

Opportunities to Disrupt Iran-Russia Drone Axis

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On April 2, a Ukrainian drone struck a manufacturing plant in the Alabuga Special Economic Zone in Russia that coproduces Iran-designed drones. This production capability allows Russia to fire over 100 Iran-designed drones into Ukraine per week, as GEN Michael "Erik" Kurilla, commander of U.S. Central Command (CENTCOM), testified on March 21.

The Iran-Russia drone axis presents a consistent threat to safety in Europe and the Middle East, where Iran-backed terrorist groups have launched hundreds of drones against Israel and U.S. forces since the October 7 terrorist attack. The United States should work with its partners—namely Israel and Ukraine—to disrupt this axis, focusing on the production and proliferation of deadly drones.

What Happened?

- On April 10, General Christopher Cavoli, commander of U.S. European Command (EU-COM) and NATO Supreme Allied Commander Europe (SACEUR), testified that Iran had provided Russia with drones, artillery, and missiles.
- On April 2, a Ukrainian drone struck a manufacturing plant in the Alabuga Special Economic Zone in Russia that coproduces Iran-designed drones.
 - » Ukraine <u>converted</u> an Aeroprakt A-22 aircraft into a one-way attack drone by loading it with explosives and adapting its controls so that it did not require a pilot to be in the cockpit.
- On March 21, commander of U.S. Central Command (CENTCOM), GEN Michael "Erik" Kurilla, testified to the House Armed Services Committee that "the relationship between Iran and Russia, that really started when [Russia] asked for [Iran] to provide the one-way attack [unmanned aerial systems]," and "they started providing complete systems, and they built an actual factory in Russia, and those same Shahed-136—a very capable system—are now going at a rate of over 100 a week from Russia into Ukraine."

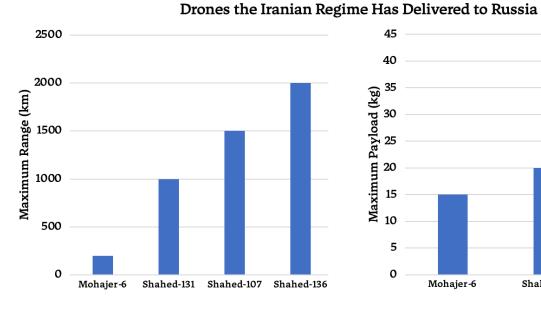
Why Is It Important?

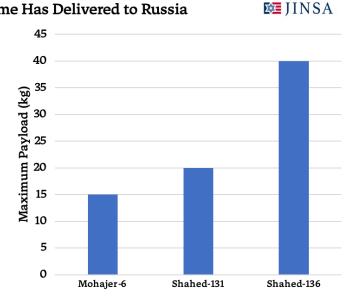
- The Iran-Russia drone axis presents a significant threat to U.S. interests in Europe and the Middle East. But is also an opportunity for concerted U.S.-led efforts to degrade the abilities of two of its main global adversaries.
 - Russia relies on Iranian-designed drones, which rely on Western-origin components, to augment its capacity to strike Ukrainian civilian and military targets, and Iran employs drones against U.S. and allied personnel in the Middle East.

