

# Threat Tactics Report: *Syria*



TRADOC G-2 ACE Threats Integration

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## Executive Summary

- The Syrian military is a heavy mechanized force, primarily designed to defend against a similarly composed external foe. The heavily armored force is not optimized for the type of combat experienced in Syria's civil war.
- The Syrian military is greatly diminished due to desertions and combat losses and had to broaden its defense capabilities to include a number of hybrid threat actors while significantly adapting its tactics and techniques in order to maintain its ability to protect the regime of President Bashar al Assad.
- The Syrian military relies on outside actors to help defend its government, namely Hezbollah and the governments of Iran and Russia for arms, strategy, and personnel.
- The reported use of chemical weapons by the Syrian military against its citizens represents the Assad government's willingness to ignore law of warfare principles in order to achieve its objectives, regardless of global opinion.

This (U) **Threat Tactics Report (TTR)** was produced in accordance with (U) *Intelligence Community Directive Number 203: Analytical Standards* (Effective: January 2015). This TTR was coordinated with:

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A handwritten signature in black ink, appearing to read 'Jon S. Cleaves'.

Jon S. Cleaves  
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Cover photo: [A destroyed tank lies in the street in Aleppo, Syria, 6 October 2012.](#)



## Introduction

Syria and its ongoing civil war represent an operational environment (OE) that includes many of the characteristics illustrative of the complexities of modern warfare. Now in its fourth year, the civil war in Syria has lured a variety of threat actors from the Middle East and beyond. What began as a protest for improved opportunities and human rights has devolved into a full-scale civil war. As the Syrian military and security forces fought to subdue the civil unrest across the country, these protest groups responded with increasing violence aided by internal and external forces with a long history of terrorist activity. Ill-suited for the scale of combat that was unfolding across the country, Syrian forces turned to their allies for help, including Hezbollah and Iran. The inclusion of these forces has in many ways transformed the military of President Bashar al Assad from a conventional defensive force to a counterinsurgency force.

TRADOC G-2 ACE Threats Integration (ACE-TI) is the source of the Threat Tactics Report (TTR) series of products. TTRs serve to explain to the Army training community how an actor fights. Elements that contribute to this understanding may include an actor's doctrine, force structure, weapons and equipment, education, and warfighting functions. There will be a discussion of the actor's tactics and techniques, and recent examples of tactical actions will be described if they exist. An actor may be regular or irregular, and a TTR will have a discussion of what a particular actor's capabilities mean to the US and its allies.

A TTR will also identify where the conditions specific to the actor are present in [Decisive Action Training Environment \(DATE\)](#) and other training materials so that these conditions can easily be implemented across all training venues.

This particular TTR will describe and assess the structure and capabilities of the Syrian military and its allies in the fight against Sunni opposition forces. Topics will include force structure, combat techniques, military capabilities, irregular forces, and unique capabilities. It is the intent to provide the reader with knowledge of the Syrian military strategy, tactics, and techniques in order to make informed decisions about how best to replicate these conditions in US Army training events using the tools and exercise design methods contained in ACE-TI's materials and products. The scope of this Threat Tactics report (TTR) covers the Syrian military, included but not limited to regular forces (army, navy, air force, special purpose forces) and paramilitary organizations (Hezbollah, the national defense forces, other foreign militias, and criminal elements) as they relate to the capabilities of the Syrian military.

## Section 1: The Syrian Military

The Syrian military is dealing with the effects of a four-year long civil war. Once considered among the most capable in the Middle East, the Syrian military has lost much of its personnel to combat and desertion to antigovernment rebel groups and extremist organizations. Conscription is mandatory for all qualified males at age 18. Women are not required to join the Armed forces but some volunteer. The officer corps is ethnically diverse, however senior officers usually come from the more politically loyal Alawi and Druze populations. Membership in the dominant Ba'ath party is not a requirement but is necessary for advancement to higher positions.

The Syrian military has suffered from a wide variety of problems including command and control (C2) issues and sustainment and logistics issues due to mismanagement of soldier professional development



and a challenging modernization effort.<sup>1</sup> The vast majority of Syrian military equipment is Soviet-era/Russian design and its doctrine has historically reflected the Soviet model. Syria has traditionally been a heavy mechanized force consisting of approximately 19 mechanized infantry brigades and 22 tank brigades. In addition to the large heavy forces, there are approximately 11 regiments of special purpose forces.<sup>2</sup> At the beginning of the current civil war the Syrian military was estimated to be between 220,000 and 250,000 soldiers. The other branches of the Syrian military, the navy and the air force, have an estimated 4,000 and 30,000 members respectively.<sup>3</sup> All branches of the military place a premium on loyalty to the government of President Bashar al Assad; the most loyal units in the Syrian military usually receive the most modern weapons and are the best trained.

The Syrian navy is one of the smallest in the region. Due to this fact, there are no large naval units such as fleets or squadrons, instead each ship is considered a separate unit. The coastal defense has a naval infantry consisting of 350-500 troops and it is charged with protecting Syria's 193 km coast. See the weapons and equipment section of this report for a list of relevant naval vessels.

The Syrian air force is one of the largest in the Middle East and is the Syrian government's main advantage against the opposition. In 2007 it was estimated to have 584 fixed wing and 210 rotary wing aircraft.<sup>4</sup> However, a lack of spare parts and maintenance for the mostly Russian fleet created a significant effect on the readiness of these aircraft, especially the attack helicopters and offensive fixed-wing aircraft.<sup>5</sup> For this reason many pilots are using training aircraft to conduct combat missions. These aircraft perform a range of missions including attack/combat, reconnaissance, transport, and training. Most aircraft are from Russian and former Commonwealth of Independent States (CIS) countries. Syrian air force operations include deep strikes into enemy-held territory as well as support to Syrian army ground forces.<sup>6</sup> The Syrian air force uses a variety of munitions including improvised bombs known as barrel bombs against rebel and civilian targets. An expeditionary force that attempts to intervene in the current crisis in Syria would need to control the Syrian air force prior to ground operations through either lethal attacks or a diplomatic agreement such as a no-fly zone. See the weapons and equipment section of this report for a list of relevant aircraft.

## Strategy and Goals

The strategic goal of the Syrian military is to maintain territorial integrity of the state of Syria for the current government of President Bashar al Assad. The civil war has forced the government to concentrate its forces on protecting the most critical regions in Syria with a special emphasis on major cities, the capital of Damascus, and pro-regime areas in western Syria. This is achieved through offensive and defensive operations designed to maintain security around political, military, and economic centers of power including provincial capitals and important military infrastructure such as air force and army bases, and other key infrastructure. The objectives of these operations are to retain territory that is considered operationally and or strategically important, to destroy the ability of rebel groups' to conduct offensive operations, and to support the perception of legitimacy for the government. The government's end state is to maintain enough control over Syria's national power to emerge victorious from the civil war.<sup>7</sup>



## Key Alliances

The Syrian military relies on a number of allies in order to remain in power, the most notable being Iran, Hezbollah, and Russia. Most of Syria's allies have provided a combination of military and economic support to maintain the government's ability to survive. The influence of these actors has some members of the Assad regime fearful of losing control over the country to the foreign powers that control these militias.

### Iran

A key ally of Syria, Iran, and particularly the Iranian Revolutionary Guard Corps (IRGC) share the Syrian government's interests—which are multifaceted—and support Iran's vision of regional stability that recognizes Iran as the dominant Middle Eastern power. The level of military and economic aid Iran provided to Syria in recent years was estimated by the United Nations (UN) to be approximately 6 billion dollars.<sup>8</sup> Military and ideological ties with Hezbollah, access to sea ports in the Mediterranean, and the defeat of Sunni extremism and Western-influenced hegemony are some of the reasons Iran has invested heavily in Syria. Examples of this support includes a large security force assistance (SFA) program involving various branches of the Iranian government involved in training police and military forces. Activities include providing training and intelligence assistance, and coordinating foreign fighters from Iran, Iraq, and other Shia areas to assist the Syrian regime. Iranian materiel support to non-state actors such as Hezbollah is facilitated through Syrian air bases. Iran pursues a policy of maintaining the regime of President Bashar al Assad, but has also made preparations for a protracted destabilization effort to prevent a Sunni-dominated government should the current government fail.<sup>9</sup>

### Hezbollah

Hezbollah is a non-state actor who has evolved from a grassroots reformist movement into a significant fighting force known for its adaptability in a variety of combat settings. Hezbollah provides both direct and indirect combat support to the Syrian regime in order to maintain freedom of movement across the Lebanese-Syrian border, to interdict Sunni extremists in Lebanon, and to support Iranian objectives in Syria.<sup>10</sup> Hezbollah participated and continues to participate in ground operations alongside the Syrian military, especially in situations where its interests are directly threatened. Smuggling routes along the Lebanese border are the conduit for arms and supplies from Iran to Hezbollah's safe havens in Lebanon, but the flow of resources is hampered by the security situation. This degrades Hezbollah's ability to operate freely against its enemies both within and outside of Lebanon. Additionally, a number of Lebanese Shia residing on the Syrian side of the border need Hezbollah's protection. For these reasons Hezbollah has increased its presence in Syria to interdict Sunni rebels attempting to smuggle arms and supplies.<sup>11</sup> These operations assist the Syrian Army, which suffers from shortages of personnel. The idea that Hezbollah is a legitimate force in the Middle East that is capable of projecting power outside of its normal sphere of influence has reportedly backfired according to some researchers who claim that Hezbollah's involvement in Syria has exposed it as a proxy for Iranian foreign policy.

