized system of information sharing is capable of protecting their most highly sensitive national security information while not exposing them to excessive risk of cyber penetration or attack.

While the technical challenges of achieving secure and effective digital connectivity between different national air defense systems should be resolvable, ensuring political buy-in from regional leaderships worried about the reliability of their neighbors, the risk of provoking Iran—especially via cooperation with Israel—and long-term U.S. staying power and support could prove more difficult, and will require strong and sustained engagement by the highest political levels in Washington with their Middle East counterparts.

Achieving real-time connectivity between national sensors on a region-wide basis for the creation of a COP that would be distributed near-instantaneously to all coalition members would constitute a huge leap forward for IAMD, dramatically expanding the air domain awareness of each of its members. Once successfully established, further steps along the integration spectrum to amplify the system's capabilities and effectiveness should be developed. These options range from the less ambitious—e.g., upon good intelligence from State A of a pending missile launch against it, other states could be willing to temporarily re-position their radars to help detect and track the threat until State A is able to resolve it—to the much more ambitious ideal of State A being willing to expend its own national assets to neutralize a threat headed toward State B, or, alternatively, states being willing to permanently re-configure their own national air defense architectures to maximize the overall effectiveness of a new IAMD architecture designed for the broader region.

In the realm of acquisition for IAMD, there are already so many advanced U.S.-supplied platforms spread across the region (or, in the case of Israel, platforms developed or produced with U.S. support) that major new purchases of equipment should not be immediately necessary—beyond those required to establish as quickly as possible the real-time digital connectivity of existing sensors needed for the COP and ensuring that all participating states can make effective use of it, including secure data sharing communications packages, as well as maximizing the bandwidth of national military cyber infrastructure.

Looking beyond the initial hook-up of already existing platforms, a joint effort to add more sensors—ground, air, and space—to close current gaps and vulnerabilities and maximize the system's geographic coverage should be the highest short-term priority for any new purchases of

IAMD capabilities. Wherever it can be done securely, this should include exploiting and adapting already available (and cheaper) commercial unmanned platforms and artificial intelligence. Outside the immediate requirements of the IAMD system itself, participating states should consider investing in joint research and development (R&D) efforts to develop new technologies in the air and missile defense realm, particularly those, like directed energy, that hold out the promise of bending the cost curve in favor of the defender. Finally, as CENTCOM and U.S. policymakers consider what future capabilities and changes to the system's architecture would further strengthen Middle East IAMD, they should look, wherever compatible with the network's effectiveness and integrity, to incorporating Israeli expertise and technologies to provide solutions—with an eye to enhancing Israel's value proposition to the security of its neighbors and advancing the strategic U.S. interest in deepening and expanding Israel's ties with the Arab world.

D. Not by Defense Alone

While progress toward IAMD would be enormously helpful to improving the protection of U.S. forces and partners in the Middle East and a boon to strengthening deterrence, it should not be mistaken for a complete answer to the challenge posed by the Iranian missile and drone threat. A potent capability to bring offensive countermeasures to bear against Iran and its proxies is essential as well. For many reasons, Washington has for years been reluctant to provide such offensive systems to its key Arab partners that could help them in directly counterbalancing Iran's missile and drone threat. Especially in an era where a key part of U.S. strategy is premised on boosting the national capabilities of its local partners so they can carry a greater share of the regional security burden, and where such offensive systems are increasingly on offer from America's primary global competitor in China, U.S. arms transfer policy to the Middle East may be in need of review.

E. Recommendations

In order to take full advantage of the current unprecedented opportunities for advancing IAMD, both the Biden administration and Congress should consider steps to highlight the issue's priority for U.S. national security strategy and incentivize U.S. partners to join the effort.

For the Biden Administration

- The immediate goal should be to establish a common operating picture (COP) with a coalition-of-the-willing that includes Israel and as many Arab partners as possible who are prepared to connect their sensors digitally to CENTCOM's Combined Air Operations Center (CAOC) and share information in real-time across the coalition.

- CENTCOM’s efforts to negotiate necessary data sharing and technical arrangements for the COP should be combined with sustained messaging from Washington’s highest levels (including the president, secretary of state, and secretary of defense) on the importance that the United States attaches to IAMD as part of its enduring commitment to the security of its traditional partners and to Middle East stability.
- A robust schedule of conferences, simulations, and training exercises under CENTCOM’s auspices can demonstrate how the system would work, the advantages it would deliver to its members in terms of greatly enhanced air domain awareness and improved defenses, and the protocols in place to address the full range of member concerns regarding the protection of sensitive national security information and cyber security.
- Consideration should be given to establishing (and resourcing) a dedicated unit under CENTCOM’s Area Air Defense Commander and headed by a senior officer that will be responsible for executing all data sharing agreements, technical requirements, and training programs necessary for creating the COP.
- It would be useful to develop a mechanism for streamlining and fast-tracking CENTCOM-approved Foreign Military Sales (FMS) acquisitions by U.S. partners that are deemed essential, in the first instance, to the rapid establishment of a COP and, subsequently, for the bolstering of the broader IAMD network, in particular the expansion of the system’s region-wide sensor coverage and joint R&D efforts to develop new, more cost-effective technologies for countering missiles and drones. Where essential for purchases by individual partner nations, Foreign Military Financing (FMF) should also be fast-tracked to incentivize maximum participation in the network.
- Separately, the administration should also undertake a review of its arms sales policy in the Middle East to consider what more it could be doing to address the legitimate defense needs of its closest Arab allies—especially in light of China’s growing efforts to penetrate the region with its own unencumbered sales of advanced weaponry that, if successful, could thwart CENTCOM’s strategy of integrating its partners militarily under U.S. leadership.

For Congress

- Following up on the DEFEND Act, Congress might explore additional legislation that identifies the development of IAMD in the Middle East as U.S. national policy, starting with the near-term establishment of a COP, and authorizes and appropriates funds for cooperative programs aimed at incentivizing U.S. partners to participate.
- Legislation that prioritizes IAMD-related FMS acquisitions approved by CENTCOM, along with necessary FMF support, would encourage regional participation in the network and improve IAMD capabilities.

- Specific joint programs that Congress could authorize and appropriate funding for that would be greatly beneficial and open only to IAMD participants might include an effort to significantly expand the network’s region-wide sensor coverage; a joint R&D program to develop new, cost-effective, and cutting-edge technologies for defeating Iranian missiles and drones; and the establishment of an IAMD Red Sands innovation, testing, and experimentation center of excellence in Saudi Arabia. The idea would be to use U.S. leadership and small amounts of seed money to leverage larger commitments of matching funds and other forms of burden sharing from all states seeking access to the system’s benefits.

II. The Crisis of Iran’s Intensifying Missile and Drone Threat

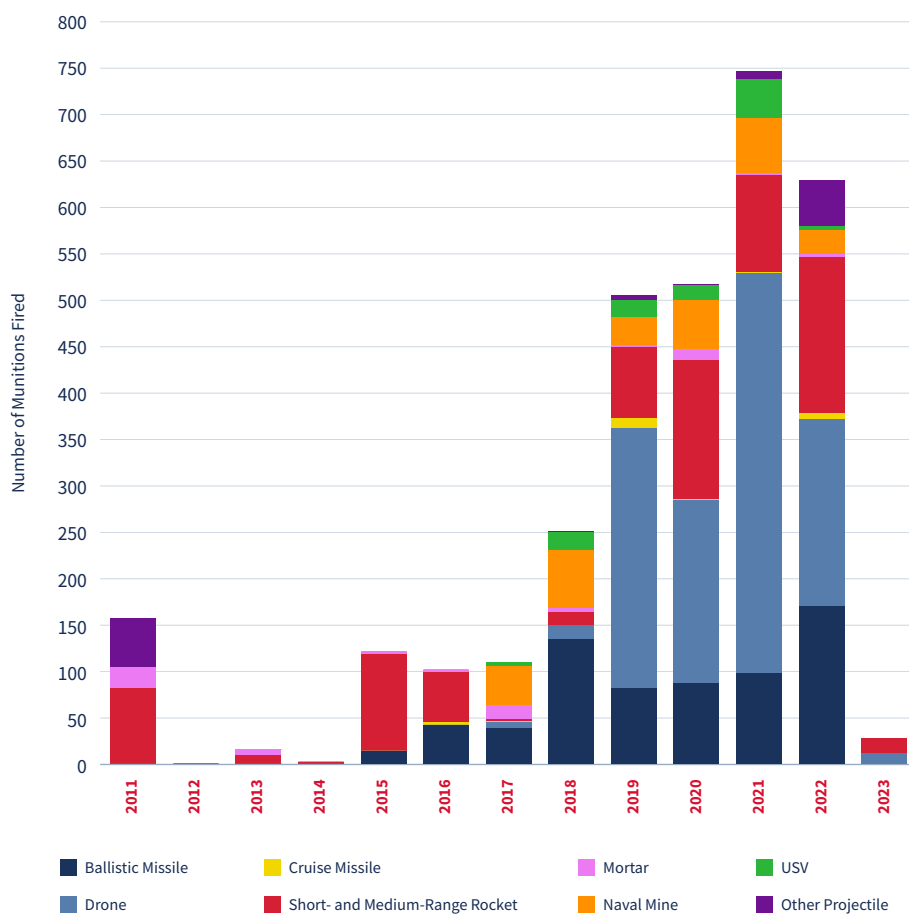
On September 14, 2019, a complex swarm attack of seven Iranian cruise missiles and eighteen drones shocked the world by targeting two strategic assets in Saudi Arabia critical to the stability of international energy markets: Abqaiq, the world’s largest oil processing facility, and Khurais, the kingdom’s second-largest oil field and the fifth largest in the world.⁴ Striking with stunning precision, the attack temporarily cut Saudi oil production in half. Though the sites were protected by some of the most advanced air defense systems in the world, including U.S.-supplied Patriot surface-to-air missile batteries, none of the twenty-five Iranian projectiles were shot down. Indeed, many, if not most, may have gone completely undetected until it was too late.⁵

Given the potentially devastating consequences for oil supplies and the global economy, the attack underscored the escalating dangers posed by Iran’s increasingly sophisticated arsenal of ballistic missiles, cruise missiles, and drones—the largest in the Middle East—and its proliferation of these systems to a network of proxy armies in Lebanon, Yemen, Iraq, Syria, and the Palestinian territories that now encircle U.S. partners, U.S. forces, and U.S. assets across the region in a so-called “ring of fire.”

A. *Escalating Attacks, Proliferation to Proxies, and Iran’s Gray Zone Strategy*

Since 2011, according to JINSA’s Iran Projectile Tracker, Iran and its proxies have fired over 3,150 projectiles at U.S. troops, Arab allies, and other U.S. partners in the Middle East, including 1,130 drones (also known as unmanned aerial vehicles, or UAVs), 760 rockets, and 660 ballistic missiles.⁶

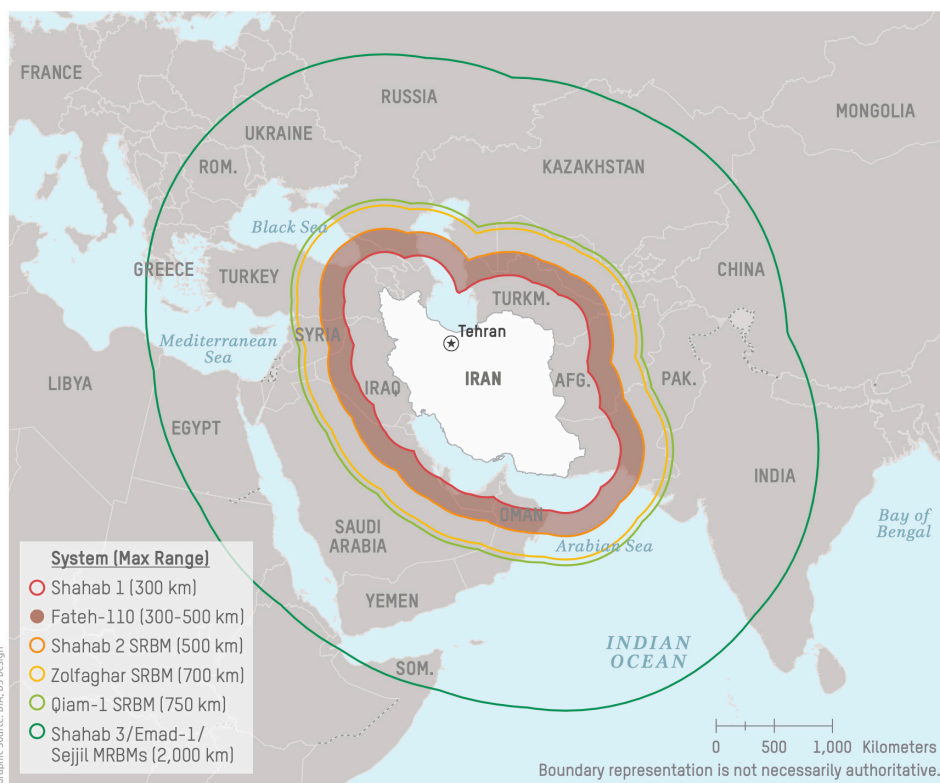
Iranian-linked Munitions Launched Per Year Against U.S. Personnel, Partners, and Interests in the Middle East 2011-Present



