

The Houthi "September offensive" against Saudi Arabia

Shaul Shay

(Senior research fellow at the International Institute for Counterterrorism (ICT) at the Interdisciplinary Center Herzliya and former deputy head of Israel's National Security Council)

Copyright: Research Institute for European and American Studies
(www.rieas.gr) Publication date: 19 September 2020

Note: The article reflects the opinion of the author and not necessarily the views of the Research Institute for European and American Studies (RIEAS)

The Iran backed Houthi rebels took over the Yemeni capital in September 2014 after ousting President Abd-Rabbu Mansour Hadi. The Saudi lead coalition intervened in March 2015 to restore Hadi to power, sparking a war which has killed more than 100,000 people, displaced millions and still far from being over.

The Houthi rebels claimed on September 10, 2020, they had launched an attack on an "important target" in Riyadh with ballistic missiles and drones. Spokesman for the Houthi military claimed that a Zulfikar ballistic missile and three Samad-3 drones were used to target a key site in the Saudi capital. "The attacks are a response to the enemy's permanent escalation and its continuing blockade against our country," he said on Twitter. He vowed to launch further attacks on the kingdom if Riyadh "continues its aggression" against Yemen. Saudi Arabia did not confirm the attacks.¹

Earlier on the same day (September 10, 2020), the Arab Coalition intercepted and destroyed an explosive-laden drone launched from Yemen by the Houthi militia toward Najran in Saudi Arabia.²

The attack on Riyadh followed five drone and missile attacks towards Saudi Arabia during the last week (6 – 11 September 2020).³ The Saudi coalition said the Houthi militia launched four drone attacks against Abha International Airport located near Saudi Arabia's southwestern border with

Yemen.⁴ The Houthis claimed to have targeted Saudi Arabia's Abha Airport twice in less than 48 hours, including one attack involving eight drones.⁵

In response to the Houthi missile and drone attacks the Arab Coalition carried out airstrikes against Houthi targets:

- The Arab Coalition has destroyed four drones at al-Dulaimi air base north of Sanaa.⁶
- A military engineering camp in Sanaa, where high-level leaders from the Houthi movement had gathered.
- The headquarters of the national security apparatus in the capital, which is controlled by the Houthis⁷
- A Houthi military center in Sawan's outskirts, east of Sanaa, used to manufacture ballistic missiles and drones.⁸
- The former command center for the Republican Guard, south of Sanaa.⁹

It was not the first time that the Houthis used the combination of Zulfiqar ballistic missile and Samad-3 drones to attack targets in Saudi Arabia. Houthi military spokesman said on March 29, 2020, the group's forces had launched rockets and drones at "sensitive" sites in Riyadh and at economic and military sites in Jazan, Najran and Asir, near the Yemen border. He said Zulfiqar missiles and Samad 3 drones were fired at Riyadh, and other drones and missiles were launched at the southern areas. He warned of further "painful operations" against Saudi Arabia if aggression against Yemen continued.¹⁰

The Samad UAVs

Houthi forces began deploying the Samad UAVs—in mid-2018.

UAE forces reportedly had captured a Samad UAV on Yemen's west coast on 21 June 2018. Investigation found out that it used a 3W-110i B2 engine, manufactured by 3W-Modellmotoren Weinholt GmbH (3W) in Hanau, Germany.¹¹

Although the engine's serial number has been removed, the UN Panel of Experts on Yemen recovered the number and traced it. According to the Panel, the engine derives from a shipment of 21 such engines that 3W exported to Euro wings Aviation and Consultancy of Athens, Greece, in June 2015. The Panel further identified that the engines were resupplied to a company based in Iran, in violation of German law.

The Samad-1 appears to be equipped with an electro-optical reconnaissance system along with two data links, likely for control and live broadcast. The UAV is not believed to be capable of carrying weapons of any type. However, the Houthis can likely equip Samad-1 with a warhead and use it as a suicide UAV, similar to other types.