### Shia and other Militias

Like Hezbollah, Iraqi, Pakistani, and Afghan Shia militias are also providing combat support to the Syrian regime.<sup>12</sup> Regarded as further evidence of Iran's influence in the conflict, these militias fight for the



government of Bashar al Assad and have provided security to Shia pilgrimage sites and key infrastructure and participated in the defense of Syrian government throughout the country.<sup>13</sup> In 2014, when extremist group the Islamic State in Iraq and the Levant (ISIL) attacked a number of Iraqi cities, a significant number of Iraqi militias were forced to return to Iraq to defend their homeland. Recent reports suggest that these militias have returned and are focusing their efforts on the Alawite heartland of the Syrian Latakia province.<sup>14</sup> Other militias that have allegiances to the regime were created from a wide variety of political interests, business groups, and clan-based tribal organizations, ranging in capabilities and providing local security and support to other pro-regime organizations.<sup>15</sup>

## Russia

Russia has provided support to Syria and its large inventory of Soviet-era military vehicles and aircraft. Russia is also an advocate for the Syrian regime in international politics and could challenge any security resolutions that threaten the Syrian government's sovereignty. Russia has reportedly provided training and materiel to the Syrian military including the Syrian air force. Russian support to Syria focuses on enabling military trade between the two countries and protection of its interests in the Mediterranean Port of Tartus. Russia has moved a number of naval assets including a battalion of naval infantry to the Port of Tartus to perform routine missions, but it is expected that these forces can be repurposed if Russian interests are threatened.

## Organizational Size and Structure

There are roughly three classes of pro-regime military and paramilitary forces in Syria—the government-backed military's regular forces, the government-backed national defense forces (NDF) irregular militia forces, and foreign irregular militias, most of which are provided through Iranian sponsored groups. The groups are unique while at the same time they complement each other. They use many of the same resources and sometimes operate jointly.

Due to the current conflict, the Syrian Army has dwindled from 250,000 members to an estimated 125,000 members.<sup>16</sup> The cause of these losses is a result of combat and, to a significant degree, defections and desertions. Manpower continues to be one of the greatest challenges for the Syrian military. The Syrian government has sought to fill its ranks by offering higher pay and benefits to recruits, supporting a robust national guard, and offering amnesty to deserters.<sup>17</sup>

Syrian government military forces are augmented by a variety of local and foreign pro-government militias estimated to contain 125,000 members that includes the NDF as well as elements from Iraq, Pakistan, and Afghanistan's Shia populations.<sup>18</sup> The NDF is the largest of the domestic militias and is charged with protecting the areas around its local communities.<sup>19</sup> Its numbers have grown since the beginning of the conflict as pro-regime actors have sought to protect themselves from opposition groups. Service in the NDF is considered desirable among enlistees as they are able to continue to work on their civilian jobs, provide for their families while defending their communities. NDF fighters are able to receive extra pay and food rations for their family members. The NDF is trained by a combination of Syrian army trainers, Iranian advisors, and Hezbollah fighters. Additionally, these elements retain the ability to provide direct combat support to local militias as they did in pivotal battles such as al Qusayr where it was estimated that 1,200 Hezbollah fighters participated.<sup>20</sup>

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Iranian forces are estimated at between 1,000 to 7,000 members and usually perform advisory roles in Syria.<sup>21</sup> Recognizing their interests in Syria, Iranian officials have played an active role in advising and training the NDF and the Syrian military. The short-term plan for Iran is to support the current government in Syria against the rebel opposition. The long-term strategy is to have the flexibility to conduct insurgent activities on its own should the regime fall and a Sunni government is put in place.<sup>22</sup>

Symbol	Echelon	Command	Personnel	Components	Total
	Brigade	Brigadier General	5,000 – 7,000	3 MECH BN 1 AR BN ARTY / ENG / ADA	19
	Brigade	Brigadier General	5,000 – 7,000	3 AR BN 1 MECH BN ARTY / ENG / ADA	22
	Regiment	Brigadier General	3,000- 4,000	3 INF BN	11
	Regiment	Brigadier General	3,000 – 4,000	3 ARTY BN	11
	Battalion	Lieutenant Colonel	50-500	4 -5 CO	164 (est.)
	Company	Captain	10 -50		656 – 874 (est.)

Figure 1. Syrian force structure

## Current Locations

Syrian forces are stationed at army and air force installations throughout the country, many of which are near major populations centers such as Damascus, Homs, and Aleppo. Small- to medium-size fortifications known as checkpoints have also been established along the approaches to these locations. The checkpoints vary in size from two to three soldiers on a so-called mobile “flying” checkpoint, to one to two platoons on large fortifications; this depends on proximity to population centers and critical facilities. The locations are designed to coincide with the Syrian government’s strategy to maintain control over the population and to protect elements of national power.<sup>23</sup> These checkpoints are used to control the flow of people and resources, and have been used as a base of operations to conduct patrols in remote areas where the threat dictates. The Syrian regime maintains a strategy to have a military presence in all fourteen provinces in order to give the impression of central control over Syria’s territory.



However, operational gains in the last year from the opposition forces including ISIL have resulted in the loss of a significant amount of territory. The province of Raqqa was lost to ISIL, and there is a minimal presence in Idlib, Hasakah, Dayr az Zawr, and Qunaytirah provinces.

Currently, the areas in the western half of the country have the greatest concentration of pro-government military forces as the Syrian government struggles to maintain its power over areas that remain loyal to the regime.<sup>24</sup> These areas include the majority of Damascus, the Southern portion of main road from Damascus to Aleppo, the Hama province, and the Alawite strongholds around Latakia and Tartus provinces. Additionally the province of Suweida, with the majority of its population belonging to the Druze sect, remains under government control. The mountainous region along the Lebanese border including the Qalamoun province is for the most part controlled by Syrian forces and Lebanese Hezbollah.<sup>25</sup>

Against regions where the rebel opposition is strongest, the Syrian military has attempted to maintain its defenses and sought to build combat power in order to create conditions favorable to regain control of these territories. The eastern regions that are threatened by ISIL are economy of force areas where limited disruption operations are conducted to slow the movement of ISIL and to support garrisons manned by small numbers of Syrian troops and local militias loyal to the regime. Supply of these remote locations is difficult as militants isolate them from government lines of communication.

Remote outposts are supplied by transport planes that provide everything from food and water to ammunition. The security situation makes routine supply by ground transport difficult for many isolated military installations. For this reason transport aircraft are a key target of opposition groups' limited air defense assets. Media reported cases where fixed-wing aircraft have been shot down by opposition forces, in some cases using surface-to-air missiles.<sup>26</sup>

## Section 2: Syrian Tactics and Techniques

The Syrian army engages in defensive and offensive operations designed to protect its dwindling combat capabilities and promote the impression of progress against the opposition while focusing on maintaining what is termed by researchers as "vital Syria."<sup>27</sup> Vital Syria refers to areas that are politically, militarily, and economically important with a dominant Alawite population. These are areas along the M-45 highway such as South Aleppo, Hama, and Homs, and key centers of power such as Damascus and the Mediterranean coastal provinces of Latakia and Tartus. These types of operations will vary depending on combat conditions but can be generally categorized as area defense and dispersed attack.

Due to massive desertions and combat losses, it is unlikely that the Syrian regime can sustain the large-scale offensive operations traditionally associated with armored forces such as multiple *integrated attacks* without significant risk to the defense of other areas.<sup>28</sup> The Syrian army has focused on large-scale conventional operations as the mainstay of its tactical operations. These types of operations relied on fire and maneuver to surround and assault objectives using aerial raids, artillery fire, and armored attacks in an attempt to destroy the enemy or force his surrender.<sup>29</sup> For this reason many of the soldiers in the Syrian army were and continue to be ill-prepared for the type of urban combat required in the civil war, which requires significant dismounted forces to cover armor avenues of approach from enemy antitank units. In the early stages of the civil war these techniques were thought to have contributed to the loss of many of the regime's most capable tanks.<sup>30</sup>

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It is possible that these techniques originated from the Syrian army's experience during the Lebanese civil war. In 1981 during the battle for Zahleh, Lebanon, the Syrian army achieved a minor success against the Lebanese forces defending the town. The Syrian army brutally mounted a siege-and-starve campaign in which it attacked the city and the surrounding areas with artillery and tanks for three months. The siege was met with fierce resistance and caused an international uproar that forced the Syrian army to withdraw before it completed the assault.<sup>31</sup>

The Syrian army's inability to penetrate Zahleh's defenses should have been an indicator of things to come in the current civil war. However, for the past four years the regime has continued to rely on armored assaults in urban areas until combat losses made them untenable. The failed approach resulted in the loss of significant amounts of armored vehicles and personnel for the Syrian regime, and is increasing the reliance on outside allies and militias to operate its remaining armored vehicles. The inexperienced crews are less able to coordinate their movement and Syrian tactics appear to be more dispersed and less concentrated. Since adopting the dispersed tactics of its enemies, the Syrian army is able to preserve its limited combat power but is unable to mass for decisive operations. Although these dispersed tactics included the Syrian air force, they amount to little more than adaptive countermeasures; they have not evolved into an effective campaign. The captured notebook of a senior Iranian military official killed by sniper fire in Syria described the "dissipation and disintegration" of Syrian army units in combat. The deceased general also observed that the Syrian army needed to be more aggressive and take an offensive approach rather than a defensive one.<sup>32</sup>

Further evidence of the inadequacies of the Syrian army's tactics was brought to light when researchers observed that many of the army's tanks were lost in early battles, for example in Darayya where they were used as battering rams and were easily engaged by rocket-propelled grenades (RPGs) in the urban canyons of built-up areas.<sup>33</sup> In response to the rapid loss of armored vehicles, the government forces would use a combination of seize-and-starve techniques that sealed off the objectives from external support while preparing engagement areas with indirect fires and large-scale aerial assaults, which were intended to provide no sanctuary for the enemy or its sympathizers.

