INSTABILITY IN SYRIA:

Assessing the Risks of Military Intervention

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Executive Summary

Syria's stability and its role in regional security politics have become steadily more uncertain since early 2011. The country has now experienced eight months of popular protests. Despite a lack of political cohesion or unity of purpose among the country's opposition forces, rural areas and smaller cities continue to experience increasingly armed unrest. Meanwhile, the regime's crackdown on dissent has shown little to no sign of abating as the country's Alawite-led praetorian security forces attempt to restore order and quash unrest.

The chorus of international pressure on Syria has steadily increased. The US and EU have bolstered unilateral sanctions regimes, turned to the UN to deepen international pressure and have openly called for President Bashar Al-Asad to step aside. Turkey, until recently one of the regime's closest allies, has been one of Syria's most vocal critics. Lastly, the conservative Gulf monarchies, which continue to have reservations about regional popular unrest, have nonetheless pushed ahead with Arab League efforts to further isolate Syria.

On the one hand, local and expatriate Syrian forces opposed to the regime are backed by the West, and key Arab and Sunni states such as Saudi Arabia and Turkey. On the other hand, the Al-Asad regime enjoys the support of its key regional ally Iran, support from Hezbollah in Lebanon, and strong international backing from Russia and China – countries that could play counter-revolutionary roles during what is increasingly looking like a "long winter of Arab discontent."[1]

A number of countries – including US NATO allies such as France and Turkey – increasingly entertain the prospect of creating a "humanitarian corridor" in Syria, potentially along the border with Turkey, to provide relief to both the Syrian population and dissident groups opposed to the Asad regime. These calls are echoed by Syrian opposition forces both in and outside Syria, including the so-called Free Syrian Army (FSA) and the Istanbul-based Syrian National Council (SNC).

These calls do not address the real world challenges of creating such a "humanitarian corridor": joint and combined military operations to suppress Syria's air defense network, the need to neutralize the country's air force, eliminating Syria's asymmetric deterrence by containing unconventional threats from long range missiles (potentially armed with chemical or biological agents) and instability along the Golan Heights. They also do not address the risk of eventually having to engage loyal Syrian ground forces (including large concentrations of Alawites) that see few prospects in a post-Asad Syria.

Some consider military intervention in Syria to be a potential next step in shifting the regional balance in favor of the US and its allies. There is little question that sustained military operations in Libya would have been impossible without American logistics, targeting, command and control and sheer military capacity. In the case of Syria, military intervention is similarly unlikely to succeed without US involvement. However, military intervention, in the Middle East, let alone near the epicenter of the Arab-Israeli conflict, always involves serious risks and the impact of the law of unintended consequences.

There now is only limited support in the US, Europe, and the Arab world for direct intervention in Syria. However, the same could also have been said in the lead-up to

operations in Libya. There are also reasons why the US might directly (or indirectly) take the lead in such efforts. The withdrawal of US troops from Iraq has left many questions about the future role and influence of the US, especially in the context of strategic competition with Iran. Instability in Syria presents Washington with the opportunity to undermine Iran's regional posture, weaken or change the leadership of one of its key regional allies and potentially to downgrade the Islamic Republic's role in the Arab-Israeli conflict through Hezbollah.

Syria is not Libya. While the later may be geographically much larger, it is a mostly empty country with a small population and very limited military capacity. In contrast, Syria's population is more than three times larger than Libya, has almost 30 times the latter's population density and a much larger and far more capable military overall. All of these factors complicate any calculus on military intervention in Syria, whether in terms of the level of potential military opposition, or with regards to the risk of high civilian casualties.

Opposition forces in Syria do not control territory, nor do they currently have military resources at their disposal to mount more than hit-and-run attacks. Most attacks by the FSA, while potentially coordinated, seem to have limited tactical or strategic depth and have yet to present a serious challenge to units loyal to the regime. While Libya's opposition forces were divided, Syria's are far more so, with little unity or agreement on the use of violence as a means to an end, and discord about the potential role of foreign intervention. The bulk of the security forces remain largely loyal as decades of over-recruiting from mainly rural minority groups bares fruit in terms of a strong corporatist military culture.