The Samad-3 UAV

The Samad-3 design follows the same lines as the first generation. However, the UAV is equipped with what appears to be a conformal fuel tank (CFT). A unique feature that likely extends the UAV's range in a significant way. On July 26, 2018, the Houthis targeted Dubai International Airport in the UAE with a Samad-3 UAV. The airport is located more than 1,500 km away from the Houthi-held areas in western Yemen.¹²

The Houthi missile threats

The Houthi spokesman, Brigadier general Yahya Sare'e, revealed a statistic of the Rocketry Force operations during five years of war. The Rocketry Force launched during the past years of war more than 1067 ballistic and winged missiles.¹³

"More than 410 missiles targeted vital military targets, installations, and others in the Saudi and Emirati depths, while more than 630 missiles targeted enemy military targets inside Yemen since the beginning of the aggression," he added.¹⁴

The brigadier general said that the Rocketry Force launched 890 ballistic and winged missiles from 2015 to the end of 2018, 110 ballistic and winged missiles during 2019, and 64 ballistic and winged missiles March 2020.¹⁵

He pointed out that some of the missiles were fired singly and some were fired in batches, the most prominent of which was the launch of 10 ballistic missiles at one time during “Victory from Allah” operation.¹⁶

The Zulfiqar (SRBM)

The Zulfiqar is a variant of the Fateh-110 short-range ballistic missile (SRBM). The Zulfiqar first appeared during a parade in September 2016. The solid-fueled Zulfiqar is reported to have a range of 700km and possess a cluster munition warhead. Some Iranian press reports have claimed the Zulfiqar is accurate within 10 meters.¹⁷

In June 2017, Iran fired six missiles from its western provinces into eastern Syria, targeting Islamic State targets in the country. Tehran claimed the missile strike was in retaliation to Islamic State-claimed terrorist attacks that occurred in Iran earlier in the month. The Zulfiqar was only debuted in September 2016 so the attack on the Islamic State was an opportunity for Iran to test the system.

On September 8 and October 1, 2018, Iran launched Zulfiqar, Quim-1 and Fateh-110 rockets at enemies in Iraqi Kurdistan. The strikes together represent the most intensive Iranian missile attacks in nearly 20 years.

The Saudi coalition's response

The Saudi coalition's response to the challenge of drone and missile attacks include both defensive and offensive measures:

The Saudi Arabian anti-missile and drone defense

Saudi Arabia and the United Arab Emirates are using American-made Patriot missile interceptors to shoot down missiles and rockets fired by Houthi rebels from Yemen. The Patriot is an air defense system, which has components made by Raytheon and Lockheed Martin.

Saudi Arabia operates the US PAC-2 Patriot air and missile defense system and since 2015 the more advanced PAC-3. The State Department cleared

Saudi Arabia to buy 600 advanced PAC – 3 interceptors, which are made by Lockheed Martin.¹⁸

In 2017, Saudi Arabia signed a contract to purchase the US Terminal High Altitude Area Defense (THAAD) system, which has an ex-atmosphere hit-to-kill capability that would have added to Saudi Arabia's missile defense prowess.

Not only is Riyadh engaged in enhancing its own defensive measures, but it is working towards a missile defense architecture for the Saudi- and UAE-led GCC countries (though an integrated GCC missile defense architecture would be challenging to accomplish as a host of issues need to be resolved).

Offensive counter measures

Airstrikes targeting warehouses and military centers used to manufacture ballistic missiles and drones.

On March 28, 2015, two days after the Saudi-led bombardment on Yemen began (Operation Decisive Storm), Saudi coalition spokesman, Brigadier General Ahmed Assiri, said the bombing campaign had destroyed “most” of the rebels' missile capabilities. Brig Gen Assiri asserted that 80 per cent of Yemen's 300 or so missiles had been destroyed. But the air strikes did not eliminate the Houthi's missile capabilities.

On February 23, 2020, the Saudi-led Arab coalition announced, that it has carried out a sophisticated operation to destroy the Houthi militias' capabilities to store and assemble Iranian ballistic missiles and drones in the Yemeni capital, Sanaa. The operation struck storage locations in Faj Attan, al-Amad and Jabal al-Nahdein.¹⁹

Coalition spokesman Colonel Turki al-Malki said the operation was in retaliation to the militias' firing on February 21, 2020, of ballistic missiles against Saudi Arabia and that was aimed at civilian targets.²⁰

On April 15, 2020, the Saudi-led Arab coalition carried out strikes in Yemen against the Houthi militias' capabilities to fire ballistic missiles. The

attacks targeted Houthi positions in Hamdan, a Sanaa suburb, and a rocket launchpad in Harf Sufyan, in the Amran province north of Sanaa.²¹

On September 11, 2020, the Arab coalition forces carried out airstrikes targeting a Houthi military center in Sawan's outskirts, east of Sanaa, used to manufacture ballistic missiles and drones.²²

Targeted killing - Mohammed Abdo Musleh al-Ghouli, a prominent militant leader Al-Ghouli was killed in June 2020, while fighting in the Naham front, east of the capital, Sanaa. Al-Ghouli might have been killed, alongside other Houthi militant leaders, following air raids conducted by the Arab Coalition. Al-Ghouli was an expert within the Houthis' ranks in charge of the explosives-laden drones, and received training in Iran at the hands of the Iranian Revolutionary Guards.