## General Tactics

The 7-100 series of OPFOR doctrinal manuals describes the types of techniques used by the Syrian military. The area defense includes both simple and complex battle positions that attempt to protect Syrian forces and populations loyal to the regime. Examples of simple battle positions the Syrian military uses are the fortifications built along approaches to military installations and cities, which protect critical infrastructure and secure populations. These defensive positions are crucial to the longevity of the regime and provide an information warfare (INFOWAR) effect as they maintain the impression of central control across the country. However, the nature of these static defenses presents easy targets for the opposition forces. For other forces, namely the militias of the Iranian-trained NDF, a network of caches similar to those used by the opposition are used to store and protect weapons and ammunition similar to the hybrid threat complex battle positions.

Ideally, offensive operations would take the form of integrated attacks where the regime coordinates both its air force and army in sieges designed to isolate opposition forces and destroy their ability to hold territory throughout the country. However, these types of operations require the mobilization of large amounts of ground forces and coordinated close air support in order to hold captured territory.



These types of operations have decreased in frequency as the civil war has progressed. Under the current state of affairs, offensive operations are dispersed and involve the employment of a hybrid threat consisting of a variety of pro-government actors to achieve their objective against the enemy. A mix of local militias, irregular forces, regular forces, and special purpose forces are employed against targets of opportunity including enemy caches, fighting positions, and concentrations of troops and equipment. Offensive operations are centered on reversing enemy gains and creating footholds in enemy-controlled areas for follow-on offensive operations. These operations can involve any combination of regular and irregular fighters and are conducted to control the tempo and attack the enemy's will to fight.

The Syrian air force is known to target concentrations of opposition personnel and materiel in a bombardment campaign designed to destroy and demoralize the enemy.<sup>34</sup> The reliance on the air force has led to a steady increase in the number of sorties flown. When possible, or during large-scale offensive operations, the air force conducts the attacks in coordination with ground operations against enemy fighting positions. It also attacks known isolated concentrations of enemy forces and populations supportive of the opposition. The types of munitions employed vary and include conventional and improvised armaments including industrial chemical munitions such as chlorine bombs.<sup>35</sup> Thermobaric or vacuum bombs that include a two-stage detonation technique to ignite the atmosphere are used to maximize the destructive force against area targets.<sup>36</sup> The use of improvised explosive laden canisters known as barrel bombs has had significant lethal and psychological effects, especially against the civilian population. The air campaign has received international condemnation for its brutality and its high number of civilian casualties.<sup>37</sup>

## Tactical Examples

Tactical examples will illustrate how the Syrian regime employs its military forces. These examples will show how the Syrian regime has used both regular and irregular forces to maintain its claim to power over Syria and how it intends to defeat the opposition within its borders. The first example is the successful siege of al Qusayr, which fell to the regime in 2013 after nearly a year of being controlled by the opposition. The lesson of al Qusayr highlights a divergence from conventional Syrian siege tactics and exposes the weakness in the Syrian army caused by the loss of much of its fighting force to desertions and attrition.

The next example describes the operations headed by Hezbollah in the Qalamoun region along the Lebanese border. This example shows how the regime has enjoyed some success by allowing its allies to take the lead in what might be termed economy of force operations. The border area is important to Hezbollah as the transfer point for Iranian arms into Lebanon. It is also an avenue of approach for Sunni militants looking to infiltrate the Bekaa valley and conduct operations against Hezbollah and the Lebanese government. Hezbollah's operations in the region are significant and its defense of the region allows the regime to focus on other areas of the battle. The influence of Hezbollah and its sponsor Iran has caused divisions within Syrian President Bashar al Assad's inner circle of trusted compatriots.

The battle for Hama province was a part of a larger operation to secure lines of communication from pro-government strongholds in Hama and Latakia. The central location of Hama made it a buffer against opposition gains in western Syria and in the Idlib province. The decision to go on the offense in Hama was partially motivated by an eventual decisive battle in Syria's second largest city, Aleppo. Hama was



deemed strategically significant as it represented the forward limit of the opposition's southern push to seal off Idlib province and clear out regime forces to the Turkish border. Syrian forces were determined to stop the southward push of opposition forces into Hama and called upon Colonel Suhayl al Hasan to coordinate the effort. Hasan, known as the Tiger, had achieved notoriety after winning a number of battles during his Aleppo campaign in 2013 and 2014 and breaking the siege in the industrial zone east of Aleppo. Touted as Bashar Assad's favorite commander by the press, Hasan was known to be operationally aggressive and sufficiently competent to accomplish the mission. The operation ended with governmental forces taking back the city of Morek in northern Hama, but the significance of this victory was lost as the opposition was able to successfully secure lines of communication in Idlib province in March of 2015.<sup>38</sup>

## The Battle for al Qusayr

In August 2011, Syrian forces entered al Qusayr to stop so called "Arab Spring" protests against the Syrian government. The army entered with more than 50 armored vehicles and isolated the area by cutting telephone, electricity, and water supplies.<sup>39</sup> In what was described by eyewitnesses as a "full-scale military invasion," the operation resulted in an estimated 13–20 casualties in the first 48 hours.<sup>40</sup> More of the city's residents fled into the countryside and, in some cases, made their way over the border to nearby Lebanon.<sup>41</sup> By the fall of 2011, the city of al Qusayr was cut off and traffic was controlled by military checkpoints, preventing freedom of movement both into and out of the city. The anti-government protests continued despite the increased security. Syrian regime forces were heavy-handed in their execution of counterinsurgency (COIN) operations, occupying the town hall and turning the local hospital into an army barracks.<sup>42</sup>

Opposition forces known as the Free Syrian Army (FSA), aided by the defection of Syrian government soldiers and supplied by external actors, began to fortify their positions in the Sunni quarters of al Qusayr. These positions also included a number of weapons caches and support zones designed to provide support for the opposition and a base of operations. After a wave of opposition group and hit-and-run guerrilla-type attacks that included placement of improvised explosive devices and a tunnel blast underneath the local Syrian occupied hospital, the situation degraded to a stalemate.<sup>43</sup> With the northeastern quarter of al Qusayr under rebel control, the Syrian army employed siege and starve operations in an attempt to force the enemy to give up his positions. The Syrian Arab Army (SYAA) continued to man checkpoints and shell the city in an effort to dislodge the rebels, but any attempt to mount an attack was met with stiff resistance.

Recognizing the threat to its safe havens and smuggling routes from Syria to Lebanon, the guerrilla organization Hezbollah increased its presence in the Shia-dominated areas west of the Orontes River in order to prevent the rebels from using the area as a transit point. By providing technical support to including training and organizing militias, Hezbollah was able to conduct raids and launch rockets into al Qusayr from the safe haven of Hermel, Lebanon. The creation of the pro-regime militia Syrian NDF by elements of Hezbollah and the Iranian Quds force allowed Syrian governmental forces and Hezbollah to hold ground around al Qusayr while it prepared for another offensive in the spring.

By the spring of 2013, Hezbollah fighters were a mainstay of the effort in the countryside outside al Qusayr. One of the first objectives included the town of Tell Qadesh, just south of Lake Homs. The ancient location of the largest chariot battle in history, Tell Qadesh was deemed a strategic location due

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to its relative height (200m above sea level) and its proximity to avenues of approach into al Qusayr from the north.<sup>44</sup> Hezbollah fighters led the charge with the NDF and Syrian army in support, resulting in the capture of many of the towns in the outlying area as the regime tightened its hold around al Qusayr. With the countryside under regime control, the last phase of the operation was an assault on al Qusayr itself. In late May 2013, the second assault on al Qusayr culminated with the Syrian governmental forces and the Hezbollah-led guerrilla force clearing the town of the opposition. The specialized training of Hezbollah fighters provided a tactical advantage as they integrated the movement of light infantry and armor and used skilled demining teams to breach defensive positions.<sup>45</sup> Rebel leaders attempted to salvage the situation and called for the FSA and other rebel forces to converge and “rescue” al Qusayr.<sup>46</sup> The new strategy by the pro-government Syrian Arab Army, however, had produced the intended results. As pro-regime web pages tracked the progress of the loyalist and Hezbollah forces on the Internet, it became apparent to the international press that al Qusayr was under regime control once again.<sup>47</sup>