- » By targeting the Iran-Russia drone axis, the United States can diminish the military capabilities of both U.S. adversaries, disrupting their cooperation and diminishing the potential for it to expand to other forms of military, diplomatic, and economic assistance.
- The Iranian regime and Russia's relentless aggression against U.S. interests stems from their shared desire to facilitate the emergence of an international order more amenable to themselves at the expense of the United States. Their partnerships allow them to combine their national power and afford them the opportunity to conduct simultaneous aggression in disparate regions, straining U.S. resources.
 - » Signaling clear intent to diminish U.S. power through cooperation with other U.S. adversaries, Mahmoud Abbaszadeh-Meshkini, spokesman of the National Security and Foreign Policy Committee of the Iranian parliament, <u>said</u> on January 19, 2022, "in the new world order, a triangle consisting of three powers—Iran, Russia, and China—has formed in Asia," and "this new arrangement heralds the end of the inequitable hegemony of the United States and the West."
 - Tehran bolstered its partnerships with other U.S. adversaries in pursuit of this vision years earlier. In July 2015, Qassem Soleimani, the former commander of Iran's Islamic Revolutionary Guard Corps Quds Force (IRGC-QF), enlisted Russian military intervention in Syria to help save the Bashar al-Assad regime in the Syrian civil war, thus preserving the rule of a brutal dictator hostile to the United States and Israel.
 - In addition, the Iranian regime frequently participates in joint military <u>exercises</u> with China and Russia, risking the erosion of U.S. military predominance in and near <u>economically vital</u> regions.
 - » Islamic Revolutionary Guard Corps (IRGC) personnel have <u>deployed</u> to Russian-occupied Crimea and Kherson, where they have trained Russian military personnel to operate Iran-designed drones.
 - » In exchange for Iranian drones, Russia has agreed to <u>provide</u> Iran with their modern Su-35 air superiority fighter, Mi-28 attack helicopters, Yak-130 pilot training aircraft. Acquiring these aircraft capabilities would be a significantly destabilizing development considering the current Iranian aircraft fleet is severely outdated, which has forced the Iranian regime to instead heavily rely on ground-based missiles.
 - The Wall Street Journal also reported on November 2, 2023 that the Russian paramilitary organization Wagner Group "plans to provide [the Russian SA-22] air-defense system to Hezbollah ... U.S. officials say, citing intelligence," underscoring that Russian involvement threatens to strengthen Iran-backed terrorists who target the United States and Israel.
- Iranian drones rely on Western components, in particular electronic parts. While the United States has export controls that limit the transfer of certain dual-use components and sanctioned Iranian officials and entities involved in the development, manufacture, and transport of Iranian drones, the Iranian regime has continued to acquire the parts necessary to produce drones through third-party marketplaces, many of which have Chinese connections.
 - » A Ukrainian intelligence <u>assessment</u> of a Shahed-136 downed in Ukraine concluded that thirteen U.S. companies produced forty of its fifty-two components, with companies in Canada, Japan, Taiwan, Switzerland, and China manufacturing the remaining twelve.
 - According to Ukraine's Independent Anti-Corruption Commission, the Shahed-136
 uses a communications chip that Wilmington, Massachusetts-based Analog Devices
 Inc. <u>produces</u> and is available online in Hong Kong for \$339 and available in eleven

additional Asian countries. The Shahed-136 also uses a microcontroller that Dallasbased Texas Instruments Inc. manufacturers and is available online for \$37.

- U.S. sanctions have likely hindered the ability of Iranian manufacturers to produce drones but have limited effectiveness given the ubiquity of sources for components, with Texas Instruments alone producing billions of semiconductors per year for 80,000 different products.
- The House of Representatives has passed the Fight and Combat Rampant Iranian Missile Exports (FIGHT CRIME) Act (H.R. 3152), and the Senate Foreign Relations Committee is scheduled to markup the bill on April 16, 2024. The bill would require the secretary of state to provide a report with a strategy to combat the Iranian regime's proliferation of banned missile technologies, including drones, and provides the president with additional sanctions authority to designate individuals and entities responsible for proliferating Iran-designed drones.
- Russia has used Iranian UAVs to devastate military and civilian targets in Ukraine, enabling Russia's military to preserve its diminishing supply of more advanced and expensive aircraft and precision-quided missiles.
 - Tehran's transfer of one-way attack drones to Moscow since August 2022, including the Shahed-136 and its smaller relative the 131, bolstered Russian strike capacity and capabilities after it suffered significant military hardware losses early in the conflict.
 - Other Iranian drones, like the Mohajer-6, have helped Moscow with intelligence, surveillance, reconnaissance (ISR) on Ukrainian positions and guidance support for the Shahed drone attacks. In addition, they helped Russia's Shahed-136 offensives by providing the one-way attack drones with guidance support.
 - In addition, the Iranian regime has created the Shahed-107 "explosive and reconnaissance" drone for provision to Russia, which is designed to target valuable assets "such as British and American multiple-launch rocket systems used by Ukrainian forces," The Jerusalem Post reported in January. According to the report, Iran has sold "a few units" of the drone to Russia for more than \$2 million.