As the US and its allies weigh options for their next-steps in their Syria policies, they need to consider a number of key military and political factors that shape the prospects for any form of direct intervention:

- Syria's military forces have many qualitative limitations, particularly in terms of modern weapons, combat readiness, and recent combat experience. They are, however, very large and months of protests, and concern over a potential Israeli strike on Iran, have made them more alert. They would need to acquire more modern and capable systems, such as major surface-to-air missiles (SAMs) and a new sensor and C4I network to defeat a major US-led air operation, but it would take a far more advanced operation than was the case in Libya, and Syria's leverage over Hezbollah, and Syrian long range missiles, air and coastal defense systems, and chemical and biological stockpiles present another kind of challenge.

- Despite defections and desertions, Syria's praetorian military units may have little choice but to rally around the Asad regime. Given their limited prospects in a post-Asad Syria, heavily Alawite elite units with sizeable numbers of loyal Sunnis will likely perceive no alternatives to defending the regime in the event of wider intervention.

- Armed opponents of the regime, such as the Free Syrian Army, are an important development. However, their size, structural limitations, their predominantly Sunni character and as-of-yet limited command and control and offensive

capabilities mean that the FSA has limited prospects in the short term for presenting a meaningful counterweight or alternative to the Syrian military. It is far more likely that the group's insurgency will be used as a platform by the Asad regime to weaken an already divided Syrian opposition.

- Syria's internal divisions are not new. However the Asad regime has managed to escalate Sunni-Alawite tension to the point that it has taken a life of its own and could be difficult to bring under control by any of the country' political forces. This presents the risk that any escalation in Syria's instability is likely to be sectarian, with real prospects for deepening divisions and broadening communal segregation. A divided Syria, once an unlikely worst case scenario for Syrians, grows increasingly probable as a result.
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- Given Syria's relatively high population density and the close proximity of civilian and military centers, it is unlikely that airstrikes in or near major urban centers – even with advanced targeting – will result in fewer casualties than the number of Syrians the Asad regime is thought to have killed so far.

- The Asad regime may react by pursing strategies that risk deeper regional destabilization as a means of deterring its regional and international opponents. It could also undertake desperate efforts to secure the future of the Alawite community. Syria's potential responses – which include turning to regional proxies and its BCW-capable ballistic missile holdings – range in scale but all have potentially catastrophic consequences for Syria and the region. They also vary considerably based on what triggers Syrian escalation.

- In the event of further escalation in Syria, there is no certainty that regional spillover effects can be contained. Lebanon, Jordan and Iraq are susceptible to instability, as are Israel and Turkey. The scale of Sunni-Shi'a regional acrimony, the stalled Arab-Israeli peace process and uncertainty about future political forces warrant a degree of caution.

- The prospect of direct escalation in Syria may trigger kneejerk reactions from both Iran and its Lebanese ally Hezbollah. This includes deflecting attention from Syria and heightening the costs of intervention by escalating tensions with Israel. Should intervention take place, there is little to prevent Iran and its allies in Lebanon and Iraq from undertaking potentially destabilizing action in Syria not unlike the cycle of violence in Iraq in the wake of the US invasion.

- Russia has emerged as a key player in balancing against further intervention in Syria. It is likely that Moscow will opt to heighten the stakes further through military posturing in the Mediterranean and "game-changing" military aid to Syria to deter the US and its allies from further escalating in Syria and raising the prospect of Libya-style intervention in the Levant. Other members of the so-called "BRICS" countries, crucially China, can also be expected to bandwagon with Russia at least at the level of the UN Security Council.

It could be argued that even without further escalation, a year of Syrian instability has been a critical setback not only to the Asad regime, but also to Iran and Hezbollah. Syria's future will be governed largely by uncertainty and prolonged malaise. Given the range of risks, the US and its allies should consider carefully the potential costs and unintended consequences of further intervention in Syria.