Against Saudi Arabia alone, Iran-backed Houthi rebels have fired at least 1,850 projectiles since the civil war in Yemen began in 2014, including over 950 UAVs and 470 ballistic missiles.⁷ In early 2022, the Houthis launched a complex series of missile and drone attacks against the U.A.E., where U.S. forces are based. While U.S. Patriot batteries and Emirati-operated Terminal High Altitude Area Defense systems (THAAD) successfully neutralized most of the missiles, some drones penetrated, resulting in three deaths.⁸

The arsenal of the Iranian regime is not just growing in absolute numbers but in range, maneuverability, payload, and, most dangerously (as evidenced by the attack on Abqaiq and Khurais), precision. The U.S. learned that lesson the hard way in January 2020 when an Iranian short-range ballistic missile barrage—the largest ever against American forces—scored several near-direct hits on an Iraqi base used by U.S. troops, obliterating barracks, aircraft hangars, and equipment.⁹ Unprotected by antimissile batteries, the attack on the base could have resulted in massive U.S. casualties. Last-minute intelligence, quick on-the-ground command decisions, and a dose of luck helped avoid any fatalities, though over 100 Americans suffered concussive brain injuries.

On its own, Iran’s array of rockets, cruise missiles, ballistic missiles, and drones now enable it to strike virtually any point in the Middle East, putting all U.S. troops and partners in the region at risk of attack. The threat is dramatically exacerbated by the proliferation of these systems to Iran’s proxy armies. Positioning radars and interceptors to defend against aerial attacks coming from Iran alone is no longer sufficient. For the United States and its regional friends, the challenge is now an all-encompassing 360-degree threat that can emerge from any and all directions and all altitudes. The defender’s task has become infinitely harder, complex, and expensive. Iran and its proxies currently have distinct asymmetric advantages—both in terms of the cost curve (Iran’s drones, in particular, are extremely cheap compared to the air defense systems they face) as well as on the battlefield (drones fly close to the ground, in unpredictable and circuitous routes, and can be fired in swarms, making them especially hard to detect and track).



Iran Military Power, U.S. Defense Intelligence Agency, August 2019,

[https://www.dia.mil/Portals/110/Images/News/Military Powers Publications/Iran Military Power LR.pdf](https://www.dia.mil/Portals/110/Images/News/Military_Powers_Publications/Iran_Military_Power_LR.pdf)

The intensifying attacks of recent years by Iran and its terrorist partners are the key pillar of a gray zone strategy, just below the threshold of war and frequently deniable, that aims to raise the costs of America’s military presence, exploit its post-Iraq, post-Afghanistan fatigue with the Middle East, and eventually drive U.S. forces out of the region entirely. With U.S. partners, it seeks to put them under persistent pressure and threat, feeling besieged, isolated, and unprotected by an increasingly unreliable great-power patron in Washington loathe to risk further military entanglements in a part of the world where it believes too much national treasure has already been expended.

B. An Exponentially Growing Threat and the Need for U.S.-Led Cooperation

Underscoring the escalating danger posed by Iran is the fact that its drone threat has now gone global. Since the fall of 2022, in a direct challenge to critical U.S. interests in Ukraine, Iran has been supplying Russia with hundreds of Shahed-136 and Shahed-131 UAVs with which to conduct attacks on Ukrainian civilian infrastructure and military platforms.¹⁰ While Ukrainian forces have succeeded in shooting down a large percentage of the drones, a significant number still hit their targets, producing important effects not only economically and on the battlefield but psychologically as well. Iran is no doubt learning important lessons from Russia's use of its drones, particularly its success at times in overwhelming Ukrainian defenses by launching UAVs in large groups, as well as its adaptations of the drones to inflict greater damage on infrastructure.



In congressional testimony in March 2023, CENTCOM Commander General Erik Kurilla starkly warned that, largely as a result of Iran’s advancing missile and drone arsenal, the Iranian threat has grown “exponentially” in the past five years.¹¹ Kurilla’s predecessor, General (ret.) Frank McKenzie, warned that Iran has effectively achieved “overmatch” in the theater—the strategic capacity to fire enough weaponry to overwhelm the defenses of the United States and its partners.¹² Unfortunately, despite some recent progress, the United States and its regional friends have not managed to keep up with the accelerating scope and intensity of the emerging challenge. As with the Russian threat to Europe, restoring deterrence and countering Iranian aggression will require a reinvigorated American commitment to mobilize and lead its allies in forging a regional coalition that can better secure their collective stability and security. Advancing an IAMD network for the Middle East should be a key pillar of any U.S. strategy to do so.

III. The Sub-Optimal Status of Current Regional Air Defenses

Both the Iran-Iraq war in the 1980s and the first Gulf War in the early 1990s signaled the coming era of missile warfare in the Middle East and the need for developing defenses against unmanned airborne threats. In the first decade of the 21st century, Israeli conflicts with Hezbollah and Hamas underscored that non-state terrorist groups affiliated with Iran were also starting to build up substantial arsenals of projectiles to use as terror weapons and as a form of asymmetric warfare against an otherwise more powerful adversary.

Over the past fifteen years, Iran has perfected its strategy. Not only has it amassed its own enormous arsenal of increasingly lethal and precise weaponry, largely unchecked by the world, but it has been permitted to proliferate many of those same capabilities to terrorist armies across the region—some of which now possess conventional missile, rocket, and drone arsenals that rival or exceed some, if not most, national militaries.

A. Ample Capabilities, Inadequate Architecture

In response, the United States has for years worked to counter the growing threat by deploying its own advanced air defense platforms to the region while also selling many of these systems, including Patriot and THAAD missile batteries, to its partners to bolster their ability to defend their own territory. Even with a large withdrawal of air defense capabilities from CENTCOM’s AOR in 2021, the U.S. military still operates at least eight Patriot batteries in proximity to U.S. forces in the U.A.E., Saudi Arabia, Bahrain, and Qatar. U.S. partner militaries operate (approx-

imately) another fifty-five Patriot batteries in total, in addition to two THAAD theater defense systems manned by Emirati forces.¹³ U.S. partners also operate large fleets of advanced U.S. fighter aircraft that have proven capable of shooting down drones. As a result, the region is now home to a plethora of high-caliber defensive hardware provided by the United States.

What Washington has proven far less successful at has been helping its regional friends to organize their substantial capabilities, either nationally or at a region-wide level, into coherent networks that fully leverage their potential power.

Nationally, while relying largely on U.S. air defense equipment, some Arab countries have also acquired a hodge-podge of additional systems from other Western sources, as well as from Russia and China. These purchases have generally been made without regard to how these different systems would be made to work together synergistically as part of a well-designed national air defense architecture. As a result, these disparate capabilities are often incapable of rapidly and securely sharing information with each other, making integration of systems at a national level difficult and fractured, usually leaving defenders without a common air picture or effective centralized command and control.

Arab states have also typically relied on point defenses, like the Patriot, that are designed to protect a specific target or limited area, as opposed to theater-level defenses like THAAD meant to cover an entire region surrounding the battery. With point defenses, each nation tends to point its radars toward the direction from which attacks are most likely to emerge. Thus, in the case of the 2019 Abqaiq attacks, a Patriot battery protecting Abqaiq was oriented to protect the southern approaches from Houthi strikes out of Yemen, leaving the facility vulnerable to launches coming directly from Iran in the north and east.¹⁴ Similarly, in January 2021, drones launched by Iran-backed militias in Iraq crashed into the main royal palace compound in Riyadh, further exposing the vulnerability of the kingdom's air defense architecture, even at its highest value targets.¹⁵

B. The Israeli Exception

The exception to the regional rule is, of course, Israel. Israel over the past dozen years has developed a multitiered and fully integrated air defense architecture, composed of some of the most advanced and effective platforms in the world, that provides the entire country with 24/7 protection from the full range of aerial threats—from low altitude drones and rockets to theater ballistic missiles. With substantial amounts of U.S. support, including co-development and co-production of key platforms, Israel has purposefully built each component of its national air defense architecture with an eye toward maximizing its ability to detect, identify, track, and neutralize potential threats at every altitude and from multiple directions.¹⁶ Its network has massive computing power, shares information seamlessly, and empowers a command-and-control system that quickly and accurately identifies the most robust platform or mix of platforms to destroy an incoming threat. As a result of the system's near-constant use in combat over the past decade, Israel's technology is also in a continuous state of updating, adaptation, and improvement based on intense operational experience against Iran and its ring of fire.

It is no exaggeration to say that Israel’s multilayered system—from design to integration to the performance of its platforms—is the best in the world. Compared to the United States, of course, Israel has only a tiny amount of territory to defend. It has also been subjected to a level of constant threat from rockets, drones, and missiles that America, fortunately, has never had to contend with, forcing Israel to produce effective and rapidly deployable solutions or risk national disaster.

C. U.S. Challenges with Multitiered IAMD

Nevertheless, as a means of fully appreciating Israel’s accomplishment and proficiency in this domain, it is worth highlighting what the infamous Chinese balloon incident of February 2023 underscored about the shortcomings in the air defenses of even the United States—the world’s most powerful military.¹⁷ U.S. ground-based radars, relics of the Cold War, are historically all oriented northward toward detecting a Russian intercontinental ballistic missile (ICBM) attack using polar approaches, leaving vast swathes of America’s borders other than the Arctic—including objects coming across the Pacific—uncovered. Further, due to antiquated technology and lack of computing power, the radars were calibrated to filter out objects that do not match the profile of an expected ICBM, leaving them unprepared to look for smaller, stealthier, and low-flying objects like balloons, cruise missiles, or drones.¹⁸ In short, the defense of the U.S. Homeland suffers from a severe shortage of advanced sensors.

Beyond the lack of an adequate sensor network to cover the full range of threats, the U.S. air defense system also suffers from an absence of sufficient integration that allows analysts to make sense in real-time of the large amounts of data flowing in from a variety of sources. As starkly described in a recent article by a former deputy director for National Intelligence and a former deputy director of operations for North American Aerospace Command (NORAD):

“Today, NORAD operators, working with decades-old technology, are forced to monitor and make sense of data on as many as fifteen separate screens, each providing only part of the picture. The professionals engaged in this task, however well trained and experienced, are being asked to perform small miracles everyday even under normal circumstances. With the significantly expanded data flow after removing filters on the radars, plus data that will come from new sensors, their job becomes unsustainable without integration.”¹⁹

D. Integration Among U.S. Partners Lacking

If integration has been a problem for the United States, it should not be surprising that America’s Arab partners have also faced significant challenges. And the lack of integration that Arab air defenses suffer from at the national level extends to their failure to organize effectively at the regional level as well. Despite more than a decade of U.S. efforts to urge greater cooperation, America’s Arab partners, particularly in the Gulf region, have generally been loathe to share sensitive national security information from their sensors with each other.²⁰ If one country’s

radars pick up a potential threat crossing its territory and heading for one of its neighbors, there are no formal reporting obligations to alert the neighbor, much less to use its own national assets to neutralize the threat on behalf of the neighbor. There is certainly no real-time integration of regional sensors that would give neighbors direct and immediate access to each other's incoming threat data.

