**Syria’s Chemical Arsenal**

**Obama’s Failure, Trump’s Mixed Success**

by Dany Shoham

Chemical weapons provide the most fearsome capability in Syrian president Bashar Assad’s hands. His arsenal includes a variety of warheads and delivery vehicles—predominantly with chlorine gas and sarin nerve agent—from improvised barrel bombs up to Scud missiles. As his father before him, Bashar views weapons of mass destruction (WMD) as crucial to his survival.

In 2013, U.S. president Barack Obama pressured Syria into signing an agreement promising to dispose of those weapons with Russian assistance. It is clear that the two countries, likely with Iran’s help, intended secretly to retain up to half of Assad’s toxic arsenal. And while Western officials do not know how much of Assad’s stockpile remains intact, is being reconstructed, or how much capacity to produce more munitions he has, a more coercive U.S. policy—combining military force with diplomacy—is needed to rid Syria of its WMD entirely.

**Obama’s Stillborn Policy**

Since the end of World War II, chemical weapons have been used more often in the Middle East than anywhere else in the world—for four years in Yemen during the 1960s; six years during the Iran-Iraq War (1982-88), and during the recent conflicts in Syria and occasionally in Iraq, despite Bashar Assad’s repeated denials.
In July 2012, the Syrian regime confirmed that it possessed chemical weapons but stated the weapons would only be used against external aggression.\(^1\) One month later, President Obama declared the use of those weapons a red line.\(^2\)

We have been very clear to the Assad regime, but also to other players on the ground, that a red line for us is we start seeing a whole bunch of chemical weapons moving around or being utilized. That would change my calculus. That would change my equation.\(^3\)

This threatened red line notwithstanding, on March 19, 2013, the Syrian army used sarin gas in Khan al-Asal near Aleppo. According to the Research Department of the Israeli Military Intelligence Directorate, Assad himself had given the order as he would do on many future occasions despite adamant denials of this fact. Less than a month later, on April 13, the Syrian regime used sarin again, this time in the Aleppo neighborhood of Sheikh Maqsood, only to do so again on two more occasions: in Adra near Damascus on May 23 and in Qasr Abu Samra on May 24. Not until June did U.S. deputy national security adviser Ben Rhodes confirm publicly that the Syrian regime had repeatedly used chemical weapons, including sarin.\(^4\)

President Obama’s apparent indifference inspired yet another devastating sarin attack. On August 21, 2013, at around 2:30 a.m., two locations in the rebel-held suburban area of Ghouta outside Damascus were struck by surface-to-surface rockets containing sarin, possibly launched from the Iranian Falaj-2 system known to be operated by Syrian military forces.\(^5\) Roughly 1,400 people were killed and another 3,600 wounded. The area was along a weapons supply route from Jordan that had been under siege by the Syrian military for months.\(^6\)

The Obama administration and the news media immediately proclaimed this as a nerve-gas attack by the Syrian regime, bringing Washington to the brink of military confrontation with Assad.\(^7\) On September 6, 2013, Senate majority leader Harry Reid introduced a resolution in Congress to authorize the use of military force against Syria.\(^8\) Three days later, Secretary of State John Kerry said air strikes could be avoided if Syria turned over all of its chemical weapons stockpiles.\(^9\) Just hours after Kerry’s statement, Russian foreign minister Sergey Lavrov announced that Moscow had suggested that Damascus surrender its chemical weapons.\(^10\) Syria’s foreign minister Walid Moualem immediately welcomed the

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Thus, this Syrian use of sarin led to the regime’s ostensible agreement to hand over its complete chemical weapons arsenal to the international community and become a state party to the Chemical Weapons Convention (CWC).

Yet President Obama never enforced his red line. Peacefully dismantling Syria’s chemical weapons arsenal was never a viable option as the regime would not willingly relinquish what it considered a central component of its safety net, but key facilities could have been destroyed without risking environmental disaster as the sarin was safely stockpiled in a binary configuration in precursors that are much less toxic than sarin.

Seemingly aware that he had dithered over Syria’s chemical weapons, Obama imposed sanctions against eighteen Syrian individuals and one organization just eight days before the end of his second term, the first such measures against officials serving Assad. And while the sanctions were vital, the move appeared a transparent ploy to cover up the administration’s inaction during the previous four years. Time and again critics assailed the Obama administration for its indifference and incompetence on this issue despite solid information from the U.S. intelligence community concerning Syrian chemical attacks that went well beyond the findings of the Organization for the Prohibition of Chemical Weapons (OPCW). This information exposed a persistent Syrian program for producing and maintaining operational chemical weapons capabilities and using chlorine, a relatively “mild” toxic agent, to conceal the fact that it also had and employed more potent chemical weapons at its disposal.

