



# U.S. Must Defeat Houthis' Asymmetric Warfare Strategy

Yoni Tobin  
Policy Analyst

Daniel Bahat  
Policy Intern

*The Houthis' asymmetric warfare has inflicted real costs on the United States. Though largely successful in intercepting Houthi projectile attacks, the United States has done so by depleting significant sums of key tactical missiles—at a cost of nearly \$1 billion thus far—to defeat inexpensive drones and missiles assembled from Iranian-supplied component parts, thereby harming U.S. military readiness. This approach is not sustainable.*

*The United States must find a way to stop Houthi attacks in the short-term by imposing prohibitive costs on the Houthis and their Iranian and Hezbollah backers. Over the medium- and long-term, the United States should develop more cost-effective means for protecting against such drone and missile threats by accelerating research and development of directed energy weapons systems, such as the Israeli Iron Beam system.*

## What Happened?

- On April 16, U.S. Secretary of the Navy Carlos Del Toro [testified](#) that the U.S. Navy has expended nearly \$1 billion dollars in munitions intercepting Houthi missiles and drones since the Houthis began their attacks on global shipping in October.
- Since October, the Houthis have launched projectile attacks targeting ships in the Red Sea and the Gulf of Aden in over 127 separate instances, according to [JINSA's Iran Projectile Tracker](#).
  - » In March alone, the Houthis [launched](#) 93 drones and missiles, after having launched 73 projectiles in February, against commercial vessels and warships.

## Why Is It Important?

- Though largely successful in intercepting Houthi projectile attacks, the United States has done so by depleting significant sums of key tactical missiles to defeat inexpensive drones and missiles assembled from Iranian-supplied component parts, thereby harming U.S. military readiness. The Houthis' asymmetric warfare shows how asymmetric and attrition-based tactics can inflict real costs, in this case on U.S. military expenditures and the global economy, while minimal costs accrue to the aggressor.
  - » The Houthis clearly have not been deterred by repeated U.S. warnings of “[consequences](#)” for their incessant attacks threatening global commerce and other vital U.S. interests.

- Houthi attacks have [reduced](#) global shipping transiting the Red Sea by up to 40 percent on any given day, which is remarkable given that fully 15 percent of global sea-borne trade [traversed](#) this waterway before the Houthi attacks began.
- Shipping companies such as Maersk have more than [tripled](#) their container shipping costs, insurance premiums for vessels traveling through the Red Sea have [skyrocketed](#) by up to 50 percent, and major insurance companies are increasingly [avoiding](#) underwriting Red Sea-bound vessels altogether. The head of a U.S. shipping firm [noted](#) that rising freight costs due to Houthi attacks are certain to “trickle down the supply chain and impact consumers.”
- Houthi leaders have joyfully noted this discrepancy, extolling the fact that their attacks have [increased](#) insurance and transport costs for global shipping firms.
- » Since early January, Houthi bombardments against commercial shipping have also caused [disastrous](#) environmental degradation and [loss of human life](#).
- The ineffectiveness of U.S. deterrent threats stems largely from the Houthis’ ability to [impose](#) serious financial costs on the global economy, the U.S. military, and coalition partners at low cost to themselves and with a small fraction of their adversaries’ military capabilities.
  - » Houthi terrorists are [assembling](#) missiles with Iranian-supplied component parts, and they use drones that are [cheaply produced](#) at costs ranging from \$2,000 to \$20,000.
    - Since October, the U.S. Navy has [reportedly](#) launched over 100 [SM-2](#) or [SM-6](#) missiles to intercept Houthi drones and missiles, [valued](#) at an estimated \$2.2 million and \$4.3 million each, respectively, yielding a highly disparate cost ratio of 100:1, or in some cases, 1,000:1 or greater.
  - » Houthi attacks are also creating opportunity costs for the United States by reportedly [depleting](#) the U.S. missile stockpile, which the Department of Defense is unlikely to be able to easily replenish in the near-term, harming U.S. military readiness and deterrence.
    - U.S. spending on tactical missiles like the SM-2 and SM-6 has largely stagnated over the past decade, with only modest increases in recent years, leaving the U.S. Navy with estimates of only [about](#) 500 SM-6 missiles total less than three months into the Houthis’ projectile attacks.
    - The Department of Defense is currently [slated](#) to procure only 155 SM-class missiles in FY2025, 195 in FY2026, and 230 in FY2027.
- The primarily defensive and reactive U.S. policy vis-à-vis the Houthi assaults on global shipping has not yielded tactical, let alone strategic, success.
  - » After an initially ambitious aerial campaign in mid-January and early-February, in which the United States and the United Kingdom conducted airstrikes [against](#) some 100 Houthi [targets](#) across Yemen, U.S. airstrikes abruptly tailed off.
    - As JINSA’s Assistant Director of Foreign Policy Ari Cicurel [assessed](#) at the time, “the strikes were not large enough to destroy all, or even likely most, of the Houthis’ arsenal of ballistic and cruise missiles as well as drones.”
  - » Since then, the United States has only periodically struck Houthi launching posts in Yemen to [neutralize](#) missiles or drones being prepared for attack. This reactive, whack-a-mole approach has not rendered Houthi capabilities ineffective nor slowed the pace of Houthi attacks.
  - » Conversely, the sporadic and piecemeal U.S. approach to Houthi projectile attacks yielded increases in Houthi projectile attacks. Houthi projectile attacks against ships in