At best, Gulf states on a voluntary basis and via a system based on phone calls rather than digital connectivity, have started reporting threat information to CENTCOM's CAOC in Qatar, which then might distribute it to a targeted third country.²¹ Some Gulf states have also begun to grant the CAOC direct access to their sensors. But, historically, the information-sharing agreements between individual countries and the CAOC restrict what data can then be shared with neighboring states, rendering a true common operating picture for the region impossible.

In 2022, for example, Saudi Arabia agreed to share its radar feeds with the CAOC, effectively doubling the square footage of the CAOC's radar coverage.²² But as a result of a bilateral data sharing agreement, CENTCOM has not been authorized to redistribute the resulting air picture with some of Saudi Arabia's neighbors. As a result, to the extent air defense cooperation has existed at all at a regional level, it has historically been very episodic, slow, and heavily constrained, making it largely impossible for countries to depend on their neighbors. In practice, each country has been left to rely on its own national capabilities, such as they are, for all elements of the kill chain against aerial threats—an increasingly sub-optimal situation given the accelerating danger posed by Iran and its ring of fire.

IV. The Many Advantages of Integration

Referring to the intensifying 360-degree threat now posed by Iran and its proxies, CENTCOM's current air commander, Lieutenant General Alex Grynkewich, recently highlighted the advantages of building a more integrated regional framework for air and missile defense: “[N]o country, no matter how wealthy, has the appropriate amount of kit to defend against that 360-degree threat.” As a result, “the only way to adequately defend yourself . . . is to leverage those partners.”²³

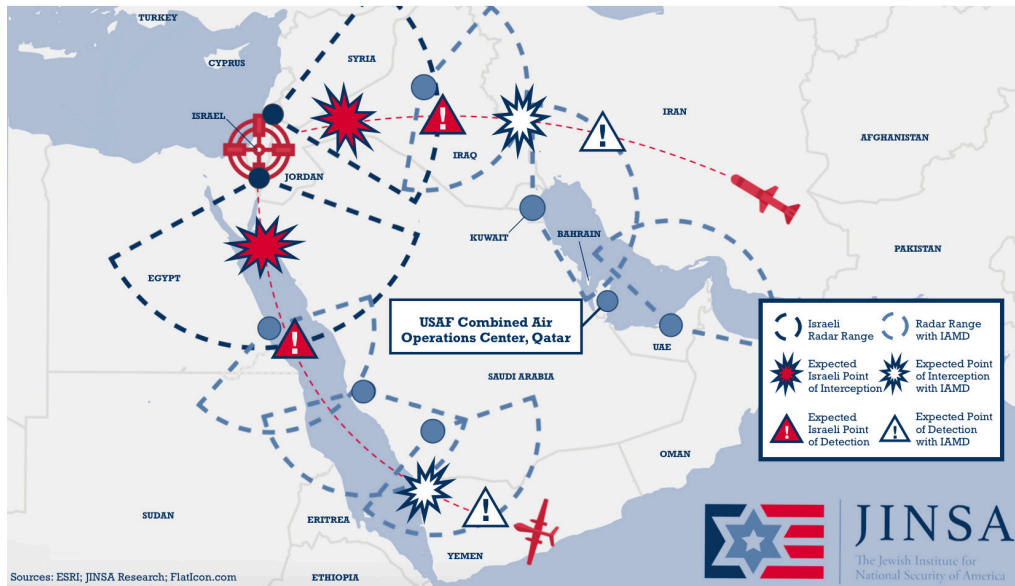
A. Operational Advantages

Individual countries have limited air defense resources and territory in which to deploy them. Greater integration with their neighbors would give them access to greater resources and territory, thereby expanding each participating nation's ability to detect, identify, track, and neutralize threats to its security. The limited capabilities possessed by each country would

be strengthened by adding the collective capabilities of the entire coalition, helping them to mitigate or resolve national vulnerabilities arising from a lack of adequate geographic coverage or intelligence gaps.

With access to a far greater number of sensors spread across the Middle East, participating nations would be able to detect and track a larger number of potential threats—earlier, more accurately, and at a greater distance from their territory, increasing the time, space, and likelihood for using their own national assets to successfully neutralize them.

Individual vs Integrated Air and Missile Defense in the Middle East



For Saudi Arabia, as an example, real-time access to sensors in some of its Gulf neighbors might have provided early warning of the Abqaiq attack or the 2021 Iraqi militia strike on the royal palace, allowing its forces at least an opportunity to try and neutralize them. In the case of Israel, even with its vaunted national air defenses, having access to information from radars hundreds or even thousands of kilometers from its borders, virtually on the doorstep of Iran, Iraq, or Yemen would dramatically expand its strategic depth by giving it invaluable additional warning of a potential attack and time to respond, perhaps even with multiple interception attempts and at significant distances from Israeli territory and population centers.

B. Political Advantages

An important advantage of greater integration in the air and missile defense realm, beyond the immediate operational impact on better air domain awareness, is that it allows participating nations to achieve significant improvements in their overall security posture without appearing to compromise their national sovereignty in the eyes of their publics. Greater connection to the air defense networks of their neighbors does not require the politically fraught decision of having foreign troops or tanks stationed within their borders. For the most part, it merely requires an agreement to share data and information.²⁴

Similarly, the purely defensive nature of integrated air and missile defense also tends to add to its political palatability. For smaller and more vulnerable Arab countries in the Gulf, often concerned about unnecessarily provoking a much larger and hostile Iranian regime, a coalition purely based on protecting participating countries from attack rather than waging offensive war is certainly easier for them to defend in the face of Iranian protests. In the United States as well, where—especially in the wake of the Yemen war—the delivery of offensive weapons to authoritarian Arab regimes with poor human rights records has become a growing source of controversy, providing material and diplomatic support to enable a purely defensive effort aimed at protecting the region from Iranian aggression is a comparably easy sell.²⁵

C. Bolstered Deterrence

To the extent it strengthens the defenses of both individual countries and the broader region, greater regional integration reduces the chances that attacks by Iran and its proxies will succeed. As such, it complicates Iranian military strategy and contributes to deterrence—at least at the margins. Certainly, to the extent that integration increases the chances of rendering attacks less effective, helps mitigate their consequences, and limits casualties, it can provide regional states with critical decision-making flexibility, reducing the pressure leaders feel to retaliate automatically and move up the escalation ladder reflexively, rather than at a time and place of their choosing, or even not at all. In Israel, for example, it is well known that the success of the Iron Dome system in neutralizing the effects of persistent rocket fire from Hamas has, on multiple occasions, relieved the pressure on Israeli political and military leaders to order costly ground operations into Gaza that would spark a wider war and result in much higher casualties on both sides.²⁶

D. A Bridge to Greater Israeli-Arab Normalization

Another important strategic benefit of improved regional cooperation on air and missile defense would be the further consolidation of Israel's relations with its Arab neighbors. The more Israel can be visibly seen to contribute to the stability and security of its neighbors, and vice versa, the stronger and more sustainable the emerging bonds of trust and confidence between America's key regional partners will grow—including with nations, like Saudi Arabia, that have yet to normalize their relations with Israel but are increasingly prepared to work with it quietly on common security challenges. Based on the skills, knowledge, technologies, and experience that Israel has developed in building the most successful multitiered air defense architecture in the world, no country is better equipped to help the Arab states of the Gulf counter the most pressing threat to their security—the missile and drone arsenals of Iran and its proxies. As such, Israel's critical participation in an effort to better integrate regional air and missile defenses can serve as a major catalyst for deepening and broadening the historic normalization process triggered by the Abraham Accords.

E. A Signal of Enduring U.S. Commitment

It is also worth noting that a successful U.S. initiative to assist its most important Middle East partners in strengthening their defenses and countering their most dangerous adversary will help bolster Washington's own standing and influence with long-time friends who are increasingly questioning its continued commitment to the region and adjusting their own policies accordingly, not always for the better. Forging its traditional friends into an effective air defense coalition to counter the threat posed by Iran and its proxies will almost certainly require a degree of sustained U.S. leadership, diplomatic engagement, and military support that cannot help but reassure nervous allies about America's commitment to their security and regional stability.

V. Historical Obstacles to Integration

Though the operational advantages of better-integrating air and missile defense systems across the Middle East are indisputable—in terms of enhanced early warning, improved detection and tracking capabilities, greater kill options, and strengthened deterrence—more than a decade of U.S. efforts to encourage increased cooperation among its Gulf partners have, at least until recently, largely failed. An iconic example was a 2015 summit meeting at Camp David between President Obama and the leaders of the six countries comprising the Gulf Cooperation Council (GCC). The leaders issued a formal statement committing the GCC to build a region-wide ballistic missile defense capability with vigorous U.S. support, including “the development of a GCC-wide Ballistic Missile Early Warning System.” Needless to say, the initiative was stillborn.²⁷

A. Distrust Among U.S. Arab Partners

By far and away the biggest obstacle to progress historically has been the political rivalries, suspicions, and differing threat perceptions among America's Arab partners. For much of the past decade, even preceding Obama's Camp David summit, Gulf politics have been most starkly distinguished by the intensity of their divisions. In 2014, Saudi Arabia, Egypt, Bahrain, and the U.A.E. all withdrew their ambassadors from Qatar in anger over its support for Islamist protest movements that had been at the forefront of the so-called “Arab Spring,” which they feared were aimed at toppling the region's traditional political order. The dispute boiled over in 2017 when the same states attempted to impose a full-fledged blockade on Qatar and even hinted at a possible military intervention to depose the country's ruling family from power.²⁸ While an official rapprochement of sorts was finally brokered in 2021, lingering animosities and suspicions run deep.²⁹

While the Qatar dispute has had the highest profile, other longstanding rivalries also constrain inter-Arab cooperation. Behind the scenes, Egypt, Saudi Arabia, and, more recently, an increasingly assertive U.A.E. tussle for the mantle of Arab leadership. Kuwait and the U.A.E. have unresolved historical disputes with Saudi Arabia over borders, territory, and oil resources that occasionally flare up. There is ample historical baggage weighing down relations between the Saudi royal family and the Hashemite Kingdom of Jordan.³⁰ Oman—and no doubt some of Saudi Arabia’s other smaller neighbors on the Arabian Peninsula—fret about succumbing to Saudi hegemony.³¹ Kuwait and Oman conspicuously declined to join their neighbors’ dispute against Qatar and have tended to be more cautious than other Gulf states in picking fights with Iran.³²

B. Legacy of Conflict with Israel

As for open cooperation with Israel, it was for decades out of the question for the vast majority of Arab countries who rejected relations with the Jewish state in the context of the Palestinian dispute. While many of them had episodic contacts with Israel clandestinely via their intelligence services, the possibility of any broader military and strategic collaboration between the Gulf states and Israel is only a very recent feature of the regional landscape, greatly enabled by the conclusion of the Abraham Accords. But political and military relationships of trust and confidence are still being established and in their infancy. Even in states that have made peace with Israel, continued sympathy for the Palestinian cause, combined with years of incitement against the Jewish state, have left Arab publics far less enthusiastic about normalization than their leaderships.³³ Moreover, several countries—most importantly Saudi Arabia—have not yet formally established relations with Israel, further complicating efforts to develop and advance new patterns of military cooperation.

In light of the history of mistrust, suspicion, and rivalry that has characterized relations between so many of the region’s states, it is hardly surprising that years of American pleadings to better integrate the region’s air defense capabilities have fallen on deaf ears for the most part. Such integration puts a very high premium on the willingness to share sensitive national security information and capabilities with actual or potential rivals that most of the region’s states have generally concluded is not worth the risk—at least until recently.

That mistrust is exacerbated to the extent that effective information sharing in the air and missile defense realm also requires a degree of digital connectivity between national assets that creates a whole new set of real or imagined vulnerabilities relating to cyber penetration, spying, and corruption. The fear that shared information will fall into the wrong hands, especially Iran’s, be otherwise misused, or create risky dependencies on not wholly trustworthy neighbors that could shut off the data flow at a moment’s notice has long proven to be a powerful constraint on region-wide defense cooperation.