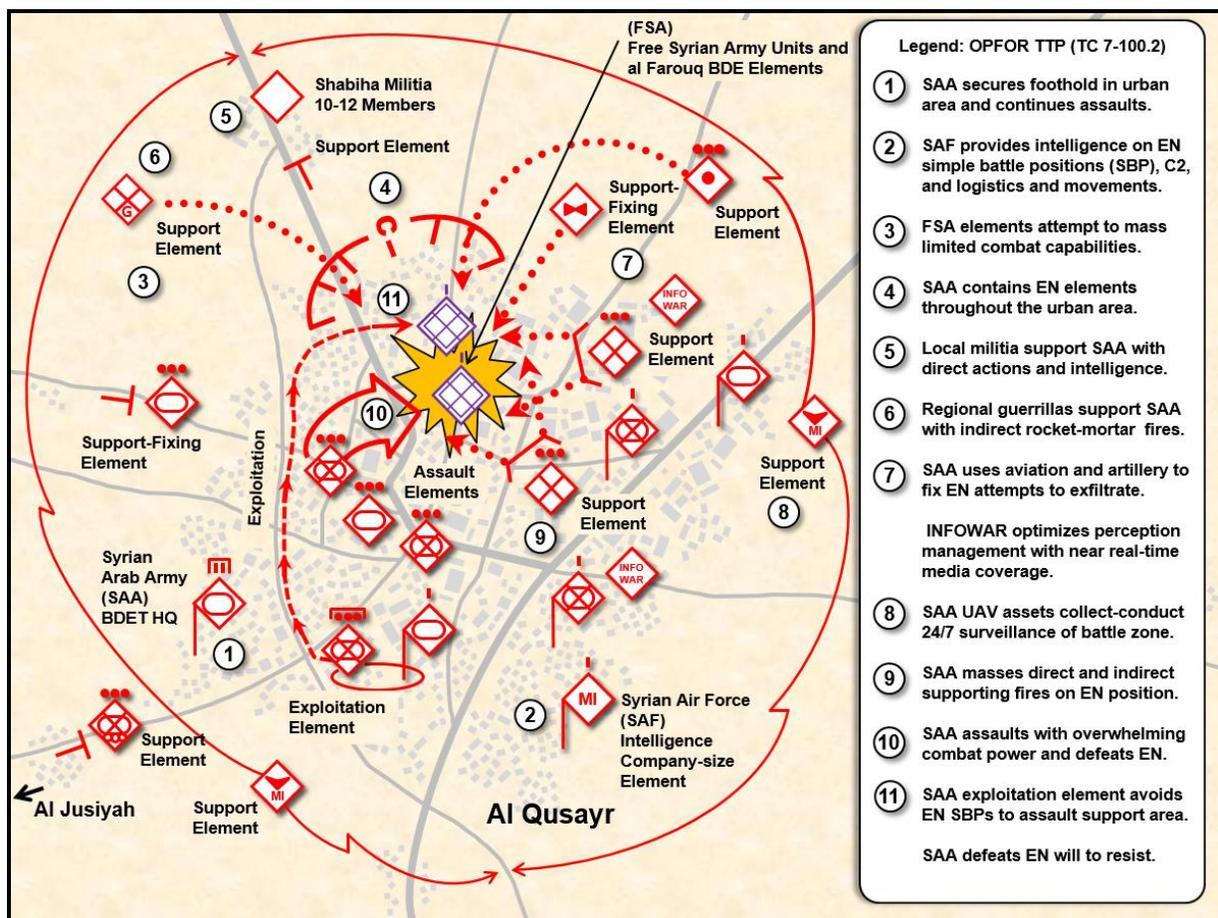


Figure 2. Integrated attack on al Qusayr (example)



As many as 1,700 Hezbollah fighters were deployed to retake al Qusayr in support of the pro-government Syrian army. These units operated in small two- to five-man teams to conduct surveillance on rebel positions and provide support to the Syrian army. Syrian commanders were assigned designated sectors within the area of operations in order to coordinate efforts and prevent fratricide. The Hezbollah fighters methodically cleared booby traps and tunnels on the objectives and cleared the path for Syrian government army units.<sup>48</sup> Additionally, reconnaissance units acted as forward observers and were instrumental in calling in airstrikes and artillery.<sup>49</sup> Command and control was enhanced by using a system of code words for each of the city sectors in order to provide interoperability between Hezbollah and Syrian Regime Forces.<sup>50</sup>

Syrian forces began the final operation by shelling and conducting airstrikes in and around the city of al Qusayr.<sup>51</sup> Syrian army elements then assaulted from the south and the west toward the northwestern part of the city, seizing the town hall and other buildings in the vicinity.<sup>52</sup> Hezbollah fighters were able to attack strongholds with Syrian army support by taking the city section by section. Resistance at opposition strong points was defeated with a combination of indirect fire, air raids, and attacks by infantry. Once the opposition was pushed out of the city Syrian army forces began exploitation operations to stop any nascent resistance within the city. Hezbollah forces then began the pursuit of remaining rebels in the surrounding towns as the opposition retreated.

## Disruption Efforts in Qalamoun

The techniques used in al Qusayr were refined as the Syrian regime maintained a disruption zone in the Anti-Lebanon Mountains of the Qalamoun province, north of Damascus. The Qalamoun province is adjacent to Lebanon's Bekaa valley an ethnically diverse region that is Hezbollah's heartland and considered the primary supply route for Iranian weapons destined for Hezbollah commanders in the region. Given the strategic importance to both Iran and Hezbollah in their struggle for regional power, Hezbollah took the lead in disrupting Syrian opposition forces trying to create a safe haven from which to launch attacks against the Damascus front. Hezbollah's force was estimated to be in the hundreds and used UAVs and enhanced optics to locate and engage rebel fighters traversing the border area between Sunni support zones in the Lebanese town of Arsal and the villages in Syria.<sup>53</sup> Forces stationed on both sides of the borders stand guard in outposts with approximately 30 fighters each located at two mile intervals. In addition to the disruption efforts in the hills and villages, Hezbollah forces also conducted reconnaissance operations within the population centers to locate suspected improvised explosive devices (IED) destined for Hezbollah strongholds in Lebanon.

Ground reconnaissance in Syria is not only conducted by regular forces and special purpose forces, it includes a large and growing number of irregular forces and fighters from Hezbollah, and technical advisors from Syrian allies such as Iran and Russia. Additionally, militia fighters from the NDF, provided a wide range of security support including reconnaissance. For example, gathering intelligence. The shaping operations in Qalamoun were part of a larger disruption effort to flush out opposition fighters from key towns along the Lebanon Syria border including Yabrud in Syria. Hezbollah was successful in disrupting rebel troops and supplies as it moved into Syria, providing eyes and ears for Syrian government forces, and acting as forward observers for indirect fires. Fires included a combination of conventional and improvised rocket assisted munitions (IRAM) known as "volcanos" against rebel strongholds inside the towns and surrounding villages.<sup>54</sup> Throughout the region Hezbollah forces deployed of troops in an effort to fill in the gaps for Syria's regular military.

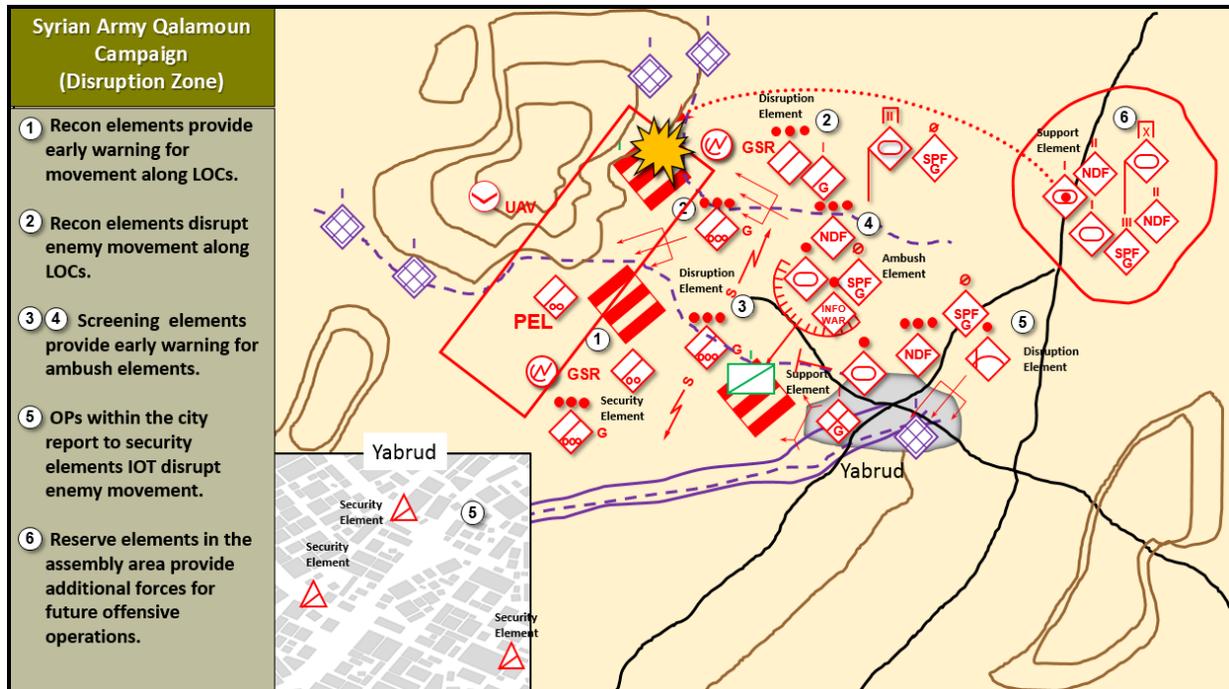


Figure 3. Syrian army and irregular forces disruption zone (example)

## The Battle for Hama

In early 2014 the Syrian government’s Syrian Arab Army (SyAA) with help from local militias including the National Defense Forces (NDF) were able to protect the airbase from opposition forces in Hama’s capital and the surrounding area and allow operations to continue.<sup>55</sup> The Hama airbase, a key component of the Syrian government’s air campaign, flew an estimated 15 fixed-wing and rotary-wing aircraft sorties out of the facility daily.<sup>56</sup> The city of Mhardah, a predominantly Christian city, contains one of the largest electrical power plants in the country providing an estimated seven percent of Syria’s electrical power and was defended by a local Christian militia. Additionally, there was a suspected barrel bomb facility near Hama city.<sup>57</sup> Not only did Hama hold the airbase, the province supported a number of army bases, contained several ammunition depots, and served as a key logistics hub to support governmental forces fighting north in Aleppo.