The network exposed by U.S. sanctions was fairly integrated. Predicated on the Scientific Studies and Research Center (SSRC), it comprised bodies in charge of security, protection, intelligence, arming, weaponization, deployment, conveyance, and the masking of chemical weapons. Most of these bodies had remained nearly intact and practically functional up to that point, and likely onward, in spite of the ostensible incapacitation of the Syrian chemical weapons alignment formally.

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The Effect of a Coercive Policy

At least two thousand chemical bombshells remain unaccounted for, suggesting they may be in the hands of the Syrian military.

If OPCW inspectors had been able to do their job properly, there would have been no need for a U.S. intervention. But the Syrian regime was able to keep and use its chemical weapons arsenal for a host of reasons. The regime managed to prevent inspectors from visiting specific locations by claiming they were too dangerous due to the civil war and confrontations with ISIS and rebel forces. If an inspection team ignored the warnings, there were other options available to ensure it did not reach its destination, including nearby physical attacks that were plausibly deniable amid the fog of the civil war.

OPCW inspectors admitted they avoided challenging the regime even though it should have been an integral part of their mission. They feared losing the security provided to them by the regime against ISIS and the rebels. And their mission was strictly to eliminate declared chemical weapons capabilities rather than to conduct a demanding search for undeclared ones. This is precisely what the Syrian regime and its Russian and Iranian allies expected.

The regime’s determination to retain its chemical weapons was reinforced by its difficulty achieving various tactical, operational, and strategic goals—either military or demographic—using conventional weapons. Yet Assad most likely would have retained these weapons anyway given their perceived centrality for his survival.

At least two thousand chemical bombshells, which Damascus claims to have converted to conventional weapons, remain unaccounted for, suggesting they may still be in the hands of the Syrian military. Additionally, munitions the outside world does not even know about may also be covertly retained, particularly Iraqi chemical and biological weapons smuggled into Syria in 2003.

Moreover, renewed production of chemical weapons by the Assad regime was discovered by Western intelligence in 2017 in hidden sections of at least three sites—Masyaf, Dummar, and Barzeh—with informal acknowledgment and at times tacit support from Russia and Iran. The weapons were filled with chlorine and even more powerful elements not previously found in Syria’s arsenal. The regime’s procurement effort intensified during 2017 with an OPCW fact-finding mission reporting that sarin was “very likely used as a chemical weapon” in Ltamenah on March 24, 2017, and that chlorine was “very likely used as a chemical weapon” at and around Ltamenah Hospital a day later.

Ten days later, on April 4, 2017, the Syrian air force dropped bombs containing sarin in a civilian area of Khan Shaykhun, which killed approximately a hundred people. Three months into his presidency, Donald Trump condemned the attack as an “affront to humanity … that cannot be tolerated,” and three days later, Washington launched fifty-nine cruise missiles on the

15 Newsmax (West Palm Beach), Feb. 19, 2013.
18 Reuters, Apr. 6, 2017.
Shayrat airbase, which was believed to have been the location used by the aircraft that had carried out the attack.  

In contrast to the U.S.-led coalition’s accidental air raid on Deir az-Zor in 2016 (which had no connection to chemical weapons and was intended for ISIS), the April 2017 strike was the first deliberate unilateral attack against the Syrian regime, strongly indicating a policy shift under the new Trump administration and its determination to impede Syria’s operational chemical weapons. Indeed, on April 24, seventeen days after the strike, the U.S. Treasury Department imposed additional sanctions on 271 SSRC employees for their alleged role in producing chemical weapons, exposing both the names and behavior of those targeted.

Even so, Damascus continued to violate its commitments. In a February 2018 briefing, senior U.S. officials said it was “highly likely” that Assad had kept a hidden stockpile of weapons after 2013 but that characteristics of recent attacks also suggested the regime had “evolved” its program to create new kinds of weapons and delivery methods, either to improve their military capability or to escape international accountability. Modifications of chlorine munitions were but a trivial example.

There were clear indications that Moscow and Tehran helped the Syrian regime in this matter, including detection of Russian military involvement in the 2017 sarin attack by the Syrian air force and deliberate Russian bombardment of the hospital where sarin-affected persons were treated. Likewise, rocket debris found after two attacks on civilians in January-February 2018 contained German electro-metallurgy technology that had been acquired by Iran for rocket manufacturing. Relying on an advanced material with a cellulose base used for insulation, which was sold to Iran by the

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German supplier, the rockets were then produced in Iran and adapted as a chemical weapon of high operational value for the Syrian army.