VI. New Factors Driving Integration

A. Intensifying Iranian Threat

Importantly, those constraints may now be easing. Without question, the primary cause—as previously discussed—is the dramatic escalation in the actual threat posed by Iran and its ring of fire. In just the past four years, the Gulf’s two most influential states—Saudi Arabia and the U.A.E.—both suffered near-catastrophic attacks on critical assets at the heart of their national power. As one U.S. retired general, who experienced first-hand the frustration in years past of trying to advance the cause of IAMD in the Gulf, recently remarked, “The s**t has finally become real for these countries.”³⁴ The threat has now manifested itself in ways that have served to concentrate the minds of many of America’s friends on the need to prioritize strengthening their air defenses as never before.

Beyond the unprecedented region-wide urgency in addressing the acute Iranian threat, two other important geopolitical developments—themselves largely rooted in the Iranian challenge—are also now driving the increased prospects for greater cooperation.

B. The Abraham Accords

The first was the 2020 signing of the Abraham Accords that normalized relations between Israel and the U.A.E., Bahrain, Morocco, and Sudan. The Accords were the vanguard of a general trend in recent years of improving relations between Israel—the region’s most powerful military, which also possesses the most effective integrated missile defense system in the world—and many of its Arab neighbors, particularly in the Gulf who are most immediately vulnerable to Iranian missiles and drones.³⁵

The bilateral manifestations of the Accords are already evident in the air defense sector. Almost immediately after it was attacked by Houthi missiles and drones in January 2022, the U.A.E. received a private message from Israel’s prime minister offering to support the Emirates with intelligence and air defense capabilities.³⁶ A week later, as subsequent Houthi attacks were still raining down on Abu Dhabi, Israel’s President Isaac Herzog became one of the first foreign leaders to visit (weeks before any senior U.S. official showed up), where he publicly committed to the U.A.E. president that Israel would “completely support your security requirements.”³⁷

Simultaneously, Israeli defense and security experts were already in the U.A.E. for discussions with their Emirati military counterparts on how Israel’s offers of assistance would be operationalized.³⁸ Within months, reports emerged that Israel had agreed to sell the U.A.E. both its Spyder counter-drone platform as well as the Barak short-range air defense system for missiles and drones. In October 2022, satellite photos suggested that several Barak launchers had, in

fact, already been deployed around Abu Dhabi.³⁹ Along similar lines, Bahrain has signed a memorandum of understanding (MOU) with Israel on defense cooperation and has been in active discussions to purchase Israeli counter-drone defenses.⁴⁰ In interviews conducted for this paper, it was further confirmed that Israeli and Saudi defense officials held clandestine meetings in 2022 to agree on their own defense MOU—despite the absence of official relations.⁴¹

C. Israel's Move to CENTCOM

The second geopolitical development, closely related to the first, that has significantly boosted the prospects for greater regional military cooperation was the 2021 decision to move Israel from U.S. European Command's AOR to that of CENTCOM—the combatant command responsible for securing U.S. interests by partnering with America's Middle East friends to strengthen regional stability and security.⁴² Under CENTCOM's multinational cover and unique convening power, unprecedented opportunities have opened up for Israeli military officials to meet with their Arab counterparts (both those who have normalized relations with Israel as well as some that have not), deepen relationships and trust, exchange information and intelligence, and plan and exercise together to confront the common threats they face across multiple domains, especially from Iran's missiles, cruise missiles, and drones.

An Israeli liaison officer is now permanently stationed alongside other Middle East states at CENTCOM headquarters in Tampa, Florida, as well as at the headquarters of U.S. Naval Forces Central Command (NAVCENT) in Manama, Bahrain. Arrangements have also been agreed to have Israelis assigned to CENTCOM's CAOC in Doha, Qatar—the nerve center of CENTCOM's efforts to mobilize its partners in cooperative air defense efforts.⁴³ Notably, while Qatar has long maintained informal contacts with Israel, it has yet to officially normalize relations.

Operationally, under NAVCENT's leadership, Israeli vessels have participated in joint exercises with the U.A.E. and Bahrain navies.⁴⁴ In both 2022 and 2023, Israel also participated in NAVCENT's annual International Maritime Exercise (IMX), the largest naval exercise in the Middle East, involving nearly 60 other countries, including several who have not normalized relations with Israel yet—most importantly, Saudi Arabia, but Qatar, Oman, and Pakistan as well.⁴⁵ At NAVCENT, a new intelligence-fusion cell is being established that will have Saudi naval officials participating alongside their Israeli counterparts.⁴⁶

The same confluence of events spurring greater regional cooperation in the maritime domain has also opened up unprecedented opportunities for progress in the all-important area of air and missile defense. The growing alignment of regional threat perceptions around the escalating Iranian missile and UAV danger, together with CENTCOM's operationalization of the security dimensions of Israel's expanding ties to many of its neighbors, has created a decisive moment for advancing the cause of a new Middle East air defense network.

VII. Key Guidelines for U.S. Strategy to Advance Integration

In seeking to take advantage of these new opportunities in the air defense domain, three points that relate more to the process, rather than the substance, of overcoming historical obstacles and building a more cooperative Middle East air and missile defense network are worth underscoring up front. Importantly, these guidelines already appear to be shaping CENTCOM's efforts to pursue greater integration in the air domain.

A. The Imperative of U.S. Military and Political Leadership

The first is the central role that CENTCOM and the United States will need to play if serious progress is to occur and be sustained. The U.S. military, of course, brings unmatched advantages to the table in terms of advanced technology, military capabilities, experience, and skill in organizing and leading complex multinational coalitions. Furthermore, with regard to the Middle East in particular, the United States brings decades of history of being the most trusted strategic partner of virtually every country that today finds itself under threat from Iran's missiles and drones. It is widely acknowledged that the region's states generally all still have a higher degree of trust in the United States and specifically in the U.S. military than they do in each other. In spite of the geopolitical drivers in the region pushing local states toward greater cooperation, it remains the case that, absent committed U.S. leadership, the chances of successfully taking advantage of the current moment to make major advances in developing a more integrated regional air defense capability will be significantly reduced, if not lost altogether.

Importantly, CENTCOM's engagement alone will likely not be sufficient. It will need to be matched by the sustained and visible support of policymakers in Washington at the highest levels, including President Biden. Over three successive U.S. administrations, doubts about America's commitment and staying power in the Middle East have grown among U.S. partners, fueling an abandonment narrative that has eroded trust and confidence, and encouraged greater hedging behavior. Before taking on the risks of signing up for what amounts to an incipient regional coalition to counter the growing Iranian threat, especially one that includes Israel, Washington's Arab partners will want strong assurances that the U.S. commitment to leading and empowering the coalition is absolute and for the long term. The push for greater integration needs to be understood by them as a major manifestation of a renewed dedication from the highest pinnacles of power in Washington to remaining the Middle East's leading security provider rather than simply another vehicle for reducing U.S. burdens in a part of the world it has grown tired of, and facilitating its ability to shift resources and attention to higher priority theaters in Asia or Europe.

B. A Step-by-Step Approach

A second point worth highlighting is that the process of advancing a multilateral effort on air and missile defense should probably best be approached as a step-by-step process rather than a one-time big-bang event. Military integration at any level is extremely hard. As previously noted, even the U.S. military, the best in the world, has been challenged at times by its efforts to integrate its air defense efforts, not to mention the different branches of its armed services. NATO, the world's oldest and most effective multinational alliance, still has more work to achieve full integration, including in the air and missile defense realm. In a region as riven by rivalries and distrust as the Middle East, where years of U.S. efforts to encourage greater collective action have generally ended in disappointment, a phased approach that focuses on proving the value to its participants of each successive step forward, gradually building trust, confidence, and a willingness to move on to the next phase should be a guiding principle of U.S. strategy.

C. Start with a Coalition-of-the-Willing

A third point worth keeping in mind is that the process of building integrated defenses may not initially attract participation by all U.S. regional partners or even most. Countries will likely have different constraints, concerns, and risk tolerances regarding sharing sensitive national security information with certain of their neighbors, appearing to challenge Iran, or engaging more openly in defense cooperation projects with Israel.

It is possible that only a smaller subset of countries will at first be prepared to take some of the more ambitious steps required to share their national air pictures in real-time with all their neighbors, including Israel, while others move more slowly, perhaps waiting to see how Iran reacts or if the benefits of greater integration are proven out before agreeing to join the network themselves. While CENTCOM should leave the door open to participation by all partner nations who can reliably contribute to a new IAMD architecture and meet its requirements, it should not allow its efforts to be slowed or held back by the refusal or reluctance of some states to sign up at the first opportunity. Instead, it should allow partners to move at their own pace, pushing ahead with as many states as are willing to advance the cause and enjoy the benefits of integration and collective security now while actively encouraging others to join later as the value proposition of greater integration is demonstrated over time and their comfort levels grow.

VIII. Modest but Unprecedented Early Advances Toward Integration

That indeed is largely the approach that CENTCOM appears to have adopted, and the results have already been impressive—even remarkable when viewed against the backdrop of more than a decade of failed efforts to promote greater cooperation. Since 2021, CENTCOM has made unprecedented strides in assembling an ad-hoc coalition-of-the-willing to discuss joint efforts related to air and missile defense that includes Israel, several of its Arab peace partners, and even several Gulf states, including Saudi Arabia, that have no formal relations with Israel yet.

A. Regular Meetings of Senior Military Leaders on IAMD

Regular conferences convened by CENTCOM are now being held at the level of each coalition member's top military leader, the chief of defense (CHOD).⁴⁷ Both the Israeli and Saudi CHODs have attended multiple sessions together, with first-hand witnesses reporting the development of a genuine rapport and comradery over time.⁴⁸ Egypt, Jordan, Qatar, Bahrain, and the U.A.E. have also joined, while states like Oman and Kuwait have been more reticent. Building regional cooperation against missile and drone threats has been a major focus of the CHOD meetings.

The regular discussions of air and missile defense by military chiefs have, in turn, been supported by an emerging institutionalized framework of CENTCOM-led conferences at two other critical operational levels. The first level involves regional air commanders directly responsible for their nation's air and missile defense efforts. And the second layer is senior officers (one and two-star generals and colonels) actually in charge of working out the nuts and bolts of planning and operations to develop cooperative tactics, techniques, and procedures (TTPs) for operating collectively to counter the missile and drone threat posed by Iran and its proxy armies. These efforts include not just the protocols for sharing aerial threat information with neighbors but how decisions should be made on which country is best positioned to act to neutralize a common threat.

B. Operational Cooperation on a Nascent Early Warning System

Importantly, these efforts have moved beyond mere conferences and table-top exchanges to live exercises in which, for example, Israeli and Arab pilots have flown together against drone contingencies threatening more than one nation—such as a UAV traversing the Red Sea that could pose a danger to Israel, Saudi Arabia, Egypt, or Jordan.⁴⁹ While communications within the emerging system remain antiquated and indirect—primarily via phone calls to CENTCOM's CAOC—coalition members are for the first time regularly reporting threat information picked

up by their national sensors that the CAOC then distributes to other coalition participants (also largely via phone) who could be in danger. In less than two years, countries have submitted hundreds of such reports, several of which have been distributed by the CAOC to a third country that has acted on the information to neutralize the threat using its own air defense assets.⁵⁰ Importantly, Israel and Saudi Arabia have been beneficiaries of intelligence shared by the other as part of this emerging framework.⁵¹

This represents extraordinary forward movement. After decades of frustration in which U.S. policy made no visible progress, elements of a rudimentary multilateral early warning system among Israel and its Arab neighbors are, for the first time, starting to take shape under CENTCOM's forward-leaning leadership and already delivering real security benefits to its participants.

IX. Critical Next Step: Creating A Real-Time Common Operating Picture

While an excellent start, however, much greater levels of cooperation and true integration will still be required to even begin adequately addressing the scope and intensity of the growing challenge from Iran and its proxies. A voluntary system of intelligence sharing, communicated indirectly through telephone calls to the CAOC, may be useful as an early-warning device for efforts to counter the threat from a single slow-moving drone where time may not be of the essence. It can also help to build trust among partners and demonstrate the additional security increment that a more cooperative system of information sharing can deliver to its participants.

But such a system is not nearly sufficient to deal with Iranian ballistic missiles moving many times faster than the speed of sound or even with subsonic land-attack cruise missiles traveling at speeds of 500 miles per hour or more. It most certainly is incapable of operating at the speed of an actual regional war, when Iran and its ring of fire could launch barrages of missiles and drones from all directions. In that environment, there is an enormous premium on speed in detecting, identifying, and tracking potential threats from wherever they arise and at the greatest distance from the target as possible.