### Defense of Hama

The Syrian regime maintained an area defense using both regular and militia troops at military installations and area villages. The Syrian governmental forces designed their area defense to deny key areas to the opposition including two major highways, the Mharda power plant, and the Hama airbase. In a war of attrition, the area defense is used to inflict losses on the enemy, while retaining ground and protecting combat power.<sup>58</sup> The militia patrols had the responsibility to secure long stretches of highway, small villages, and quarters in Hama’s major cities. The defensive posture in Hama epitomized



the Syrian regime's "win by not losing strategy." The regime conducted access control operations that traded time for the opportunity to attack the opposition when and where it is most vulnerable.

## The Opposition Attacks

Opposition groups launched operation "Badr al Sham" against Hama province and the military structure supporting it. The opposition fighters established support zones and secured lines of communication in cities within Hama province's boundaries that held large populations of Sunni sympathizers. The opposition forces designed perception management operations that highlighted the regime's brutality against Sunnis to garner influence with the Sunni population and imposed fear on non-aligned parties as a means to maintain security and ensure support in these friendly areas. In southern Idlib and northern Hama provinces, opposition groups established support areas in Morek, Lataminah, and Kifr Zita. The opposition fighters infiltrated into Halfaya, massing troops for offensive operations in villages along the Orontes River and the Hama Latakia highway.<sup>59</sup> At the Serthel checkpoint, the opposition forces used captured Syrian army equipment to overrun the government force's outpost.<sup>60</sup> The Khattab ammunition depot fell in late July with opposition forces capturing ammunition in its crates, various artillery pieces, and some armored vehicles.<sup>61</sup> Armed with captured Syrian equipment, the opposition force advanced to within four kilometers of the Hama airbase engaging the base with BM-21 grad missiles mounted on medium trucks.<sup>62</sup>

## Counter Attack

The Syrian government dispatched elements of the 4th armored division and a newly designated unit known as the Tiger Brigade to Hama to improve command and control among the Syrian government forces. In addition to these forces, the militias received augmentation by additional Iranian advisors and an array of foreign fighters coordinated by the Iranian IRGC. The Syrian air force dropped barrel bombs in opposition controlled areas such as Kifr Zita and Morek.<sup>63</sup> In addition to the air campaign, the Syrian regime adopted more aggressive tactics to meet with and engage the enemy. The techniques employed were likely a result of the Iranian advisors' suggestions to crack open opposition defenses with specially trained "line breaker" troops, which were fast-moving troops ordered to sweep ahead of armored vehicles and defeat antitank missile teams. These techniques were viewed by Syrian military officials as successful when Hezbollah used them in a regime offensive in the Qalamoun Mountains in 2013.<sup>64</sup>

Analysis of pro-Syrian regime videos shows small groups of 10 to 20 infantry attacking positions with support from heavy machine guns and tanks on the edges of population centers.<sup>65</sup> Typically, ground forces advanced after rebel fighting positions were sufficiently degraded by aerial bombardment. Using preemptive strikes against concentrations of enemy troops and equipment as well as suspected support facilities such as medical clinics and food distribution sites, the air force isolated and attrited the rebel forces.<sup>66</sup> The air force also targeted specific heavy weapons such as tanks and anti-aircraft guns. Ground forces used mortars, artillery, and short range missiles against remaining opposition targets to dislodge the enemy from its positions and allow the infantry to close within the effective range of its small arms and anti-armor weapons.<sup>67</sup> The pro-governmental forces used heavy weapons at maximum standoff distances to protect combat power. Artillery, improvised rocket assisted munitions, and multiple launch rocket systems shelled villages throughout the offensive operations, removing enemy defensive positions for the attacking forces and closing off escape routes for the opposition.

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In larger towns armored vehicles were cautiously moved close to the main battle zone to provide support for advancing infantry. T-55 main battle tanks (MBT), in coordination with dismounted observers, engaged opposition particularly well-defended fighting positions. Using heavy guns mounted on medium trucks, the regime forces fired on enemy positions and also acted as spotters for tanks to fire their main gun. Dismounted radio operators directed the tanks into fighting positions and oriented the guns to their target. The pro-government units only advanced after the threat was either destroyed or neutralized. Infantry cleared roads, patrolled ditches, and inspected culverts for IEDs in order to protect the tanks. The exploitation force cleared the fighting positions, defused booby traps, and performed site exploitation operations by taking images of enemy weapons, ammunition, and equipment left behind by the fleeing opposition fighters. This last step provided the Syrian government the evidence needed to support the claims of a large amount of foreign assistance to the anti-government opposition groups.

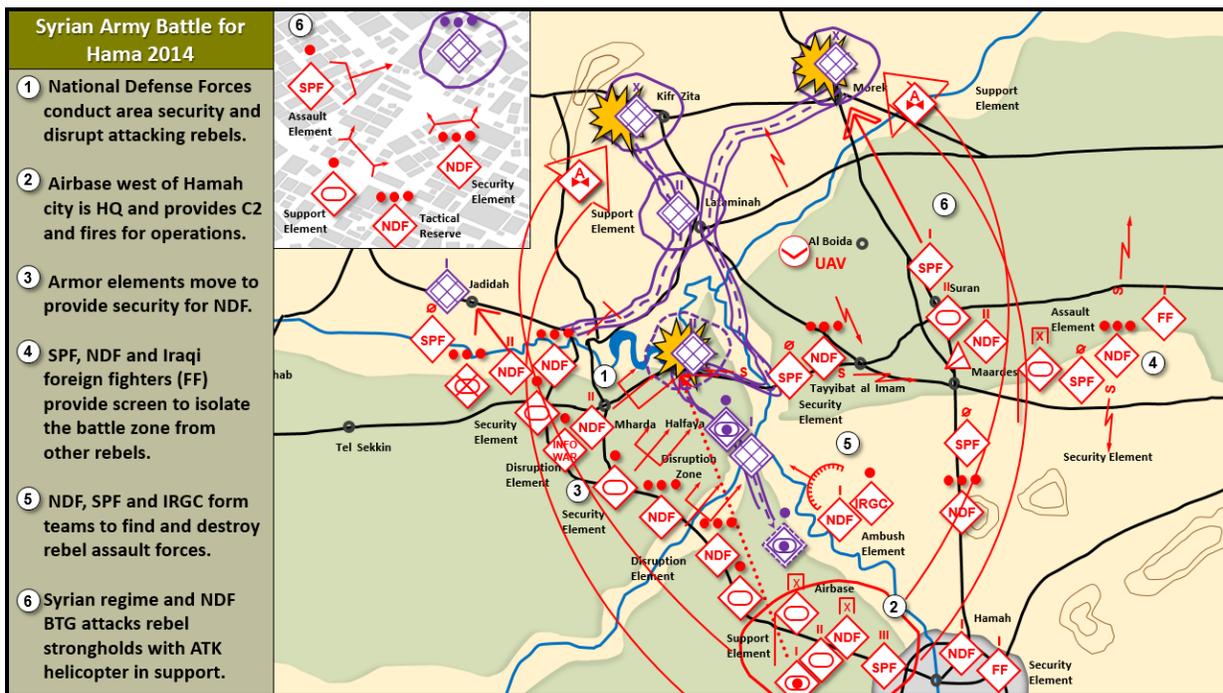


Figure 4. Syrian regime operations in Hama province 2014 (example)

## Section 3: Syrian Weapons and Equipment

Most of the equipment on this list represents estimated pre-civil war equipment levels for the Syrian Government. As mentioned above, Syrian regular army units are at 50–70% strength. Information on many of the following platforms can be found in the 2014 [Worldwide Equipment Guide](#).