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Syria has been a key player in US-Iranian competition in the Levant, and has been Iran's most important strategic partner over the past 30 years. Since Syria's 2005 military withdrawal from Lebanon, the regional partnership between Syria and Iran has become increasingly skewed in favor of the latter. However, Syria remains critical to Iran's efforts to shape a favorable security situation in Lebanon and along Israel's northern frontier. This helps explain why the US has repeatedly sought to reorient or downgrade Syria's long-held role as Iran's gateway to the Levant.

After more than eight months of popular unrest in 2011, Syria's internal stability and its role in regional security politics have both become far more uncertain. As the regime continues its crackdown on dissent, international pressure on Syria has also steadily increased. The US and EU have bolstered unilateral sanctions regimes, turned to the UN to deepen international pressure and have openly called for President Bashar Al-Asad to step aside. Turkey, until recently one of the regime's closest allies, has been one of Syria's most vocal critics. Lastly, the conservative Gulf monarchies, which continue to have reservations about regional popular unrest, have nonetheless pushed ahead with Arab League efforts to further isolate Syria.

On the one hand, local and expatriate Syrian forces opposed to the regime are backed by the West, and key Arab and Sunni states such as Saudi Arabia and Turkey. On the other hand, the Al-Asad regime enjoys the support of its key regional ally Iran, support from Hezbollah in Lebanon, and strong international backing from Russia and China – countries that could play counter-revolutionary roles during what is increasingly looking like a "long winter of Arab discontent."[2]

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This report explores Syria's options and possible reactions to outside military intervention. It examines Syria's air defense systems, its Air Force, capacity in conducting electronic warfare and its ballistic missile capability – all critical as regional and international actors consider some form of military intervention in Syria. It will also discuss some of the real world military and non-military challenges and unintended consequences that Western, Turkish or Arab intervention could entail on Syria, the region and US policy towards the Levant.

Assessing Syrian Defenses

Any Western military intervention in Syria must deal with Syria's air defenses, tackle the country's air force and contain risks from unconventional and asymmetric threats. The US was indispensable to any NATO or UN-led military effort in Libya and the same applies to Syria. Only the US has the mix of capabilities and capacity to support and sustain such a military effort should it every come to pass.

As the following section shows, Syria's air and air defense forces have serious shortcomings. These limitations present a number of opportunities. They do not, however, negate the fact that Syria has very large, active forces or mean that any intervention would not encounter significant risks and uncertainties, or potentially deepen Syria's internal divisions and have an impact on the Arab-Israeli conflict.

Syrian Air Defenses

When Syria abandoned its efforts to achieve "strategic parity" with Israel in the 1980s it shifted toward "strategic deterrence" through increased investment in air defense systems. This effort became unaffordable once the Soviet Union broke up and Russia ceased to provide major aid and loans for arms sales. Even a reduced pace of military modernization proved to be an unaffordable economic burden on Syria, and Damascus had to sharply reduce the rate of military modernization across its armed services. Some three decades later, most Air Defense, Air Force and Army equipment are ageing and in many cases obsolete.

Figure 1 shows the projected strength of Syrian land-based air defenses in 2010. Syria's system has many obsolescent and obsolete weapons and sensors and is vulnerable to US and Western real-time targeting, precision air and missile attacks, and electronic countermeasures. It has a weak command and control system, as well as serious training and readiness problems.

The effectiveness of many of the Syrian surface-to-air missile systems listed in **Figure 1** is increasingly uncertain. Advances in air targeting and long-range, air-to-ground precision combat capability – coupled with steady advances in the long-range strike capabilities of rockets and missiles – have reduced the effectiveness of many Syrian short-range air defense systems. Some have limited or no effectiveness against low-flying helicopters unless the pilots cannot avoid overflying the defenses. Many others lack the range, lethality, and ease of maneuver to attack fighters that can use long-range air-to-surface missiles.

Figure 2 shows the order of battle of Syrian medium to long range SAM systems in 2010. There are no major Syrian SAM installations tasked with protecting Syria's northern flank along the border with Turkey – not unusual given Syria's traditional focus on Israel and, until recently, warm relations with Ankara. While some major SAM systems can provide interdiction and targeting over the country's north-west, barring a difficult re-deployment of mainly static units, Syria's north-east lacks any major SAM coverage.