A. Sharing Sensor Data at the Speed of War

That is why the first critical step for building out an IAMD network is getting America's Middle East partners to agree to share their national air pictures with each other in real-time and fuse them together instantaneously into a COP that is available within seconds to all other

coalition members. That will require a willingness by participating countries to move beyond the voluntary and cumbersome phone call for sharing threat information to a system that, by formal agreement, connects their existing national radars and sensors digitally via machines that operate 24/7 and much closer to the speed of light. By allowing each coalition member to leverage a regionwide multinational network of sensors, such a step would, in theory, significantly expand each country's air domain awareness far beyond its own borders and enhance its ability to work alone or with others to defend itself against incoming threats.

At a technical level, digital connectivity of national sensors requires that classified computer networks from different countries be able to securely share data while minimizing the risks of cyber intrusion from hostile actors or each other. Though challenging, these technical obstacles can almost certainly be overcome through appropriate investments in and use of existing U.S. military communications solutions such as the encrypted Link 16 tactical data sharing system. The fact that the air and missile defense capabilities of most U.S. regional partners are dominated by U.S. platforms certainly makes the problems of connectivity and inter-operability easier to resolve.

Israel's most advanced national platforms—Iron Dome, David's Sling, and Arrow—would prove more challenging to connect, but in light of the extremely close cooperation that already exists between the United States and Israel on air and missile defense, and the existing compatibility of systems like Arrow with Link 16, the technical obstacles are almost certainly surmountable with appropriate safeguards established. That said, other foreign systems in the arsenal of some Arab states, most obviously any from Russia and China, would have to be excluded.

B. CENTCOM's Central Role in a Hub-and-Spoke System

Historically, the far greater obstacle to integration has been political, not technical. In light of the region's longstanding rivalries, animosities, and suspicions, there has been great reluctance to share what is rightly viewed as highly sensitive national security information that, in theory, could provide rivals and adversaries with important insights on a country's capabilities, vulnerabilities, blind spots, etc., not to mention opportunities for cyber infiltration, espionage, and offensive attacks. There is also no doubt the lingering political sensitivity among some Arab states over how their populations—widely believed to be far less enthusiastic about cooperation with Israel in the absence of a resolution to the Palestinian issue—would perceive such high levels of military cooperation with Israel.

Vigorous U.S. leadership and engagement will be essential to allay the suspicions and fears that have held back progress in the past. Because all of America's Middle East partners have greater trust in the United States than they do in each other and far more experience and comfort working bilaterally with the U.S. military than multilaterally with their neighbors, convincing them to take the step of sharing their real-time air picture with each other means that CENTCOM will need to be at the center of what is, in essence, a hub-and-spoke system. Rather than sharing their sensor information directly with their neighbors, coalition members would instead first send their data through a direct digital connection to the CAOC in Doha.

The CAOC, in turn, would sanitize and scrub the data of its most sensitive elements involving sources and methods to the satisfaction of the country providing it, fuse the remaining information with incoming data from other participating nations and from U.S. sensors, and send out the resulting COP to the entire coalition.

All of this would occur through high-speed U.S. computers—continuously, nearly instantaneously, and securely. Indeed, CENTCOM’s so-called Kingpin squadron is capable of receiving, scrubbing, fusing, and redistributing incoming data as part of a COP in less than two seconds.⁵² Such an arrangement would also give the coalition’s Arab participants the (technically truthful) argument that they are only sending their national data to CENTCOM, not to any of their neighbors, including Israel.

CENTCOM would need to demonstrate the system’s capabilities through repeated training and exercises, proving conclusively to prospective participants that the benefits of greater regional integration would bring a significant improvement in their security over the existing status quo—while at the same time mitigating any downside risks. It would require demonstrating how each country’s most sensitive national security information can be reliably protected while, at the same time, their air domain awareness and ability to protect themselves can be dramatically enhanced through increased multilateral cooperation.

C. Sustained U.S. Political Support Essential

In these efforts, CENTCOM will need the fulsome support of senior political echelons in Washington. Ultimately, for most of America’s Middle East partners, the decision to cross the Rubicon of true integration of early warning capabilities will be made not by military officers but by kings, crown princes, emirs, presidents, and prime ministers. They are the audience that will ultimately need to be convinced that the benefits of regional integration, unprecedented information sharing with their neighbors, and collective security outweigh the perceived risks. Without their explicit authorization, regional military leaders will be constrained and reluctant to move forward.

Accordingly, it is important that a U.S. strategy to build a new Middle East air and missile defense architecture has the explicit and sustained backing of top policymakers in Washington, including not only the secretary of defense and secretary of state but, importantly, the president as well. It will not be enough simply to identify better integration of regional air defenses as a priority on paper in the administration’s National Security Strategy.⁵³ The president himself will need to internalize the importance of the issue and make its advancement a constant priority in all his engagements with his regional counterparts, and his top national security aides will need to echo this consistently as well.

The message conveyed should be that rapid progress on better integrating regional air defenses is viewed as critically important to U.S. national interests and an essential element of a strategy to bolster the collective defense capabilities of U.S. partners in order to deter and counter the threat from Iran and its proxies and enhance regional security. By agreeing to participate,

it should be made clear to countries that not only will they be enhancing their own security but greatly solidifying their bilateral defense and security ties to Washington by partnering in a major U.S.-led project that has the explicit purpose of affirming and deepening America's long-term commitment to the security and wellbeing of its regional friends—at a time when that commitment has come increasingly into question in the post-Iraq, post-Afghanistan era.

X. Integration Beyond A COP

While connecting the existing network of sensors across the region with the CAOC in a way that allows the creation of a real-time COP would be a historic advance for the United States and its partners in the Middle East, it ideally would not be the last step toward building a more integrated regional air and missile defense network.

A. The Ideal of Full Integration

In theory, cooperation could eventually progress to a point where countries would have a high enough degree of trust and confidence in each other that future national decisions on the acquisition and deployment of different elements of air and missile defense—radars, sensors, interceptors, etc.—would be made not solely with an eye to maximizing their own defense needs, but to maximizing the coalition's collective ability to protect the wider region. Rather than a hub-and-spoke system whereby all data is funneled through the CAOC, each participating nation might one day be digitally connected directly to other coalition members, not only in terms of radar and sensor feeds but also in terms of command-and-control systems as well. All of this, ultimately, could result in not just the sharing of data and intelligence for a common air picture but on the actual sharing of interception capabilities, wherein the national assets of one country—upon the determination by an integrated command-and-control mechanism to be the optimal kill option available—would be used to neutralize an aerial threat to another coalition member.

In reality, that depth of integration is likely a long way off—if ever achievable. It would require levels of trust, as well as a willingness to cede portions of national sovereignty, national treasure, and national military capability that are hard to imagine, given the region's divisive history, as anything but a far-off ideal and ambition. Not even NATO, the gold standard for integrated multinational alliances, has resolved many of these issues—not least the willingness of one NATO member to dedicate limited missile defense capabilities in order to protect, for example, the national capital of a fellow NATO member while potentially leaving exposed some of its own territory and citizens.

B. Intermediate Stages of Integration

While anything approaching total integration may be unrealistic in the near future, one can imagine other intermediate steps that may be more achievable once the CAOC succeeds in developing a real-time COP based simply on the existing deployment of national assets. For example, scenarios could be developed and exercised under which intelligence about a possible attack against one coalition member could result in a request to have other coalition members temporarily reposition their radars or sensors to provide better detection and tracking of the pending threat until it is resolved. Similarly, contingencies could be explored, and tactics, techniques, and procedures authorized that examine the circumstances wherein one country facing an incoming aerial threat to its territory would have pre-delegated authority to enter the air space of a neighboring country to eliminate the threat, using its own interceptor missiles or other defensive capabilities, including manned aircraft.

More ambitiously, as members gain a greater appreciation for how the emerging network is able to enhance their individual early warning capabilities, they might eventually be open to discussions about repositioning their sensors on a more permanent basis as part of a broader strategy to eliminate redundancy of national efforts, seal seams in coverage, reduce vulnerabilities, and expand air domain awareness for the coalition as a whole. This could perhaps include a willingness by coalition members to allow the deployment of superior capabilities from other countries on their territory when such a move would enhance the region-wide system's performance. Especially looking to the future, as new air and missile defense capabilities are purchased by individual countries, their acquisition and deployment decisions should be influenced by discussions within the coalition, led by CENTCOM, on how to ensure that those decisions also serve to strengthen the broader network's overall effectiveness.

XI. Integration and Acquisition

A. Major New Platforms Not the First Priority

As a general matter, significant initial progress toward a COP should not require major up-front acquisitions of new capabilities by participating countries. The fact is that within the national arsenals of Washington's key Middle East partners, substantial capability already exists—including U.S.-operated assets deployed in the region.

As discussed earlier, the Biden administration withdrew significant capabilities from the Middle East in 2021, which had been deployed in Iraq, Jordan, Kuwait, and Saudi Arabia. These included up to eight Patriot point defense antimissile batteries and one THAAD theater missile defense battery.⁵⁴ While a blow to U.S. presence in those countries that further

undermined confidence in Washington’s commitment to the region’s security, the move still left the United States with a total of eight Patriot batteries in Bahrain, the U.A.E., Qatar, and Saudi Arabia.

That is on top of (approximately) another fifty-five Patriot batteries currently operated by U.S. partners around the region, most of whom have recently participated in CENTCOM-sponsored meetings to better integrate regional air defenses—including Israel, Saudi Arabia, the U.A.E., and Qatar. The U.A.E. also operates two extended-range, high-altitude THAAD batteries.⁵⁵ A variety of other U.S.-supplied air defense systems for lower altitude targets, including National Advanced Surface-to-Air Missile Systems (NASAM), Avenger systems, and older Hawk systems, are also possessed by several U.S. partners.⁵⁶ Finally, though not yet deployed, it is worth noting that Saudi Arabia is well along the process of eventually acquiring up to seven THAAD theater missile defense batteries of its own, which would greatly enhance a prospective region-wide network’s capabilities.⁵⁷

Overview of Major Middle East Air Defense Systems That Could Form U.S.-led IAMD



Country Location	U.S. Deployments	Currently Deployed by Regional Country	Awaiting Delivery to Regional Country	In Acquisition / Development Process
Bahrain	2 Patriot PAC-3		2 Patriot PAC-3	
Egypt		20 I-HAWK 25 Avenger		
Iraq	C-RAM Centurion	8 Avenger		
Israel		Arrow 2 & Arrow 3 Barak-8 David’s Sling Iron Dome 4 PAC-2 “Yahalom” SPYDER		Iron Beam Laser-Guided Missile Defense System
Jordan		14 I-HAWK		
Kuwait		8 Patriot PAC-3 5 I-HAWK	NASAMS	
Oman		NASAMS		THAAD
Qatar	2 Patriot PAC-3	10 Patriot PAC-3	NASAMS	THAAD
Saudi Arabia	2 Patriot PAC-3	24 Patriot PAC-3 10 HAWK 6 I-HAWK	7 THAAD	
U.A.E.	2 Patriot PAC-3	9 Patriot PAC-3 2 THAAD 5 I-HAWK Barak-8		

As also discussed earlier, Israel, with substantial U.S. assistance both in terms of development and production, has fielded its own advanced platforms that today make up the world's most comprehensive multitiered missile defense network, primarily consisting of the long-range Arrow (Arrow 2 and Arrow 3), the mid-range David's Sling, and shorter-range Iron Dome batteries. There is good reason to expect that these U.S.-backed Israeli systems, with appropriate technical adaptations, should be capable of integrating into a U.S.-led effort on regional defenses by feeding into the CAOC's common air picture using secure data exchange systems like Link 16. That is in contrast to the smattering of other non-U.S. platforms, including from Russia and China, that some of Washington's Arab partners have acquired over the years.⁵⁸ For reasons of operational security as well as interoperability, the majority of those non-U.S. platforms will likely be excluded from any U.S.-led network.