- the Red Sea and Gulf of Aden hit a single-month [apex](#) of 33 attacks in February, only to be [surpassed](#) by a single-month record of 35 attacks in the month of March.
- In addition, the U.S. Navy's current force posture in the Red Sea is likely unsustainable over the long-term, placing a resource strain on the U.S. military's platforms and personnel.
    - » The Dwight D. Eisenhower Carrier Strike Group, which includes the *USS Dwight D. Eisenhower* aircraft carrier itself, was [stationed](#) in the Red Sea for over five months to address Houthi attacks, straining the total availability of U.S. carrier strike groups at any one time to deter aggression and project power in other global hotspots.
      - The U.S. military has fewer than a dozen aircraft carriers, only roughly half of which are [available](#) to deploy overseas at any given time. Aircraft carriers frequently [require](#) lengthy port calls for maintenance.
      - Three aircraft carriers were [deployed](#) to the Indo-Pacific theater to enhance readiness as of February, leaving little excess capacity to project U.S. naval power and address crises in other parts of the world.
    - » In addition, the *Eisenhower* carrier strike group is [manned](#) by some 7,000 sailors who faced tense combat conditions on heightened readiness throughout their deployment.
      - The Associated Press [reported](#) in February that the sailors “have spent four months at a constant combat pace with no days off with a port call. That takes a toll on sailors, the commander of the *Eisenhower*, Capt. Christopher ‘Chowdah’ Hill, said.”
  - Targeting ready-to-launch Houthi missiles or drones in [self-defense strikes](#), a tactical posture the United States has almost exclusively adopted in recent months, will not be sufficient to stem the tide of Houthi attacks – as evidenced by the sustained pace of such attacks.
    - » The United States will need to regularly strike Houthi weapons depots across Yemen, and target Houthi personnel, particularly senior leaders, to force the terror group to incur real costs and to substantially degrade its capabilities.
  - Additionally, U.S. policy that fails to stem Iran's [provision](#) of weapons, know-how, training and intelligence to the terror group will inflict only superficial and temporary wounds against the Houthis, who depend heavily on these supplies and advisors to conduct attacks.
    - » In February, the U.S. Navy [intercepted](#) a weapons shipment in the Gulf of Aden bound for Yemen containing Iranian-made ballistic and cruise missile components. During a similar operation in January, U.S. Navy SEALs [interdicted](#) an Iranian shipment to Yemen that included medium-range ballistic missile components.
    - » However, sporadic U.S. interdictions of weapons to the Houthis [represent](#) only a drop in the bucket in Iran's vast smuggling enterprise to ensure the Houthis are well-armed, which includes smuggling routes involving Africa and land routes through Oman.
      - As JINSA's 2022 Generals and Admirals Program Participant and former Marine Corps Forces Central Command commander LtGen (ret.) Sam Mundy recently [stated](#) about U.S. efforts to stanch Iran's weapons smuggling to Yemen, “the problem is, it's a big geographic area and we don't have enough resources to do this.”
    - » Iran also provides the Houthis—in the form of Hezbollah and Iran's Islamic Revolutionary Guard Corps (IRGC) advisors [on the ground](#) in Yemen—the know-how to assemble component parts into deadly missiles as well as intelligence and targeting support. Iran also has reportedly [provided](#) targeting intel directly to the Houthis from its naval vessels.
  - In the medium-and long-terms, the Houthis' attacks on global shipping also present an opportunity for the United States to change how it responds to asymmetric projectile attacks by conventionally weaker adversaries, including other Iranian proxies.