# Threat Tactics Report: Syria



ARMY <sup>68</sup>					
Armored Equipment in Service		Artillery Systems in Service		AT/SAM Weapons in Service	
T-72 Upgraded	122	82mm Mortar	200	AT-3 Sagger	3500
T-72M	1478	M-1943 120 mm Mortar	400	AT-4/5	350
T-62M / K	1000	M-160 160 mm Mortar	100	AT-10/15 Kornet	2,000
T-55 / T-54	2200	M-240 240 mm Mortar	10	Milan	200
T-55 ARV	UNK	M-1938 122 mm	150	SA-24 Strelets (Igla-S)	32
BMP-1	2450	D-30 Howitzer 122 mm	500	SA-7 Grail	UNK
BMP-2	100	M-46 130 mm	800	SA-14 Gremlin	UNK
BRDM-2	950	D-20 152 mm	20	SA-16 Igla-1	UNK
BTR-152	560	M-1937 152 mm	50	Sa-18 Igla	UNK
BTR- 50/60/70/152	1,040	S23 180 mm	10		
BTR-4	26	2S3 152mm	50		
ZSU-23	400	2S1 122mm	400		
D-30 mntd on T-34 chassis	50	Tunguska-M1	6		
		ZU-23-2	650		
		M-1939 37 mm	300		
		S-60 57 mm	675		
		KS-19 100 mm	25		
		KS-12 85 mm	25		
		Type-63 107 mm MRL	200		
		BM-21 220 mm MRL	300		
		BM-27 Uragan 220 mm MRL <sup>69</sup>	UNK		
		9A52-2 Smerch-M 280 mm MRL <sup>70</sup>	UNK		
ARMY AVIATION					
Fixed Wing Aircraft in Service		Rotary Wing Aircraft in Service		Missiles in Service	
				FROG Missile	18
				Scud Launchers	24-36
				Scud B Missile	200
				Scud C Missiles	8
				SS-21 Launcher	18
				SS-21 Missile	36
				SS-21 Scarab Missile	200
				No Dong	UNK

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				SS-C 1B Sepal	4
				SS-C-3 Styx	6
AIR FORCE					
Fixed Wing Aircraft in Service		Rotary Wing Aircraft in Service		Missiles in Service	
Su-24	20	Mi-2 Hoplite	20	SA-2/3 Guideline	600
MiG-29 SMT	14	Mi-8 /171E	100	SA-3 Goa	
Su-22	90	Mi-25 Hind D	48	SA-5 Gammon	48
MiG-23 Bn	44	SA 342 Gazelle	42	SA-6 Gainful	200
MiG-21	170			SA-8 Gecko	60
MiG-23	90			SA-9 Gaskin	20
MiG-25	30			SA-11 Buk M1	UNK
MiG-29	22			SA-13 Gopher	35
MiG-25R	6			SA-17 Buk M2	UNK
MiG-21 H/J	8			SA-22 Pantsir	12
UAV	Limited			TOR M1 Gauntlet	UNK
Training	139				
Transport	22				
NAVY					
Vessels		Aviation			
Petya-III	2	Ka-28 Helix ASW Helicopter	2		
OSA I and II	10	Mi-14 Haze ASW Helicopter	13		
Patrol Craft	8				
Mine Warfare Craft	5				
Polnocny Amphibious	3				

## Section 4: Syrian Military Organization

Many in the midlevel leadership as well as many of the conscripts within the Syrian military were from the Sunni majority. As the conflict became increasingly sectarian, Sunni soldiers and officers defected or deserted the military. Alawite officers do not trust their Sunni soldiers and their personal security is provided by Alawites.<sup>71</sup>

Loyalty to the regime is a prized trait among the Syrian military's current leadership. Although there are some exceptions, many high-ranking leaders are from the Alawite religious sect to which the president and his family belong. Even before the civil war, elite formations of special purpose forces, the republican guard, and certain heavy units such as the 4th Armored Division were predominantly Alawite in their makeup. Possibly for political purposes, there are a number of Sunni officials holding high-



ranking positions in the Syrian Armed forces. These units are used for offensive operations and for defending key elements of the Syrian government.

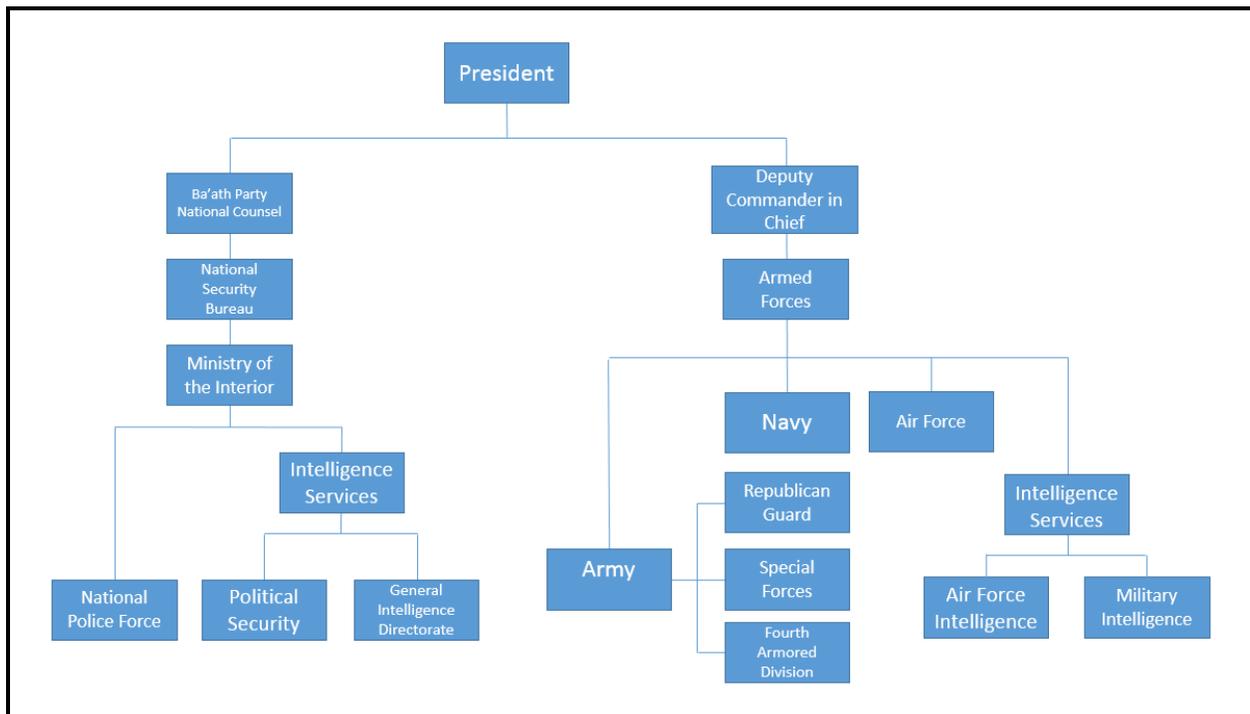


Figure 5. Military leadership of Syria<sup>72</sup>

## Military Capabilities

### Command and Control

The Commander in Chief of the Syrian military is the president. Below the president is a traditional military structure similar to the Soviet military system. High-level ranks include the following:

- General
- Lieutenant General
- Major General
- Brigadier General
- Colonel

Ranks below colonel are the same as in most armies. There are three ranks among warrant officers. There are only six grades of enlisted ranks. The navy and air force are arranged similarly with the highest ranks being the equivalent of an army lieutenant general (vice admiral) and colonel general (general), respectively. Among the more elite units the rank structure follows the normal military lines. However, officers from these units are granted more authority due to their functions and social standing in Syrian society.



Since the beginning of the civil war, Iranian influence is well-documented in the Syrian decisionmaking process. The current strategy of holding the provincial capitals as a show of governmental power is suspected by observers of the conflict as having Iranian origins, mainly from Iranian Quds Force Commander Major General Qassem Suleimani.<sup>73</sup>

The Syrian military's ability to conduct combined joint operations is low due to a number of factors including distrust among regular units, obsolete equipment, and a lack of confidence in the other services besides the army.<sup>74</sup> However, the current conflict is forcing the military to adopt new approaches to exercising command and control over a multinational, unevenly-trained force. One example is to attach less-reliable regular army units and national defense forces to loyalist command and control structures.<sup>75</sup> This allows commanders to have more combat power and to maintain discipline with loyalists in key leadership positions. This command and control technique was reportedly used in al Qusayr when elements of Hezbollah retook the town using Syrian governmental units in support.

## Maneuver

As a predominantly heavy armored force, the Syrian army was not prepared with the proper tactics and force structure to fight a guerrilla-based insurgency.<sup>76</sup> Seize and starve tactics that were designed to isolate the enemy in its safe havens were only moderately effective. The humanitarian toll of these types of operations had a detrimental effect on governmental forces' ability to gain support from fence-sitters both in the area of operations and in the world of public opinion.

Armored operations in urban areas were unsuccessful when executed without proper terrain analysis and infantry support. As a result, Syria suffered significant losses to its most advanced main battle tanks. Consequently, Syrian military leaders have sought to integrate light forces with armor to attempt to reduce anti-armor capabilities before committing tanks to the attack.

## INFOWAR

The Syrian Regime is adept at using a variety of cyber-related techniques to gain intelligence and influence and inform both support and opposition groups. Social media was recognized early on as an outlet that needed to be monitored and controlled in order for the regime to influence events on the ground. After a series of nuisance attacks that included website defacement and propaganda campaigns of social media outlets, the Syrian regime has steadily improved its abilities to penetrate high-profile websites. In 2013 a news feed from a respected news outlet falsely reported an attack on the White House. As recently as June of 2015, western media attributed a crash on a US Army website to the Syrian Electronic Army.