Thus, in terms of sheer numbers, there is, in fact, an enormous quantity of highly capable systems spread across the ad-hoc group of states that are already participating in one form or another in CENTCOM's latest efforts regarding integrated air and missile defense. That is why—even in the absence of the acquisition of any new platforms—the relatively straightforward act of transcending current national stovepipes by digitally connecting some or all of these advanced capabilities together via the CAOC and fusing the vast amount of information they produce into a common air picture that can be rapidly shared among all coalition members, would represent such a qualitative leap forward in the air domain awareness of each participating country. The act of linking these disparate capabilities together and taking advantage of the resulting synergies in capabilities and area coverage would unquestionably produce a regionwide early warning and tracking system that is significantly more powerful than the sum of its individual national parts and a dramatic improvement over the status quo.

B. Immediate Investment in Readiness, Secure Connectivity, and Bandwidth

Instead of purchasing new platforms, the immediate investments required would be those essential to facilitating each coalition member's rapid digital connectivity to the CAOC. In the first instance, that means making sure that each participating country is investing in regular maintenance of its air and missile defense network and ensuring the readiness to “fight tonight” of its systems. Though improving, a culture of maintenance of high-priced weapons platforms has not always been a strong feature of Washington's Arab partners, particularly in the oil-rich Gulf.

A second area where immediate investments are required is in the highly encrypted data sharing communications technology required for real-time information sharing with the CAOC. While several U.S. partner nations actually possess older versions of the Link 16 system, they were found to have cryptological vulnerabilities that now hinder their use in an integrated network.⁵⁹ Those systems require significant security upgrades and cryptological modernization before connectivity through the CAOC can reliably and safely be established on a constant basis. Those upgrades require new investments and will take time to complete across all coalition members.

A third area of immediate investment to bolster the value of real-time connectivity and information sharing would be to ensure each participating country possesses sufficient computing power to process the huge amount of data distributed as part of the CAOC's common operating picture. Limitations on the bandwidth of some countries' national "pipes" create latencies, or delays, in the speed and fidelity with which critical early-warning information can be transmitted to targeted countries.⁶⁰ As noted earlier, CENTCOM's Kingpin squadron is reportedly capable of fusing and distributing incoming data streams in as little as 1.2 seconds, but the value is greatly diminished if coalition members are incapable of processing the data for timely use in tracking and eliminating incoming threats.⁶¹

C. Greater Sensor Coverage

To the extent that new air and missile defense capabilities are considered in the initial breakthrough effort to develop a common operating picture, the priority item on the coalition's acquisition list should be additional sensors. In light of the region's size, the 360-degree nature of the threat, and the rising danger posed by Iran's missile and drone arsenal, it is nearly impossible to have too many sensors. The more the better in terms of expanding coverage and closing down blind spots and seams that Iran and its proxies can exploit. That is where the marginal dollar would achieve the biggest bang for the buck in terms of building a COP.

In this context, NAVCENT has formed Task Force 59 with several partner nations as a concerted multinational effort to adapt commercial off-the-shelf unmanned vessels and artificial intelligence to dramatically increase domain awareness and strengthen deterrence throughout its vast area of maritime responsibility.⁶² The thousands of data inputs persistently collected from sensors on those platforms will be continuously integrated, fused, and synthesized into a so-called "single pane of glass" for distribution to partners seeking to secure the region's critical waterways.

The potential application of that model to the region's air space is obvious and, at a minimum, worth exploring. Could the U.S. and its partners relatively quickly agree to "flood the zone" along the region's aerial borders with cheaper off-the-shelf drones that can be adapted to securely and persistently feed additional intelligence into the CAOC's common air picture? That appears to be one fruitful avenue that CENTCOM is now exploring, according to its air commander, Lieutenant General Grynkewich: "We're looking at the enhanced use of drones—not the kind of drones that we used in the past, but smaller, less expensive that we can network in some way," he said. "We're looking at the unique placement of sensors that we can put at high altitude in order to build a broad situational awareness."⁶³

In the area of bolstering sensor coverage, another potentially game-changing niche for rapid multinational cooperation worth looking at is space-based capabilities. Israel, in particular, has been a leader in developing the use of more cost-efficient nanosatellite technology that could be used to supplement the U.S. space-based Shared Early Warning System (SEWS) for ballistic missile attacks.⁶⁴ A possible constellation of nanosatellites operating in tandem,

funded jointly by the broader region-wide air defense coalition and adapted to securely feed information to the CAOC, would potentially be able to provide near-continuous monitoring of Iran and its proxies at a cost (according to interviews for this study) of as little as \$200 million dollars.

D. Bending the Cost Curve Through Joint R&D Investments

Another area worthy of near-term investments to promote regional synergies on air and missile defense would be incentivizing joint efforts in research and development (R&D). All of the potential members of a U.S.-led coalition face a particularly urgent challenge in common, especially in the realm of countering Iranian drones. The costs of neutralizing a drone far exceed what it costs Iran, or one of its proxies, to manufacture them—often by multiples of 100 to 200 times. An Iranian Shahed-136 (now being used by Russia to attack civilian targets in Ukraine) costs approximately \$20,000. Some drones used by Houthi rebels in Yemen may be far cheaper.⁶⁵ In contrast, Patriot missiles fired by Saudi Arabia—usually at least two per target—may have an average cost of \$3 million to \$4 million each, and, in some cases, as high as \$6 million.⁶⁶ Manned interceptions by Saudi F-15 aircraft using an Advanced Medium Range Air-to-Air Missile (AMRAAM) can cost close to \$2 million or more per shot.⁶⁷ Even Israel, despite its unprecedented success in bending the cost curve in air and missile defense, finds itself at a severe disadvantage, with Iron Dome interceptors costing anywhere from \$40,000 to \$100,000 each, and being expended against Hamas rockets that may cost as little as a few hundred dollars to build.⁶⁸

Far cheaper and more sustainable options are desperately needed, whether it be drones that can counter drones or directed energy weapons like high-powered lasers. Israel is well along in the development of its Iron Beam laser system, which has already been used successfully in live-fire tests to destroy rockets, mortars, and small drones.⁶⁹ The technology still has limits—in terms of range, effectiveness in poor weather, and potential threat to collateral objects such as civilian aircraft. But it is promising enough that U.S.-based Lockheed Martin has recently joined in the development of Iron Beam with Israel's Rafael Advanced Defense Industries.

The possibility that once operational directed energy weapons, with a virtually unlimited magazine, could reduce the cost of each interception attempt to roughly \$2 is certainly a major incentive to invest significantly in the effort. Mounting such laser technology on manned or unmanned aircraft would further enable the destruction of aerial threats over enemy territory rather than near one's own population centers—including ballistic missiles at boost phase provided a powerful enough laser can be operationalized.

The United States and Israel have been cooperating on programs to counter unmanned aerial systems since Congress passed legislation in 2019 authorizing joint research, development, testing, and evaluation activities, with cost-sharing in the form of a required Israeli matching contribution. In light of the urgency of the overriding threat that nearly all of the Arab members of a prospective regional air defense network face from drones—with both Saudi Arabia

and the U.A.E. having already suffered major attacks—it makes enormous sense, especially in terms of cost sharing, to find a way to bring their substantial resources to bear behind the ongoing U.S.-Israel R&D efforts, assuming appropriate safeguards for protecting technology can be agreed.

In that context, CENTCOM's proposal to develop a Red Sands Integrated Experimentation Center in Saudi Arabia to develop and test integrated air and missile defense solutions, including directed energy for countering drones, could be an especially important initiative that merits quick support.⁷⁰ As with the cooperative R&D efforts, the Center's operating costs could be jointly funded by members of the coalition, and access to its pipeline of emerging technologies is a powerful incentive for countries to agree to participate in the overall integration project.

E. Incorporating Israeli Solutions in Regional IAMD

In thinking through future acquisitions and investments to advance the cause of IAMD, special attention should be given to the role of Israel. As a general matter, it is true that the more future acquisitions are solely sourced to U.S. systems, the easier it will be to integrate them quickly into a secure and effective air defense architecture. That said, it is also true that the more some of Israel's exquisite home-grown technological solutions can be incorporated into that architecture, providing real security value to Arab states and their populations, the deeper Israel's own relationships with its neighbors will grow.

Israel's unparalleled operational experience and technological prowess confronting Iran and its proxies, particularly its success in building multilayered air and missile defenses, is clearly an important driver of Arab interest in security cooperation with the Jewish state. The U.A.E. has already purchased Israel's Barak and Spyder air defense systems.⁷¹ Wherever they can be integrated securely into an emerging regional CENTCOM-led architecture, Washington should be looking for opportunities to leverage these and other Israeli technologies—not just to build a better Middle East air defense system but as an extremely powerful diplomatic tool to consolidate and expand the historic process of Israel's rapprochement with its most important Arab neighbors. Well beyond their strictly military utility, the incorporation of Israeli solutions as part of any future acquisition approach for IAMD could have far-reaching geopolitical effects that serve broader U.S. strategic interests. Indeed, such high-level security cooperation could become the bridge that encourages and incentivizes states like Saudi Arabia, the Arab and Muslim world's most influential power, to take the final leap in fully normalizing its relations with the Jewish state.

XII. Integrated Air Defense Necessary But Not Sufficient

A. IAMD is Not a Panacea

As important as it is to seize the current opportunity to make progress on strengthening a region-wide air and missile defense network, an important caveat merits mention and consideration by U.S. policymakers. It would be a mistake to assume that such a network, on its own, will be sufficient to address the full scope of the challenge now posed to the region by the missile and drone arsenals of Iran and its proxies. Those arsenals have grown too large, too varied, and too advanced to rely on purely defensive means alone to deter and counter them. As discussed previously, a more integrated regional air defense network could be an important tool in foiling Iran's dominant gray zone strategy of harassing and threatening the United States and its partners just beneath the threshold of war using limited drone and missile strikes—thereby bolstering deterrence and helping policymakers avoid any reflexive and risky climb up the escalation ladder.

But in the event of full-scale war with Iran and its ring of fire comes, no one should be lulled into a false sense of confidence that an integrated air and missile defense by itself offers any kind of panacea. While an effective regional defense network would certainly be a key element in mitigating Iran's wartime strategy of inflicting widespread destruction, loss of life, and terror to compel its neighbors to quickly sue for peace, Iran's and its proxies' ability to launch wave after wave of drone and missile barrages—as Russia has proven in Ukraine—will almost certainly overwhelm even the best defenses, including in Israel, allowing some percentage of them to penetrate and cause potentially horrific levels of damage.

B. The Need for Offensive Counterbalancing

That is why any serious effort to deter and defeat Iran also requires a major offensive component as well. In the first instance, that means seeking to deter by convincing Iran's leaders that, should they choose to attack, their opponents have their own capability to put the Iranian regime's most valuable assets at risk of destruction. Second, in the event war does occur, its opponents will also need the ability to curtail Iran's offensive firepower by rapidly locating and striking as many Iranian missile and drone launchers and missile and drone production facilities as possible.

While both the United States and Israel possess the accompanying offensive means necessary to deter and defeat Iran, albeit, at a significant price, U.S. partners in the Gulf do not. In an emerging era of fires warfare that is putting an increasing premium on long-range precision

strike weapons like surface-to-surface missiles, cruise missiles, and drones, the United States has for years systematically refused to provide its Arab partners with the types of systems that could most directly counterbalance the Iranian airborne threat. Complicated by Congress's role in arms sales, calculations related to America's statutory obligation to maintain Israel's Qualitative Military Edge (QME), concerns about the human rights records of several Arab regimes, and the constraints imposed by international commitments like the Missile Technology Control Regime (MTCR), U.S. presidents have generally not been willing to expend the necessary political capital to fight for such transfers to Washington's Arab friends.

Until quite recently, Washington's partners in the Gulf could still have faith that they might be able to forego possessing certain countermeasures themselves because they could depend on the United States to bring its full offensive power to bear to deter and defeat Iran in the event of a conflict. But that faith has been badly shaken by events of the past several years and the consistent message by presidents of both parties that the United States has grown weary of war and conflict in the Middle East and is seeking to draw down its presence and shift attention and resources to higher priority theaters, particularly in Asia.⁷²

In an environment where Washington is seeking to reduce its military posture in the Middle East and strengthen the ability of its regional partners to do more for themselves as well as jointly together, the issue of addressing their legitimate need for greater offensive capabilities against Iran will almost certainly grow in salience. Increasing the defensive capabilities of U.S. partners is a necessary part of the deterrence equation but will not be sufficient by itself.