**A Second Strike against Chemical Weapons Facilities**

The use of weaponized chlorine and additional so-called milder chemical weapons by the Assad regime continued and was more or less tolerated by the international community. A State Department spokesperson indicated, though, that Washington was “extremely concerned” about reports that Syrian forces had conducted more chlorine gas attacks. However, another official said that the Trump administration hoped that increased international sanctions and diplomatic pressure would deter Assad. If the international community did not act quickly to increase the pressure, the official warned that Syria might use chemical weapons beyond its borders and possibly as far as “American shores.”

Washington’s relative tolerance ended two months later. On April 7, 2018, the Syrian army launched yet another deadly sarin attack in the Ghouta district, killing 85 people and wounding many more. In response, on April 14, a joint U.S.-British-French force struck several key Syrian chemical weapons installations with much greater force than in 2017: the Scientific Studies and Research Center in Barzeh, known to be the core Syrian facility for research, development, production, and testing of chemical and biological weapons; and the Him Shinshar storage facility and bunker, which constituted “the primary location of Syrian sarin and precursor production equipment” and an important command post.

These strikes were the most significant attack against the Assad regime by the Western coalition (as opposed to unilateral U.S. strikes) during the Syrian civil war. While the West supported various rebel groups from early in the war, it had not yet intervened directly against Syrian government forces. But while a Pentagon spokesperson claimed that the Barzeh attack would set back the Syrian chemical weapons program for years, the successful raids did not bring about compliance. Trump warned Damascus that Washington was “locked and loaded” to strike again if Assad carried out more chemical attacks. He also warned Syria’s allies: “To Iran and Russia, I ask: What kind of a nation wants to be associated with the mass murder of innocent men, women, and children?” Lavrov responded by saying that Moscow had informed Washington before the raid “where our red lines were, including the geographical red lines, and the results have shown that they haven’t crossed those lines.”

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26 Ibid.
Several months later, in August 2018, observers and analysts worried that the Syrian regime might use chemical weapons during an impending assault on Idlib if the rebels managed to slow its advance. U.S. intelligence and military experts drew up a preliminary target list of Syrian chemical weapons facilities for a fresh round of air strikes. A decision to take action had not been made, but the military was ready. Washington reaffirmed its zero-tolerance policy without firing a shot, driving Moscow to amass the largest-ever naval grouping in the eastern Mediterranean with Russia’s U.S. ambassador warning Washington against another “groundless and illegal aggression against Syria.”

A few weeks later, Syria’s foreign minister Moualem said,

We fully condemn and reject the use of chemical weapons under any circumstances, wherever, whenever, and regardless of the target. This is why Syria eliminated completely its chemical program and fulfilled all its commitments as a member of the OPCW.

This might well have been a cynical lie, but it was also indicative that the air strikes had sobered Syria up somewhat. In January 2019, National Security Adviser John Bolton warned Damascus that despite the pending U.S. military withdrawal, there “is absolutely no change in our position that any use of chemical weapons would be met by a very strong response, as we’ve done twice before.” Syrian use of sarin did indeed stop (for now) and chlorine use considerably decreased (while the civil war was subsiding), but became rather less traceable. Thus, on May 19, chlorine was used by the Syrian army in Idlib, yet only in late September did Washington conclude and announce that the incident had taken place.

Secretary of State Mike Pompeo, nonetheless, added that the administration “will not allow these attacks to go unchallenged, nor will we tolerate those who choose to conceal these atrocities.”

**Conclusion**

The Trump administration’s approach to Syria’s use of chemical weapons has markedly reduced the regime’s chemical weapons capabilities; moderated Assad’s

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33 Izvestiya (Moscow), Aug. 28, 2018; Reuters, Aug. 30, 2018.
36 CNN, Sept. 27, 2019.
thinking, predilection for brinkmanship, and brutality; and apparently reduced the amount of Russian and Iranian support he once enjoyed within that context. The U.S.-led attacks against Syrian chemical weapons facilities constituted its fourth physical disarmament intervention in the Middle East, preceded by such actions in Iraq, Libya, and Sudan.

Trump’s approach is sharply different from that of his predecessor. Thanks to Obama, a remarkable amount of chemical weapons munitions were removed and destroyed, yet Assad continued to use them, becoming considerably more cautious only after the joint U.S.-Western action under Trump. Yet while the Trump administration applied direct pressure and action to Syria, it has so far largely refrained from doing the same to Russia or Iran though the latter has worked to boost Syria’s chemical weapons capabilities.\(^{37}\) Deterring Syrian use of chemical weapons should be applied consistently, not only against the regime, but also toward Moscow and Tehran, for the simple reason that without their backing, Assad likely would not have used WMDs.

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