- Russia and Iran's <u>cooperation</u> to produce Shahed-136 drones at the Alabuga Special Economic Zone in Russia and Iran's <u>shipments</u> of ballistic missiles to Russia both enhance Russia's capability to prosecute its war against a U.S. partner whose defeat would entrench Russia on the border of several additional NATO countries.
 - » During his March 21 <u>testimony</u>, GEN Kurilla said, "[Iran is] providing [Russia] both complete systems and they've built a factory for Russia to now produce [one-way attack drones] themselves," likely a reference to the Alabuga facility.
 - The U.S. Treasury Department <u>announced</u> on February 23 that it and the State Department sanctioned Iran's Ministry of Defense and Armed Forces Logistics (MODAFL), which Treasury said cooperated with Russia "to finance and produce Iranian-designed one-way attack UAVs" at the Alabuga facility, further underscoring the threat that Iranian involvement in the facility's operations presents.
 - » The drone facility in Alabuga could enable Russia to reverse its frequent shortage of these platforms, allowing it to further preserve its supply of precision munitions and significantly enhance Moscow's position in the rapidly developing drone arms race around the globe as a user and supplier of the platforms.
 - Russian officials aim to produce 6,000 Iran-designed drones at the factory by 2025.
 - Since the one-way attack drones that Iran is helping Russia produce and acquire are single-use weapons—like missiles and rockets—Russia needs to constantly restock its arsenal each time it uses them or risks facing a shortage.
 - » The Alabuga facility helps Moscow secure its drone supply chain by shielding it from strikes or interdiction by the United States, which has not been willing to join the war directly, and Israel, which has targeted Iranian drone facilities in the Middle East but would have limited interest in targeting drones that Russia would be using in Ukraine.
 - Israel has also sought to avoid a direct confrontation with Russia because of latter's presence in Syria.
 - » At the new facility, Russia could <u>apply</u> its industrial expertise to improve upon Iranian manufacturing techniques, using Iranian hardware, to produce the drones in greater quantities and with stricter quality control.
 - » Furthermore, should Russia choose to employ Iranian ballistic missiles against Ukraine, the weapons could wreak further havoc against Ukrainian military and civilian infrastructure, further frustrating Kyiv's ability to retake territory from Russian forces.
- Since both Russia and the Iranian regime routinely face air defenses made by the United States and other Western nations, the Russian armed force's use of Iran-designed drones has turned Ukraine into a test lab for tactics, techniques, and procedures (TTPs) that Tehran and its proxies could use in the Middle East.
- Ukraine's drone strike against the Alabuga facility underscored that Moscow's reliance on the Iranian regime makes its production and acquisition of drones <u>highly centralized</u> and, therefore, vulnerable to disruption.
 - » With the Alabuga facility in Russia as the single domestic producer of Iran-designed drones in Russia, Ukraine's capability to strike the facility could degrade the Russian armed force's ability to rearm itself.
 - Striking Russia's supply of Iran-designed drones at the source provides Ukraine with a cheaper means of combatting Russia while shifting the battlespace away from Ukrainian territory.