C. The China Challenge and U.S. Arms Sales Policy

Going forward, should Washington continue to reject supplying the Gulf states with some of the offensive countermeasures that they increasingly view as necessary to their ability to defend themselves from Iranian aggression, the risks for U.S. interests in the Middle East could be more far-reaching than in the past. Increasingly, as the region becomes a growing venue for great power competition and China's efforts to extend its diplomatic and military influence accelerate, America's traditional partners will have an increasingly realistic option to pursue their advanced weapons needs from Beijing.

Indeed, General Kurilla has warned that CENTCOM is now in a race to integrate the region militarily under a U.S.-led umbrella before China can penetrate it with open-ended offers of equipment. Kurilla noted that of all the cases of U.S. FMS that experience serious challenges and delays, eighty percent of them are related to countries inside CENTCOM's AOR.⁷³ In private, U.S. military leaders bluntly acknowledge that the FMS system is broken. Even sales that receive rapid approval take years to execute. While U.S. sales to the Middle East have declined by thirty percent in the past decade, China's sales have grown by eighty percent. According to Kurilla, China "opens their entire [weapons] catalog" to its Middle East customers:

“They give them express shipping. They give them no end user agreement. And they give them financing.... [T]hey are much faster to the need. And our partners have real security needs. And we are losing our ability to provide our equipment so that they can integrate in the region.”⁷⁴

If U.S. strategy in the Middle East in an era of great-power competition with China is now premised, as a senior Pentagon official recently insisted, on a commitment “to work alongside inter-operable and capable partners” to “win the competition of coalitions that is becoming increasingly critical to our common security,” including a willingness “to share cutting-edge capabilities” with them, then the time may be approaching when American policymakers need to re-examine the thorny issue of how Washington can responsibly address the legitimate military requirements of its Arab partners, both defensive and offensive.⁷⁵

XIII. Recommendations

Strategic factors have aligned to create the most propitious circumstances ever for advancing the longstanding U.S. objective of better integrating the air and missile defenses of its Middle East partners. But taking advantage of the historic opportunity and overcoming both the perennial obstacles posed by the region itself, as well as more recent challenges stemming from the eroding faith of U.S. partners in America’s commitment to their security, will require a major injection of leadership and engagement from Washington’s highest levels—both from the Biden administration and Congress.

A. For the Biden Administration

- Creating a real-time COP should be prioritized as the critical first step in building an IAMD network. It should include Israel and those Arab nations prepared to connect their national radars and sensors digitally to the CAOC and have their data (appropriately sanitized and secured) distributed and shared with all other participants.
- CENTCOM’s efforts to negotiate necessary data sharing agreements among coalition members, as well as to resolve technical challenges related to ensuring that each participant can securely connect their sensors to the CAOC and reap the COP’s full benefits, should receive sustained high-level political support from Washington, including the president and his top national security officials.

- » The message to their regional counterparts should underscore the priority the administration attaches to advancing IAMD as a pillar of reaffirming Washington's enduring commitment to the security of its regional partners vis-a-vis Iran and to the broader stability of the Middle East.
- The effort to secure regional buy-in for the COP should include an ambitious calendar of CENTCOM-led conferences, simulations, and training exercises that clearly demonstrate how the system would operate in practice, the significant advantages it would deliver to the air domain awareness of all its participants in comparison to the status quo, and the safeguards in place to ensure critical national security information of member states is protected, including against cyber threats.
- Consideration should be given to establishing (and appropriately resourcing) a dedicated unit under CENTCOM's Area Air Defense Commander and led by a senior officer that would have responsibility for executing the necessary requirements for establishing the COP, including data sharing agreements, technical solutions to ensure secure and instantaneous connectivity across the network, and extensive training programs to demonstrate the system's value and assuage outstanding concerns.
- A mechanism should be developed that would streamline and fast-track FMS purchases of U.S. equipment by IAMD members that CENTCOM certifies is critical, in the first instance, to establishing the COP and, subsequently, for advancing other key elements of an IAMD architecture—starting with the expansion of region-wide sensor coverage, including use of commercially available off-the-shelf unmanned aerial systems, artificial intelligence, and nano-satellite constellations.
- For those partners requiring help in financing IAMD-related purchases, fast-tracking FMF should also be prioritized to incentivize maximum participation in the network.
- Another useful means of incentivizing nations to join the IAMD coalition would be the establishment of a U.S.-led joint R&D effort, open to all participating countries, to accelerate the development of more cost-effective solutions for neutralizing missiles and drones, especially directed energy and lasers.
- Where consistent with the network's security and integrity, U.S. officials should consider how Israeli technological solutions and operational experience can be systematically incorporated into the IAMD strategy and used as an important vehicle for advancing Washington's strategic interest in deepening and broadening the historic process of Israeli-Arab normalization.
- In parallel with the establishment of a real-time COP, or in its aftermath, realistic next steps for further advancing an IAMD strategy should be developed, including procedures for addressing projectiles that threaten multiple coalition members simultaneously, granting pre-delegation authority for Country A to enter the airspace of Country B to neutralize an incoming threat to Country A, and the handling of requests by Country A for Country B to re-position its sensors temporarily to help detect and track an imminent launch targeting Country A.

- Separately from its specific strategy for advancing IAMD, the administration should take to heart CENTCOM's mounting concerns about China's accelerating efforts to penetrate the Middle East militarily by launching its own review of U.S. policy on selling certain offensive weaponry to its most important Arab partners that, coupled with improved air defenses, could help them directly counterbalance and deter Iran's escalating missile and drone threat—while taking full account of competing U.S. priorities, including maintaining Israel's QME and ensuring that advanced U.S. systems are not misused or allowed to fall into the hands of hostile actors.

B. For Congress

Building on the DEFEND Act, Congress should explore follow-on legislation that could further underscore the U.S. national commitment to IAMD and incentivize the greatest number of U.S. regional partners to participate.

- Congress could affirm that it shall be the policy of the United States to encourage and incentivize the building of an IAMD network in the Middle East that includes Israel and all willing Arab partners, with the immediate goal of establishing a secure, effective, real-time, and region-wide COP.
- As part of the effort, Congress should express its support for a streamlined FMS and FMF process that ensures IAMD member nations can quickly access U.S. equipment that CENTCOM certifies is essential for the COP's early establishment, as well as for subsequent purchases that CENTCOM deems critical for strengthening the region's IAMD architecture in the future.
- Congress could also help incentivize U.S. partners to join the IAMD coalition by authorizing and appropriating seed funding for several joint programs that would seek to expand the network's region-wide sensor coverage, develop new, more cost-effective cutting-edge anti-missile and counter-drone technologies, and establish an IAMD-focused Red Sands innovation, experimentation, and testing center of excellence in Saudi Arabia
- Relatively small amounts of U.S. seed money could be used to leverage matching funds and other forms of burden sharing from every country seeking to participate in the network and benefit from its distinct advantages and capabilities.

Endnotes

1. *A Stronger and Wider Peace: A U.S. Strategy for Advancing the Abraham Accords*, The Jewish Institute for National Security of America, January 19, 2022, https://jinsa.org/jinsa_report/a-stronger-and-wider-peace-us-strategy-for-abraham-accords/.
2. James M. Inhofe National Defense Authorization Act for Fiscal Year 2023, 117th Congress, 2022, <https://www.congress.gov/117/bills/hr7776/BILLS-117hr7776enr.pdf>.
3. *Atlas Supported: Strengthening U.S.-Israel Strategic Cooperation*, Jewish Institute for National Security of America, May 8, 2018, https://jinsa.org/jinsa_report/atlas-supported-strengthening-u-s-israel-strategic-cooperation/; *Abraham's Command: Relocating Israel to CENTCOM's Area of Responsibility*, Jewish Institute for National Security of America, November 25, 2020, https://jinsa.org/jinsa_report/abrahams-command-relocating-israel-to-centcoms-area-of-responsibility/.
4. David Reid, "Saudi Aramco reveals attack damage at oil production plants," *CNBC*, September 20, 2019, <https://www.cnbc.com/2019/09/20/oil-drone-attack-damage-revealed-at-saudi-aramco-facility.html>; Sarah Witefor, "The biggest oil fields in the world," *OneStep Power Solutions*, October 9, 2020, <https://www.onestepower.com/post/the-biggest-oil-fields-in-the-world>.
5. Sébastien Roblin, "Why U.S. Patriot missiles failed to stop drones and cruise missiles attacking Saudi oil sites," *NBC*, September 23, 2019, <https://www.nbcnews.com/think/opinion/trump-sending-troops-saudi-arabia-shows-short-range-air-defenses-ncna1057461>.
6. "Iran Projectile Tracker," The Jewish Institute for National Security of America, March 1, 2023, <https://jinsa.org/iran-projectile-tracker/>.
7. "Iran Projectile Tracker," Jewish Institute for National Security of America, April 19, 2023, <https://jinsa.org/iran-projectile-tracker/>.
8. Jen Judson and Joe Gould, THAAD, in first operational use, destroys midrange ballistic missile in Houthi attack," *Defense News*, <https://www.defensenews.com/land/2022/01/21/thaad-in-first-operational-use-destroys-midrange-ballistic-missile-in-houthi-attack/>.
9. Qassim Abdul-Zahra, "Iran claims missile barrage near US consulate in Iraq," *Associated Press*, March 13, 2022, <https://apnews.com/article/iran-missile-attack-erbil-iraq-us-consulate-7a4ea6281fe6191a4e4b640c58c7fd49>.
10. "Timeline: U.S. Sanctions & Iran's Drones to Russia," U.S. Institute of Peace, March 21, 2023, <https://iranprimer.usip.org/blog/2023/jan/17/timeline-us-sanctions-irans-drones-russia>.
11. Marc Rod, "CENTCOM commander outlines 'race' against China in Middle East, rising Iran threat," *Jewish Insider*, March 17, 2023, <https://jewishinsider.com/2023/03/centcom-china-iran-middle-east-u-s-gen-michael-erik-kurilla-saudi-arabia/>.
12. Robin Wright, "The Looming Threat of a Nuclear Crisis with Iran," *The New Yorker*, January 3, 2022, <https://www.newyorker.com/magazine/2022/01/03/the-looming-threat-of-a-nuclear-crisis-with-iran>.
13. "SIPRI Arms Transfers Database," Stockholm International Peace Research Institute, updated March 13, 2023, <https://www.sipri.org/databases/armstransfers>.
14. Sébastien Roblin, "Why U.S. Patriot missiles failed to stop drones and cruise missiles attacking Saudi oil sites," *NBC*, September 23, 2019, <https://www.nbcnews.com/think/opinion/trump-sending-troops-saudi-arabia-shows-short-range-air-defenses-ncna1057461>.
15. "Saudi oil refinery attacked by drone, sparking small fire," *Associated Press*, March 11, 2022, <https://apnews.com/article/business-saudi-arabia-middle-east-houthis-riyadh-ce53c8d2f8fcfb584800bb1af4d00c4>.
16. Jeremy M. Sharp, *U.S. Foreign Aid to Israel*, Congressional Research Service, March 1, 2023, <https://sgp.fas.org/crs/mideast/RL33222.pdf>.
17. Caitlin Yilek "What we know so far about the Chinese spy balloon and the other objects the U.S. shot down," *CBS*, February 20, 2023, <https://www.cbsnews.com/live-updates/chinas-spy-balloon-unidentified-objects-shot-down-what-we-know-so-far/>.

