

*JINSA's Gemunder Center for Defense and Strategy*

## Iran-Backed Missile and Drone Strikes

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*Earlier this week, Iran's Houthi proxies in Yemen escalated their ongoing missile and drone offensive against Saudi Arabia by targeting one of the world's major oil export terminals. This is part of a larger Iranian strategy to exert regional dominance by developing, proliferating and using these increasingly capable precision munitions to target and exploit its adversaries' lack of strategic depth in the Middle East. This could eventually give Iran the ability to conduct highly costly, even catastrophic, conventional military strikes in the region. As Tehran relies more and more on these tools and tactics to pressure its neighbors, including American forces, Washington and its partners must proactively deter and degrade Iran's use and spread of these weapons.*

### What Happened?

- On Sunday, March 7, Iran's Houthi proxies in Yemen fired 14-22 missiles and [drones](#) at Saudi energy facilities, including the world's largest offshore oil terminal at Ras Tanura.
- The Houthis have been firing missiles and drones at Saudi Arabia for years, but Sunday's events indicate recent [advances](#) in the pace, sophistication and distance of such strikes, with roughly 20 separate drone and/or missile attacks against Saudi infrastructure so far in 2021:
  - On March 4, missiles and drones [targeted](#) a separate Saudi oil installation at Jeddah near the Red Sea, and another airbase in southwest Saudi Arabia.
  - On February 27, Saudi air defenses [intercepted](#) a Houthi ballistic missile over Riyadh, and the Houthis launched several drones at other Saudi cities.
  - In December 2020, a Houthi missile killed 25 in a [decapitation](#) strike on the Saudi-backed, internationally-recognized Yemeni government at Aden (Yemen) airport.
  - Separately, on January 23, 2021, Iranian proxies in Iraq conducted a multi-drone strike targeting the main Saudi royal palace in Riyadh.

- Saudi air defenses have intercepted ballistic missiles predictably coming from Yemen, but struggle against cruise missiles and drones with variable low-altitude flight paths.
- Iran “supplies significant volumes of [weapons](#) and components to the Houthis,” according to the U.N., as well as [advisers](#) to help [operate](#) these missiles and drones.

## Why Does it Matter?

- This missile and drone offensive by Iranian proxies indicates how Tehran’s conventional capabilities are improving appreciably and ultimately could be used to threaten or conduct highly effective, possibly catastrophic, strikes in the Middle East without nuclear weapons.
- Iran’s operational concept features three basic interlocking components:
  - [Better weaponry and tactics](#): Iran’s missile and drone programs have existed for decades, but in recent years it has devoted major effort, and made clear strides, in improving its short- and medium-range ballistic and cruise missiles (land-attack and anti-ship variants) and its unmanned armed aerial and naval surface vehicles.
    - These are different from Iran’s long-range nuclear-capable [missiles](#), and from the smaller unguided artillery rockets which Hezbollah possesses in the tens of thousands and which Iran’s proxies fire at U.S. installations in Iraq.
    - Despite sanctions and a U.N. arms embargo, Tehran is developing or acquiring [improved](#) guidance systems, engines, fuels, body designs, reentry vehicles and other components to boost these weapons’ range, precision, maneuverability and payload.
    - In 2021 Iran already has [conducted](#) several high-profile military [exercises](#) featuring combined swarms of suicide [drones](#) and ballistic and [cruise](#) missiles.
  - [Bigger footprint](#): Iran also tries assiduously, with some success to proliferate these improved weapons to its proxies in Lebanon, Syria, Iraq and Yemen.
    - This could enable Iran to encircle its adversaries with overlapping fields of long-range precision fires, effectively forcing air defenses to provide 360-degree coverage while also offering Tehran plausible deniability for attacks by its proxies.
    - Proliferating these weapons also enables them to be forward-deployed regionwide, effectively expanding their range beyond what Iran can target from its homeland.
  - [Vulnerable, valuable targets](#): many Middle Eastern countries lack strategic depth and often adequate air defenses, which boosts Iranian leverage by enabling it to hold a small number of very high-value strategic sites hostage with these missile and drone swarms.