Computer security firm Fireeye also reported on a concerted effort by the Syrian regime to hire pro-government computer trolls to find and exploit Syrian opposition fighters. The report explained how regime hackers used avatars of single women to lure fighters into an image exchange in which they were able to install malware. The avatar images were actually Trojans that contained the remote administrative tool Dark Comet and allowed regime hackers to access the opposition's computers.<sup>77</sup>

Propaganda is a major element of the Assad regime's ability to control information and to propagate themes and narratives that support the government's brand of secular Arab nationalism. The regime has capitalized on the widespread use of social media and other new forms of information technology to



manipulate public opinion by allowing disinformation to spread to the point where it is difficult for target audiences to distill fact from fiction. In practice, the Syrian regime attempts to focus on the brutal activities of the opposition and to maintain the narrative of a stable and legitimate central government in Syria. President Assad conducted an interview with western media in which he declared that his regime is defending itself against terrorism and highlighted efforts to engage opposition groups in independent negotiations. This control leveraged on all forms of media, including traditional mass media and new social media, has allowed the regime to foster claims of legitimacy by discrediting opposing views.

Another propaganda element is the National Defense Force (NDF). Civilians taking a proactive role in the defense of Syria is an example of loyalty to the state. President Assad explained his views in a recent speech, saying, "Syria is not for those who live in it or those with Syrian citizenship; it is for those who defend it." The effect it has on the NDF fighters, their families, and neighbors is twofold depending on what side a person is on in the Syrian civil war. For those against the regime, the NDF is illustrative of just how far the rebellion has to go before it can be successful. If the regime continues to absorb recruits then it is likely that the war will last a long time. For those that are pro-regime, NDF fighters represent security at the lowest level and the legitimacy of President Assad's government. This sense of national identity is a part of the propaganda campaign that has allowed the Syrian regime to stay in power.

## RISTA

All Syrian maneuver units have the ability to execute a reconnaissance mission to support the overall objective. The reconnaissance force could include a mix of elements from any of the regular divisional or independent infantry and armored brigades, or special purpose forces regiments.<sup>78</sup> Tactical units may also send out independent reconnaissance patrols (IRPs) to perform ground reconnaissance. The size of such patrols can vary, but in today's fight the Syrian army usually opts for a reconnaissance or combat arms platoon, often augmented with Hezbollah or other irregular light infantry and engineers.

In theory, Syrian special purpose forces (SPF) may form additional IRPs, or their personnel and vehicles can supplement patrols formed by other reconnaissance or combined arms units. In the early days of the current Syrian conflict, Syrian SPF patrols located and eliminated opposition leaders suspected of radicalism within contested areas. Before the civil unrest began, however, the Syrian SPF units supported border security operations and guarded sensitive defense facilities throughout the country.<sup>79</sup> While many SPF units provided intelligence and information on external threats to Syria, some SPF units were not prepared to conduct counterinsurgency operations against their own populations. This led to a number of defections not just among the ranks of the special purpose forces but in the regular forces as well. Most of the SPF were considered among the most loyal of the Syrian armed forces and President Assad allocated to them the best weapons as well as support from the Syrian security apparatus. Reconnaissance forces geared for border security, such as the 14th Special Forces Division, received the mission of canalizing attacking forces into conventional forces engagement zones.<sup>80</sup> These experiences were useful for interdicting rebel forces attempting to cross into Syria with men and materiel.

## Fire Support

Syria has a large number of indirect fire equipment including mortars, self-propelled artillery, and towed artillery pieces. Additionally, the air force provides air support to ground forces and conducts independent operations against remote targets. The Syrian government's use of chemical weapons has

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been noted and, despite efforts to discontinue their use, it is questionable whether or not there are more weapons available for future use.<sup>81</sup>

Fires by both artillery and rockets as well as by attack aircraft are an important element of the Syrian government forces' offensive and defensive tactics. In Syria's urban combat theaters (Aleppo, Damascus, Homs), controlling and holding high ground has been fundamental. Tunnel blasts are one of the few ways to successfully counteract the adversary's control of high ground in this conflict. In most cases fires are used to degrade and displace enemy positions before ground forces attempt an assault. Reports of the use of advanced Russian multiple rocket launchers and aircraft to deliver a range of munitions, including cluster bombs, is indicative of the Syrian government's willingness to pursue specialized technology in order to prevent enemy freedom of maneuver and remain in power.<sup>82</sup>

## Protection

The use of improvised armor and berms in static fighting positions aids in the survivability of armored vehicles against anti-armor weapons. Additionally, the use of dismounted troops as observers for tank direct fire has allowed tanks to be more effective when establishing a situational defense. Syrian forces will also use heavy machine guns to suppress the enemy while tanks move into position to decisively engage enemy fighting positions.

The NDF also provides protection for Syrian regular forces by identifying concentrations of enemy forces and establishing which quarters are most dangerous. As a local militia, the NDF is best suited for providing intelligence on enemy dispositions in its areas.

In order to combat mines and booby traps, Hezbollah forces with special engineer training were used throughout the theater. The Syrian army uses specialized mine-clearing vehicles, known as MTK-2 Meteorit, to create mobility corridors using a thermobaric charge.<sup>83</sup> Command and control techniques that assign sectors to various sections of an urban area of operations allow for limited engineer assets to methodically clear enemy fighting positions.

The use of snipers to lay suppressive fires on known enemy locations has allowed follow-on forces to penetrate deeper into rebel-controlled sectors in relative confidence. Russian sniper rifles were used extensively in Aleppo, Homs, and Duma.<sup>84</sup>

## Logistics

At the strategic level, much of Syria's support comes from Russian and Iran. In 2011 Syria signed a 4 billion dollar military aid package with Russia.<sup>85</sup> Supplies and spare parts are delivered via the sea ports in Tartus and Latakia as well as being flown in to the various air bases throughout the country.<sup>86</sup>

The roadways connecting the major cities and military installations throughout the country represent the lines of communication for the Syrian forces. The main Damascus and Aleppo highway connects the north and south of the country, as well as linking Damascus to the Alawite-dominated areas in the west. Hezbollah maintains bases and facilities in Lebanon and uses sea ports to bring in supplies from Iran. The border between Lebanon and Syria is porous, with men and materiel moving both in and out of Syria via known smuggling routes. Lines of communication from the Bekaa Valley in Lebanon to battlefronts in Damascus run through the Qalamoun Mountains and have been at the center of Hezbollah's efforts in Syria since 2013.



Remote military installations, including airbases, are supplied primarily by air—especially in areas with a significant rebel presence. In some cases supplies are air-dropped via parachute to Syrian governmental units.<sup>87</sup>

## Air Defense

The main perceived threat against Syrian airspace is from the Israeli air force. The Syrian air defense effort is one of the largest in the Middle East and consists of mainly Soviet-era technology. This includes a mix of tactical- and strategic-level surface-to-air missile (SAM) systems that provide redundant protection for Syrian airspace. Syrian air defense equipment has received a number of upgrades, including improved early-warning radar systems. The deployment of Syrian strategic SAMs is designed to defend against threat ingress routes focusing on major population centers, the coastal areas, and the southwestern part of the country. The air defense forces also possess a number of empty sites that are used to increase flexibility if missile systems need to be repositioned or if there is a need to take additional air defense systems out of storage in response to a threat.

At least eight air defense sites have been compromised by rebel forces. The loss of these sites, especially in rebel-controlled areas along the Turkish border, could enable attacks from aircraft stationed in Turkey.

## UAVs

Due to aircraft losses in the Syrian air force, investment in air defense and early warning systems has been redirected, at least temporarily, to the acquisition of systems such as UAVs. The situation has caused the Syrian regime to seek assistance from its allies and their proxies to locate and destroy an enemy that is familiar with the governmental forces' tactics, techniques, and procedures.<sup>88</sup> Syrian forces are known to use UAVs to provide intelligence on enemy locations and to assist in locating targets for artillery and air strikes.<sup>89</sup> The use of UAVs provides situational awareness and preserves combat power that can then be used for decisive operations. Iran supported the Syrian regime by providing a wide array of UAV technology. Relatively-advanced platforms such as the Shahed-129, with a possible range of 200 km and an endurance of 24 hours, appear in insurgent videos.<sup>90</sup> A recent video shows a Russian-made mini-UAV known as Eleron 3SV that was claimed to have been shot down by members of Jubhat al Nusra.<sup>91</sup> Hezbollah fighters also used UAVs and enhanced optics to patrol potential enemy mortar point-of-origin sites aimed at security outposts and to locate and engage rebel fighters traversing the border area between Sunni support zones in the Lebanese Bekaa Valley and the village of Yabrud in Syria.<sup>92</sup>

## Chemical Weapons

The Syrian government maintains a chemical weapons program, which provides it with a strategic deterrent against perceived threat actors in the region.<sup>93</sup> The Syrian government did sign the Chemical Weapons Convention in 2013 after it was accused of using nerve agents in Khan al Assal and Al Qusayr.<sup>94</sup> This spurred western governments to consider airstrikes and motivated the Syrian regime to reveal at least a portion of its chemical weapons facilities.<sup>95</sup> In light of a series of major setbacks for the Syrian government, there is a chance that it could use hidden chemical weapons to ensure its survival.