- » Directed energy systems represent a potentially promising means to bend the cost curve of Houthi attacks back in the United States' favor. Rather than requiring costly interceptor missiles to neutralize drones and other projectiles, directed energy weapons use high-powered microwaves and lasers to [disrupt](#) drones' electronic systems and render them incapable of flight.
- » Israel has pioneered advances in directed energy, such as its Iron Beam directed energy system, providing an ideal opportunity for the United States to shift away from its current cost-ineffective approach to countering Houthi drone attacks, and other lower-level projectile threats like mortars and rockets, over the coming years.
  - Israel's Rafael Advanced Defense Systems company [developed](#) Iron Beam, which is expected to be operational by the end of 2025, and which, according to Rafael, is capable of neutralizing multiple drones from miles away using laser technology.
  - In May 2023, Rafael [unveiled](#) a naval variant of the Iron Beam system capable of protecting ships against drone swarms and short-range ballistic missiles, which could significantly augment U.S. defenses against attacks like those from the Houthis.
- » The Department of Defense has reportedly already begun [exploring](#) the possibility of using directed energy weapons to neutralize Houthi drones at a significantly lower cost than surface-to-air missiles.
- » Though Iron Beam is likely unable, in its current iteration, to [intercept](#) cruise missiles or medium-range ballistic missiles, such innovations are not technologically infeasible. The Department of Defense, according to reports, is [aiming](#) to use directed energy systems to neutralize cruise missiles by 2030.
- » The Iron Beam program is moving quickly towards full production, as evidenced by the fact the United States provided Israel \$1.2 billion for Iron Beam procurement in the recently passed National Security Supplemental aid package.

## What Should the United States Do Next?

- The United States should, as JINSA has previously [called for](#), strike the Houthis head-on in a sustained, proactive, and “increasingly frequent, deadly, and destructive” manner to degrade their offensive capabilities and reestablish deterrence.
- U.S. policy toward Iran's proxies in Yemen and elsewhere should shift from a reactive posture to a proactive one focusing on targeting Iranian military assets and personnel across the region. As part of this effort, the United States should prioritize [targeting](#) Hezbollah and IRGC advisors and facilities in Yemen.
  - » Doing so would send a signal that the United States is committed to [compelling](#) the Iranian regime to cease providing, as JINSA's Director of Foreign Policy Jonathan Ruhe observed, “the crucial intelligence, weapons, and advisory support that enables Houthi launches in the first place.”
  - » Even if the Houthis are resolved to continue their projectile attacks, taking their weapons supply chain and Iran-backed advisors out of the equation would considerably impede the Houthis' ability to continue their aerial assault on global shipping.
- The United States should increase efforts to interdict shipments of arms and weapon components from Iran into Houthi hands, as authorized by United Nations Security Council Resolution (UNSCR) 2216, which [mandates](#) countries to “immediately take the necessary measures to prevent the direct or indirect supply, sale or transfer” of arms to the Houthis.

The United States should also examine ways to incentivize its regional partners to better facilitate such interdictions through greater intel-sharing.

- In future defense budgets, the United States should allocate greater sums toward the Department of Defense's tactical missile expenditures.
  - » Increasing expenditures on tactical missiles, particularly SM-6 missiles, would help offset growing SM-class stockpile depletions caused by Houthi missile and drone attacks, and bolster military readiness and credible deterrence against nation-state actors.
- The United States should continue to work with Israel to accelerate efforts to deploy Rafael's Iron Beam directed energy system and advance joint directed energy initiatives, including a specific focus on naval variants to help impede threats like the Houthi drone attacks.
  - » A segment of this funding should aim to accelerate and expand [ongoing efforts](#) between U.S. and Israeli defense firms, namely Lockheed Martin and Rafael, to develop and test variants of the Iron Beam system for the United States and allies.
  - » As part of bilateral efforts to develop Iron Beam and ensure it is battle-ready, both countries should ensure that Iron Beam is well suited for interoperability with U.S. systems.
    - The Iron Dome kinetic air defense system, while world-renowned for its effectiveness, does not naturally operate well with U.S. military platforms, as JINSA has previously [noted](#).
  - » The United States should focus on expanding directed energy research and development cooperation as part of the U.S.-Israel Operations Technology Working Group (OTWG), which was [established](#) in November 2021 to better address shared defense needs, and increase funding for the program.
    - The OTWG has at least six sub-working groups to [address](#) various defense needs, including a directed energy working group and a counter-drone working group.
    - To the extent possible, these two working groups should emphasize close collaboration with one another, with a particular focus on thwarting Houthi attacks.
  - » Congress should explore extending the mandate of, and increasing funding for, the U.S.-Israeli Counter Unmanned Aerial Systems program, which [includes](#) research into directed energy weapons. The program currently is slated to expire at the end of 2026 and annual U.S. contributions for the program are capped at \$40 million.
  - » The United States should also explore establishing a directed energy version joint testing facility in either country modeled on the Spadeadam Electronic Warfare Tactics Range in England, which [enables](#) the United States and the United Kingdom to simulate real-world settings to jointly test and interoperate test electronic warfare systems.