- Most of the tens of thousands of American servicemembers in the region are concentrated in just a few bases and warships, as are Israeli and Arab forces;
- Israel and Gulf Arab states each depend heavily on just a couple seaports, airports, power plants, and chemical processing and water treatment plants; their supertall skyscrapers, palaces, embassies and other megaprojects also make inviting targets.
  - For example, a strike on Saudi Arabia's primary desalination plant could force an immediate [evacuation](#) of Riyadh, the capital city of nearly 8 million people.
- Iran initially employed this operational concept to limited [effect](#) in June 2017, firing 6-7 [ballistic](#) missiles from Iran against ISIS targets in Syria – its first such use since the 1980s.
  - From there, the tempo and operational sophistication of these attacks ticked [upward](#), marked by two Iranian [missile](#) and drone [swarm](#) attacks on Iraq and Syria in fall 2018.
  - In May 2019, the Houthis launched a successful [multi-drone](#) attack on the East-West Pipeline in Saudi Arabia, demonstrating recent advances in drones' guidance and range.
- By September 2019, Iran's advances were on remarkable display in its unclaimed attack on major Saudi oil processing facilities at Abqaiq and Khurais, two of the biggest in the world:
  - In just 17 minutes, 25 drones and cruise missiles slammed into individual buildings at the facilities, taking offline fully half of Saudi oil output – and five percent of global oil production – and causing the largest oil price [spike](#) in almost 30 years.
  - Highlighting the problems posed by Iranian proliferation, Saudi air defenses were oriented southwest toward Yemen while the attack came from the northeast via Iran and/or Iraq; had these defenses aimed northeast, Iran's use of low-flying and maneuverable drones and cruise missiles still would have complicated interception.
  - Iran reportedly also considered [hitting](#) a Middle Eastern seaport, airport or U.S. base.
- Similarly, Iran's January 2020 retaliatory attacks against American forces at Al-Asad Airbase in Iraq consisted of salvos of nearly two-dozen total short-range ballistic missiles.
  - Though additional missiles apparently failed in flight, those that [impacted](#) appear to have done so with considerable [accuracy](#), hitting individual buildings and runways.
  - Recent [reporting](#) suggests high casualties were only narrowly averted, partly due to early warning that enabled more than 1,000 personnel to evacuate the base.

- The current missile and drone offensive against Saudi Arabia underscores Iran's ongoing efforts to refine and export this basic operational concept around the region:
  - Like Abqaiq and Al-Asad, and like [recent](#) Iranian drills, these attacks feature [combined](#) salvos of missiles and drones targeting critical infrastructure and military bases.
  - However, the Houthi missile and drone arsenal – including weapons from Tehran – is currently smaller and less capable than Iran's, making it unlikely that the Houthis can yet match Iran's ability to launch sophisticated strikes like Abqaiq and Al-Asad.
- Such attacks are likely to continue growing in frequency and lethality, as Iran and its proxies increasingly rely on such weapons and tactics the more advanced they become.

## What Should the United States Do Next?

- Iran's development and proliferation of these weapons remains both a priority and a work in progress for Tehran, which should underscore the importance of proactive U.S. and partner efforts to mitigate the use and spread of these weapons. Initial steps should include:
  - Clear U.S. declarations that any Iranian or proxy use of such attacks against U.S. interests will be met with forceful responses at the time and place of America's choosing.
  - [Dispersing](#) American military basing and personnel in the region to more, smaller bases.
  - More short-range and point-defense systems to counter cruise missiles and drones.
  - More 360-degree air defense radar coverage for critical U.S. and partner installations in the Middle East, to counter Iran's encircling these targets from multiple attack vectors.
  - Developing an integrated theater-wide, multi-layered air network under U.S. auspices, with Israeli and Arab participation, as spelled out in [several](#) JINSA policy papers.
  - Enhancing interdiction efforts of illegal Iranian arms transfers to the Houthis in Yemen, in keeping with U.N. Security Council Resolution [2216](#) (2015).
  - As spelled out in a series of [policy papers](#) from JINSA's U.S.-Israel Security Project, greater U.S. material support for Israel's "campaign between the wars" to degrade and deny Iran's [proliferation](#) of precision munitions to proxies in Lebanon, Syria and Iraq.

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