There are also examples of the Syrian government using toxic industrial chemicals such as chlorine against targets throughout the country. Barrel bombs loaded with chlorine have reportedly been utilized



throughout the conflict and their use is being expanded as the Syrian government deals with having to protect political, military, and economic sites.<sup>96</sup>

## Conclusions

Before the current civil war, the Syrian army was mainly a heavy ground force and thus not suited for urban combat. Conducting population- and resource-control operations from armored vehicle and tanks is difficult and sends the wrong message when the intent is to influence the population to reject rebel narratives and accept government authority. Syrian forces attacked population centers using anti-aircraft guns and tanks to destroy suspected enemy positions with little regard for the civilians in the area. This type of heavy-handedness isolated populations and increased their resolve to fight against Syrian regular forces. Additionally, heavy weapons lacked the maneuverability to pursue lightly-armed insurgents in an urban battlefield. Hezbollah provided experienced fighters with recent combat experience against Israel to assist the Syrian army in areas where it was lacking the experience necessary to root out rebels in complex battle positions and safe havens throughout the cities of Syria. This assistance included reconnaissance, engineer support, snipers, and light infantry to augment Syrian heavy forces.

## REAL-WORLD CONDITIONS APPLIED TO TRAINING

The [TC 7-100 Hybrid Threat series](#), the [Decisive Action Training Environment \(DATE\)](#), and the [Worldwide Equipment Guide](#) provide training resources for applying real-world conditions to training. The tactics used by the Syrian army can be found as part of the composite threat model that exists in the Hybrid Threat Doctrine series. The Syrian army uses principles of offense and defense very similar to those present in TC 7-100.2 *Opposing Force Tactics*. Additionally, the operational environment outlined in DATE includes characteristics of the Hybrid Threat that can be modified to represent the actors currently associated with the Syrian army.

- Most aspects of the Syrian military would be easy to replicate in a training environment.
- The pro-government militias and other foreign fighters that support the Syrian regime can be replicated using the various irregular forces contained in DATE 2.2 with minor adjustments to capabilities. For example, certain units of the Syrian National Defense Forces could include elements from motorized, mechanized, and armored formations in the Hybrid Threat Force Structure.
- The environmental conditions in Syria are complex and involve a wide array of actors with unique objectives. DATE 2.2 allows for this with the various irregular organizations present in Ariana, Atropia, Donovia, Gorgas, and Limaria.

## Replication in Training

Of the countries in DATE, the one that can most realistically replicate Syria from a capabilities perspective is Ariana. Like Syria, Ariana is a country intent on growing its national power through diplomatic, informational, military, and economic means. Recent years of economic sanctions have forced Ariana to develop military capabilities indigenously. Ariana is not a complete representation of

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Syria, however, due to how its military is equipped. In order to portray Syria in a training environment, Ariana’s military would need to include additional irregular forces.

For information on how to build a force structure to conduct these actions, reference [TC 7-100.4 Hybrid Threat Force Structure Organization Guide](#) (Chapter 3, Section VIII “Building an OPFOR Order of Battle”). The table below contains excerpts from the TC 7-100.2 that define the tactical actions discussed in this report.

TC 7-100.2 Tactics	
<p><b><i>Offensive Operations Towards An Enemy On The Move (Annihilation Ambush)</i></b></p>	<p>3-151. The purpose of an <i>annihilation ambush</i> is to destroy the enemy force. These are violent attacks designed to ensure the enemy’s return fire, if any, is ineffective. Generally, this type of ambush uses the terrain to the attacker’s advantage and employs mines and other obstacles to halt the enemy in the kill zone. The goal of the obstacles is to keep the enemy in the kill zone throughout the action. Using direct, or indirect, fire systems, the support element destroys or suppresses all enemy forces in the kill zone. It remains in a concealed location and may have special weapons, such as antitank weapons.</p>
<p><b><i>Offensive Operations Towards An Enemy In The Defense (Integrated Attack)</i></b></p>	<p>3-64. <i>Integrated attack</i> is an offensive action where the OPFOR seeks military decision by destroying the enemy’s will and/or ability to continue fighting through the application of combined arms effects. Integrated attack is often employed when the OPFOR enjoys overmatch with respect to its opponent and is able to bring all elements of offensive combat power to bear. It may also be employed against a more sophisticated and capable opponent, if the appropriate window of opportunity is created or available.</p>
<p><b><i>Mobile Defense (Maneuver Defense)</i></b></p>	<p>4-62. In situations where the OPFOR is not completely overmatched, it may conduct a tactical <i>maneuver defense</i>. This type of defense is designed to achieve tactical decision by skillfully using fires and maneuver to destroy key elements of the enemy’s combat system and deny enemy forces their objective, while preserving the friendly force. Maneuver defenses cause the enemy to continually lose effectiveness until he can no longer achieve his objectives. They can also economize force in less important areas while the OPFOR moves additional forces onto the most threatened axes.</p>

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<b>Positional Defense (Area Defense)</b>	<p>4-85. In situations where the OPFOR must deny key areas (or the access to them) or where it is overmatched, it may conduct a tactical area defense. Area defense is designed to achieve a decision in one of two ways:</p> <ul style="list-style-type: none"> <li>• By forcing the enemy’s offensive operations to culminate before he can achieve his objectives.</li> <li>• By denying the enemy his objectives while preserving combat power until decision can be achieved through strategic operations or operational mission accomplishment.</li> </ul>
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**Table 1. Excerpts from TC 7-100.2 *Opposing Force Tactics***

Additional considerations for replicating Syria in training environments would be replicating Syria’s capabilities in five key areas. These areas are combined arms, CBRN, fire support including air support, INFOWAR, and SPF. Syria’s capabilities in these five areas are currently being used and are illustrative of Syria’s adaptive strategy. The chart below details how training centers could replicate a capability comparable to that of Syria.

Capability (What)	Actor/Order of Battle (Who)	Tactic (How)
<b>INFOWAR</b>	Ariana has an INFOWAR brigade (section 2C-9 of DATE) that can be used for INFOWAR replication.	TC 7-100.2 <i>Opposing Force Tactics</i> Chapter 7 FM 7-100.1 <i>Opposing Force Operations</i> Chapter 5  To replicate Syria: Highlight strategic INFOWAR operations discussed in the TC.
<b>RISTA</b>	Ariana has a very robust RISTA capability with a dedicated command. The order of battle of this command can also be found in DATE section 2C-9.	TC 7-100.2 <i>Opposing Force Tactics</i> Chapter 8 FM 7-100.1 <i>Opposing Force Operations</i> Chapter 6  To replicate Syria: Place emphasis on militia, guerrillas, and INFOWAR capabilities.
<b>Fire Support</b>	Ariana has a very powerful fire support capability. Its units are equipped with tier 1 fire support. To replicate Syria, a training center could use Ariana’s fire support orders of battle; however, the systems would need to be reduced to tier 2 capability.	TC 7-100.2 <i>Opposing Force Tactics</i> Chapter 9 FM 7-100.1 <i>Opposing Force Operations</i> Chapter 7  To replicate Syria: Make prolific use of “annihilation fire.”
<b>Air Defense</b>	Ariana has a robust air defense capability made of primarily tier 2 systems. Arianian air defense units can be used to replicate Syria’s air defense assets.	TC 7-100.2 <i>Opposing Force Tactics</i> Chapter 11 FM 7-100.1 <i>Opposing Force Operations</i> Chapter 9  To replicate Syria: Highlight missile systems.

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SPF	Syria has placed great emphasis on its SPF capability in recent years and Ariana's SPF capability can sufficiently represent that of Syria'.	TC 7-100.2 <i>Opposing Force Tactics</i> Chapter 15 FM 7-100.1 <i>Opposing Force Operations</i> Chapter 13 To replicate Syria: Highlight amphibious and airborne operations discussed in the FM.
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**Table 2. How to use doctrine to replicate Syria**

## Related Products

Follow these links to view related products:

- [Syria Quick Guide November 2012](#)
- [SHABIHA Threat Report Jul 2012](#)
- [The Battle for al Qusayr, Syria](#)
- [Syrian Electronic Army \(SEA\) Targets Qatar](#)

See also the [Red Diamond Newsletter](#), which contains current articles on a variety of topics useful to both soldiers and civilians ranging from enemy tactics and techniques to the nature and analysis of various threat actors.

For detailed information on weapons and equipment, see the [Worldwide Equipment Guide](#).

To see more products from ACE Threats Integration, visit the Army Training Network (ATN) with CAC access: [https://atn.army.mil/dsp\\_template.aspx?dpID=377](https://atn.army.mil/dsp_template.aspx?dpID=377).

## POC

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**Note: Not all references listed in this publication are readily available to the public; some require a government common access card (CAC) to view.**

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## Figure Credits

Figure 1. Syrian force structure. ACE-TI, 17 August 2015.

Figure 2. Integrated attack on al Qusayr (example). ACE-TI, 17 August 2015.

Figure 3. Syrian army and irregular forces disruption zone (example). ACE-TI, 17 August 2015.

Figure 4. Syrian regime operations in Hama Province 2014 (example). ACE-TI, 17 August 2015.

Figure 5. Military leadership of Syria. ACE-TI, 17 August 2015.

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