- » At just over \$90,000, an Aeroprakt A-22 aircraft, which Ukraine had converted into the drone that struck the Alabuga facility, <u>costs</u> only <u>slightly more</u> than the \$78,000 Javelin missiles, which the Ukrainians have used to down hundreds of drones.
 - The A-22 is much cheaper than Ukraine's domestically produced Neptune cruise missile (\$500,000) and other cruise missiles international partners have provided, such as the U.K.-provided Neptune (\$3 million).
 - An unaltered A-22 aircraft can fly at speeds of up to 126 mph, making them slower than the Neptune and Storm Shadow and susceptible to air defenses, but can travel 600 miles, much farther than either of those cruise missiles.
- While Iran originally transferred drones to Russia through airlines linked to the IRGC, the
 National Security Council <u>released</u> declassified intelligence that Iran has adapted to Western sanctions by shipping its drones to Russia on unsanctioned Russian ships through the
 Caspian Sea. Iran may have chosen this route because it allows weapons proliferation in a
 theater not as accessible to U.S. military assets.
 - The Russian-flagged Baltiyskiy-111, Omskiy 103, Skif V, Musa Jalil, and Begey took at least a <u>combined 73 trips</u> through the Caspian Sea to Iranian ports in 2023, according to a Ukrainian government document.



Source: National Security Council

- The United States also has an interest in disrupting Iran's production and proliferation of drones in the Middle East, with Iran's proxies having <u>launched</u> at least 173 projectile attacks against U.S. troops since mid-October, including an attack on January 28 that <u>killed</u> three and wounded more than 40 service members in Jordan.
 - » The Iran-backed attacks against U.S. personnel are one part of a regional Iran-led campaign against the United States, its partners, and its vital interests. Most recently, this has included Hamas's October 7 massacre in Israel, Iran-backed Hezbollah in Lebanon's near-daily projectile <u>attacks</u> against Israel since October 8, and the Iran-backed Houthis' regular <u>targeting</u> of commercial ships in the Red Sea, blocking the freedom of navigation through key international waters.

What Should the United States Do Next?

- The U.S. Department of Defense should bolster cooperation with Ukraine to interdict, militarily if necessary, Iranian drones or weapons components before they reach Russia.
- The United States should assist Israeli operations that target Iranian drone manufacturing sites. If Tehran's proxies resume their attacks against U.S. forces, U.S. Central Command (CENTCOM) should not only strike the launchers, fighters, and storage facilities involved in the attack but also use kinetic or cyber means to target the Iranian drone manufacturing facilities responsible for producing weapons that target American troops.
- U.S. Cyber Command (CYBERCOM) should work with partners to infiltrate networks at Iranian drone facilities and the vehicles, like aircraft and ships, that the Iranian regime uses to proliferate weapons.
 - » These cyber exploits could be leveraged to disable the production or transportation of weapons, provide additional information about the weapons that strengthens the ability of U.S. or partner forces to neutralize them, or insert flaws in weapons that cause them to malfunction.
- The Biden administration should support Ukrainian strikes against the Alabuga facility by
 providing it with intelligence and non-military aircraft airframes and parts that Ukraine can
 convert into one-way attack drones.
- Washington should encourage its European partners to add sanctions on entities involved in Iran's drone program. Entities that U.S. partners should add sanctions against include the IRGC, the Aerospace Industries Organization (AIO), MODAFL, the Iran Aircraft Manufacturing Industries (HESA), Fajr Aviation & Composite Industries (FACI), Pars Aviation Services Company (PASC), and the Iranian airlines that have <u>transported drones to</u> Russia: Iran Air, Mahan Air, Fars Air Qeshm, and Saha Air.
- The United States and its partners should sanction any Russian companies or ships that
 have transported Iranian drones via the Caspian Sea and push to remove their access to
 the international shipping insurance market to hinder their ability to transport cargo to other
 countries.
- The U.S. Treasury Department should designate additional individuals and entities who aid in the development, manufacture, or transportation of Iran-designed drones.
 - » The U.S. Treasury Department should also push international partners to strengthen their export controls and enforcement.
- The U.S. Commerce Department should work with industries that produce dual-use components to strengthen their chain of custody indicators, like serial numbers or more discrete methods, to better track export control violators.