Summary

The Iran backed Houthis in Yemen have carried out a spate of cross-border missile and drone attacks targeting Saudi air ports, bases, oil and gas industry and other civilian targets. The terror attacks came against the backdrop of escalating tensions in the Persian Gulf amid an ongoing crisis between Washington and Tehran following the U.S. pullout from the nuclear deal with Iran, new American sanctions on Iran and the "targeted killing" of Al Quds commander Qassim Soleimani.

Riyadh has accused Tehran of supplying the Houthis with missiles and drones used in the attacks on Saudi cities, a charge both Iran and the group reject. The Houthis also say they manufacture their own weapons system.

The military of Saudi Arabia is one of the best equipped armed forces globally thanks to the world's third-largest military budget, with hundreds of billions of dollars spent on fighter planes, tanks and other military hardware. But the kingdom's American-made Patriot missile-defense system has a mixed record when it comes to intercepting projectiles from Yemen and isn't primarily designed for repelling drones.²³

The last attacks on Saudi Arabia are reflecting the Houthi operational capabilities regarding the distance of the target (Saudi capital at 700 km) and

the number of drones and missiles that took part in the operation. It is also highlighting the kingdom's military vulnerabilities in defending itself against Iran and its Houthi ally.

By launching missiles and drones against civilian and military targets in Saudi Arabia, the Houthis try to change the military balance of the war in Yemen and to create a new balance of deterrence with the Saudi Arabian led coalition.

Iran and its proxies gaining operational experience in the battlefield of Yemen and technological lessons. That will be implemented by the Iranian drone and missile industries.

Notes:

¹ Yemen's Houthis claim drone, missile attack on 'important Riyadh target', the new Arab, September 10, 2020.

² Houthi drone attack on Saudi Arabia intercepted, destroyed: Arab Coalition, Al Arabiya, September 10, 2020.

³ Arab Coalition targets Houthi centers in Yemen used to build drones, missiles, Al Arabiya, September 12, 2020.

⁴ Yemen launches drone, missile attacks against Saudi capital; key target hit: Al-Masirah, Press TV, September 10, 2020.

⁵ Yemen's Houthis claim drone, missile attack on 'important Riyadh target', the new Arab, September 10, 2020.

⁶ Arab Coalition destroys four Houthi drones at Yemen's al-Dulaimi air base air base, Al Arabiya, September 13, 2020.

⁷ . Saudi-led coalition launches airstrikes on Yemen's capital Sanaa, the new Arab, September 12, 2020.

⁸ Arab Coalition targets Houthi centers in Yemen used to build drones, missiles, Al Arabiya, September 12, 2020.

⁹ Arab Coalition destroys four Houthi drones at Yemen's al-Dulaimi air base air base, Al Arabiya, September 13, 2020.

¹⁰ Houthis launch air attacks on Saudi capital, the guardian, March 30,2020.

¹¹ Houthi forces in Yemen, Investigating the supply and development of unmanned aerial vehicles (UAVs) in the Yemen conflict, Conflict Armament Research, February 19, 2019.

¹² Yemen Armed Forces Unveil New Weapons, apocrev.wordpress.com, July 8, 2019.

¹³ Sare'e: Yemeni Army Launched 1067 Ballistic, Winged Missiles Within 5 Years, ansarollah.com, March 24,2020. <https://www.ansarollah.com/archives/327452>

¹⁴ Ibid.

¹⁵ Ibid.

¹⁶ Ibid.

¹⁷ Behnam Ben Taleblu, "Assessing the Latest Iranian Ballistic Missile: The Zulfiqar," *Qualitative Military Edge*, Foundation for Defense of Democracies, September 29, 2016.

¹⁸ Arab Coalition Carries out Operation to Destroy Houthi Capabilities to Assemble Ballistic Missiles, Asharq Al Awsat, February 23, 2020.

¹⁹ Arab Coalition Carries out Operation to Destroy Houthi Capabilities to Assemble Ballistic Missiles, Asharq Al Awsat, February 23, 2020.

²⁰ Ibid.

²¹ Arab Coalition Strikes Houthi Ballistic Targets in Yemen, Asharq Al Awsat, April 17, 2020.

²² Arab Coalition targets Houthi centers in Yemen used to build drones, missiles, Al Arabiya, September 12, 2020.

²³ Ibid.