18. Matthew Beinart, "Radar Enhancements May Explain Uptick In Detection Of Objects In U.S. Airspace, Officials Say," *Defense Daily*, February 13, 2023, <https://www.defensedaily.com/radar-enhancements-may-explain-uptick-in-detection-of-objects-in-u-s-airspace-officials-say/pentagon/>.
19. Beth Sanner and Pete Fesler, "The Chinese Balloon Was a Necessary Wake-Up Call," *Foreign Affairs*, February 23, 2023, <https://www.foreignaffairs.com/united-states/chinese-balloon-was-necessary-wake-call>.
20. Gerald M. Feierstein et al, "US-Gulf Relations at the Crossroads: Time for a Recalibration," Middle East Institute, April 5, 2022, <https://www.mei.edu/publications/us-gulf-relations-crossroads-time-recalibration>.
21. Interview with authors.
22. Interview with authors.
23. "Virtual Mission Brief | Innovation and Experimentation: A New Approach for the U.S. Air Force in the Middle East with Lt. Gen. Alexis Grynkwich," Center for New American Security, February 13, 2023, <https://www.cnas.org/events/mission-brief-grynch>.
24. Kenneth F. McKenzie Jr., "Striking Back: Iran and the Rise of Asymmetric Drone Warfare in the Middle East," The Washington Institute for Near East Policy, Policy Notes No. 128, February 26, 2023, <https://www.washingtoninstitute.org/policy-analysis/striking-back-iran-and-rise-asymmetric-drone-warfare-middle-east>.
25. Interview with the author.
26. "Iron Dome at 97% success rate after 580 rockets fired from Gaza since Friday," *The Times of Israel*, August 7, 2022, <https://www.timesofisrael.com/580-rockets-fired-from-gaza-since-friday-iron-dome-at-97-success-rate/>.
27. Office of the Press Secretary, "Annex to U.S.-Gulf Cooperation Council Camp David Joint Statement," The White House, Press Releases, May 14, 2015, <https://obamawhitehouse.archives.gov/the-press-office/2015/05/14/annex-us-gulf-cooperation-council-camp-david-joint-statement>.
28. Patrick Wintour, "Qatar given 10 days to meet 13 sweeping demands by Saudi Arabia," *The Guardian*, June 23, 2017, <https://www.theguardian.com/world/2017/jun/23/close-al-jazeera-saudi-arabia-issues-qatar-with-13-demands-to-end-blockade>.
29. Nader Kabbani, "The blockade on Qatar helped strengthen its economy, paving the way to stronger regional integration," Brookings Institution, January 19, 2021, <https://www.brookings.edu/blog/order-from-chaos/2021/01/19/the-blockade-on-qatar-helped-strengthen-its-economy-paving-the-way-to-stronger-regional-integration/>.
30. David Ottaway, "Royal Rifts: The History of the Jordanian and Saudi Monarchies," The Wilson Center, April 9, 2021, <https://www.wilsoncenter.org/article/royal-rifts-history-jordanian-and-saudi-monarchies>.
31. Julien Barnes-Dacey, Ellie Geranmayeh, and Hugh Lovatt, *The Middle East's New Battle Lines*, European Council on Foreign Relations, May 2018, https://ecfr.eu/archive/page/-/The_Middle_Easts_New_Battle_Lines.pdf.
32. Giorgio Cafiero and Theodore Karasik, "Kuwait, Oman, and the Qatar Crisis," The Middle East Institute, June 22, 2017, <https://www.mei.edu/publications/kuwait-oman-and-qatar-crisis>.
33. Dylan Kassin and David Pollack, "Arab Public Opinion on Arab-Israeli Normalization and Abraham Accords," The Washington Institute for Near East Policy, July 15, 2022, <https://www.washingtoninstitute.org/policy-analysis/arab-public-opinion-arab-israeli-normalization-and-abraham-accords>.
34. Interview with the authors.
35. *A Stronger and Wider Peace: A U.S. Strategy for Advancing the Abraham Accords*, Jewish Institute for National Security of America, January 19, 2022, https://jinsa.org/jinsa_report/a-stronger-and-wider-peace-us-strategy-for-abraham-accords/.
36. "Israel offers UAE security, intelligence support after deadly Houthi attack," Reuters, January 18, 2022, <https://www.reuters.com/world/middle-east/israel-offers-uae-security-intelligence-support-after-deadly-houthi-attack-2022-01-18/>.

37. "Israel supports UAE security needs, president says on first visit," Reuters, January 30, 2022, <https://www.reuters.com/world/middle-east/israeli-president-herzog-departs-uae-first-visit-spokesman-2022-01-30/>.
38. Barak Ravid, "Israel offers to help UAE bolster defenses after Houthi attacks," *Axios*, February 2, 2022, <https://www.axios.com/2022/02/02/israel-uae-bolster-defenses-houthi-attacks-yemen>.
39. Avi Sharf, "Satellite Images Reveal UAE Deploys Israeli Barak System Against Iranian Missiles, Drones," *Haaretz*, October 28, 2022, <https://www.haaretz.com/israel-news/security-aviation/2022-10-28/ty-article/.premium/satellite-images-reveal-uae-deploys-israeli-barak-system-against-iranian-missiles-drones/00000184-1fd7-ddff-a586-dfd70bd70000>.
40. "Israel defence minister signs security agreement with Bahrain," Reuters, February 3, 2022, [https://www.reuters.com/world/middle-east/israel-defence-minister-visits-us-navy-base-bahrain-2022-02-03/#:~:text=Elad%20Malka%2FMinistry%20of%20Defence%20\(MOD\)%2Fvia%20REUTERS.&text=MANA-MA%2C%20Feb%203%20\(Reuters\),heightened%20tensions%20in%20the%20region](https://www.reuters.com/world/middle-east/israel-defence-minister-visits-us-navy-base-bahrain-2022-02-03/#:~:text=Elad%20Malka%2FMinistry%20of%20Defence%20(MOD)%2Fvia%20REUTERS.&text=MANA-MA%2C%20Feb%203%20(Reuters),heightened%20tensions%20in%20the%20region).
41. Interviews with the authors.
42. Seth Frantzman, "US Central Command absorbs Israel into its area of responsibility," *Defense News*, September 7, 2021, <https://www.defensenews.com/global/mideast-africa/2021/09/07/us-central-command-absorbs-israel-into-its-area-of-responsibility/>.
43. Interview with the authors.
44. "UAE, Bahrain, Israel and U.S. forces in first joint naval drill," Reuters, November 11, 2021, <https://www.reuters.com/world/middle-east/uae-bahrain-israel-us-forces-conduct-red-sea-military-exercise-2021-11-11/>.
45. Ari Cicurel, "Expanding Middle East Maritime Security Cooperation," Jewish Institute for National Security of America, March 10, 2023, https://jinsa.org/jinsa_report/expand-navcent-maritime-security-cooperation/.
46. Interview with the authors.
47. Michael R. Gordon and David S. Cloud, "U.S. Held Secret Meeting With Israeli, Arab Military Chiefs to Counter Iran Air Threat," *The Wall Street Journal*, June 26, 2022, <https://www.wsj.com/articles/u-s-held-secret-meeting-with-israeli-arab-military-chiefs-to-counter-iran-air-threat-11656235802>.
48. Interviews with the authors.
49. Interviews with the authors.
50. Interviews with the authors.
51. Interview with the authors.
52. Interview with the authors.
53. *National Security Strategy 2022*, The White House, October 2022, <https://www.whitehouse.gov/wp-content/uploads/2022/10/Biden-Harris-Administrations-National-Security-Strategy-10.2022.pdf>.
54. Gordon Lubold, Nancy A. Youssef, and Michael R. Gordon, "U.S. Military to Withdraw Hundreds of Troops, Aircraft, Antimissile Batteries From Middle East," *The Wall Street Journal*, June 18, 2021, <https://www.wsj.com/articles/u-s-military-to-withdraw-hundreds-of-troops-aircraft-antimissile-batteries-from-middle-east-11624045575>.
55. SIPRI Arms Transfers Database," Stockholm International Peace Research Institute, updated March 13, 2023, <https://www.sipri.org/databases/armstransfers>.
56. SIPRI Arms Transfers Database," Stockholm International Peace Research Institute, updated March 13, 2023, <https://www.sipri.org/databases/armstransfers>.
57. Mike Stone, "Saudi Arabia inks deal for Lockheed's missile defense system," Reuters, November 28, 2018, <https://www.reuters.com/article/us-saudi-arms-missiledefense/saudi-arabia-inks-deal-for-lockheeds-missile-defense-system-idUSKCN1NX2YJ>.
58. Ashley Roque, "As US worries over Beijing's influence in Middle East, Chinese defense firms flock to IDEX 2023," *Breaking Defense*, February 22, 2023, <https://breakingdefense.com/2023/02/as-us-worries-over-beijings-influence-in-middle-east-chinese-defense-firms-flock-to-idex-2023/>.

59. Interview with the authors.
60. Interview with the authors.
61. Interview with the authors.
62. John W. Miller and Ari Cicurel, "Fifth Fleet's Task Force 59 Is a Good Start," *Real Clear Defense*, October 6, 2021, https://www.realcleardefense.com/articles/2021/10/06/fifth_fleets_task_force_59_is_a_good_start_797673.html; Ari Cicurel, "New U.S. Drone Initiative is an Opportunity to Counter Iranian Aggression," Jewish Institute for National Security of America, September 21, 2021, https://jinsa.org/jinsa_report/new-u-s-drone-initiative-is-an-opportunity-to-counter-iranian-aggression/.
63. Rachel S. Cohen, "Drone networks can cut cost of Middle East security, AF general says," *C4ISRNET*, August 30, 2022, <https://www.c4isrnet.com/unmanned/2022/08/30/drone-networks-can-cut-cost-of-middle-east-security-af-general-says/>.
64. Sharon Wrobel, "Israeli quantum communication nanosatellite launched into orbit by SpaceX rocket," *The Times of Israel*, January 4, 2023, <https://www.timesofisrael.com/israeli-quantum-communication-nanosatellite-launched-into-orbit-by-spacex-rocket/>.
65. Associated Press, "The Iranian-made killer drones vying for supremacy in Ukrainian skies," *The Times of Israel*, October 18, 2022, <https://www.timesofisrael.com/the-iranian-made-killer-drones-vying-for-supremacy-in-ukrainian-skies/>.
66. Tara Copp and Lolita Baldor, "EXPLAINER: What can the Patriot missile do for Ukraine?" Associated Press, December 15, 2022, <https://apnews.com/article/russia-ukraine-war-patriot-missile-system-explainer-b16125509161de8a7a3b4c38022534c7>.
67. David Hambling, "New Saudi Missile Order Reveals The High Cost Of Asymmetric Drone War," *Forbes*, November 11, 2021, <https://www.forbes.com/sites/davidhambling/2021/11/11/new-missile-order-reveals-true-cost-of-asymmetric-drone-war/>.
68. Robert Farley, "The Cost Of Iron Dome," *The Daily Beast*, July 14, 2017, <https://www.thedailybeast.com/the-cost-of-iron-dome>.
69. Ari Cicurel and Henry Obering, "US should draw in Israel, regional players for directed energy development," *Breaking Defense*, July 20, 2022, <https://breakingdefense.com/2022/07/us-should-draw-in-israel-regional-players-for-directed-energy-development/>.
70. Courtney Kube, "U.S. military is developing plans to open a new testing facility in Saudi Arabia," *NBC*, September 17, 2022, <https://www.nbcnews.com/politics/national-security/us-military-developing-plans-open-new-testing-facility-saudi-arabia-rcna46343>.
71. Avi Sharf, "Satellite Images Reveal UAE Deploys Israeli Barak System Against Iranian Missiles, Drones," *Haaretz*, October 28, 2022, <https://www.haaretz.com/israel-news/security-aviation/2022-10-28/ty-article.premium/satellite-images-reveal-uae-deploys-israeli-barak-system-against-iranian-missiles-drones/00000184-1fd7-ddff-a586-dfd70bd70000>.
72. Tyler Pager and Natasha Bertrand, "White House shifts from Middle East quagmires to a showdown with China," *Politico*, January 28, 2021, <https://www.politico.com/news/2021/01/28/biden-china-foreign-policy-463674>.
73. "Hearing to Receive Testimony On The Posture Of United States Central Command And United States Africa Command In Review Of The Defense Authorization Request For Fiscal Year 2024 And The Future Years Defense Program," Senate Armed Services Committee, Testimony of Michael E. Kurilla, March 16, 2023, <https://www.armed-services.senate.gov/hearings/to-receive-testimony-on-the-posture-of-united-states-central-command-and-united-states-africa-command-in-review-of-the-defense-authorization-request-for-fiscal-year-2024-and-the-future-years-defense-program>.
74. Ibid.
75. "Full Committee Hearing: U.S. Military Posture And National Security Challenges In The Greater Middle East And Africa," House Armed Services Committee, Testimony Celeste Wallander, March 23, 2023, <https://armedservices.house.gov/hearings/full-committee-hearing-us-military-posture-and-national-security-challenges-greater-middle>.



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