Despite the scale and concentration of Syrian air defenses in and around strategic positions and reports of SA-2 upgrades, the country's longer-range surface-to-air missile, sensor, and C4I/ battle management systems are now so old that US and other advanced

electronic and other countermeasures, including anti-radiation missiles, can deprive them of much of their effectiveness. If Syria's forces use their radars persistently they can be located, characterized, and jammed or killed. If they make sudden use of their radars, or remote radars further to the rear, reaction times are slow and lethality is low. Another core weakness of Syrian SA-2, 3 and 5 systems is that they are static and it is difficult to redeploy them quickly.

While the risks posed to aircraft equipped with modern electronic warfare (EW) and jamming systems may be relatively low in the context of rapid transit operations, there are real risks to aircraft targeting Syrian air defense, ground and air targets as part of loiter and target acquisition operations.

In spite of various upgrades and "patches" over time, Syria lacks a modern, integrated mix of sensors and battle-management systems to tie together its surface-to-air defenses. While this is also true of Israel, this is partially compensated by a significant capability to perform such operations. Though the Syrian system is increasingly vulnerable, it still has some capability and Syria has improved its shorter-range air defense systems. However, the survivability of both Syrian radars and hardened and dispersed Syrian command facilities is increasingly questionable.

Figure 3 shows the disposition of Syrian SA-5 batteries and their fire ranges. Although they have serious limitations and are designed largely to deal with the long-range, slow moving and maneuvering threats of the 1980s, Syria's SA-5/S-200 batteries are its most recent major SAM acquisition. Damascus was the first country outside the then-Soviet Union to acquire the system in 1983. Deployed in Homs and south of Dumayr Airfield, each SA-5 is equipped with a complete early warning command and control system, with a third at Jabal Al-Mani. Radars supporting the system include height finders, acquisition, tracking and guidance.[3]

The SA-5 system is little more than a long range high altitude system, although it is able to hit vulnerable targets at a maximum range of 250 km. As a result, it is integrated, with a mix of SA-6, 7, 8 and 9 SAMs and ground troops with anti-aircraft guns to safeguard against low altitude penetrating targets and those with active and electronic countermeasures. They are linked by Soviet-era C2 systems that were integrated into the present Syrian system.[4]

These weaknesses in Syria's air defense systems have led it to repeatedly try to acquire more modern medium and long range SAM systems. Syria has long sought Soviet-designed S-300 and S-400 surface-to-air missiles – which have many of the advantages of the US-built Patriot. Most recently, it was reported in 2009 that Syria began taking delivery of the Russian 96K6 Pantsir-S1 self-propelled short-range gun/surface-to-air missile air-defense system. This comes some four years after an order for 36 systems was signed. It is unclear if these systems are operational, let alone integrated into Syria's increasingly obsolescent air defense holdings.

Figure 1: Syrian Land-Based Air Defense Systems in 2010

Service	Major SAMs	Light SAMs	AA Guns
Air Defense Command (60,000)	*25 AD Bde* *150 SAM Bty* *320 SA-2* *148 SA-3* *195 SA-6* *44 SA-5*	**Total : 4,000** 4,000 SA-7A/SA-7B	**Some 4,000 air defense artillery**
Army		**Total : 4,184+** 4,000+ SA-7 14 SA-8 SP 20 SA-9 SP 20 SA-11 30 SA-13 100 SA-14 Some SA-18	**Total : 1,225+** 600 ZU-23 23 mm ZSU-23-4 23 mm M-1937 37 mm 600 S-60 57 mm 25 KS-19 100 mm

Note: Figures in italics are systems operated by the Air Force or Air Defense commands. "Bty" are batteries. "Bde" are brigades.

Source: Adapted by Anthony H. Cordesman and Aram Nerguizian from the IISS, *The Military Balance*, various editions. Some data adjusted or estimated by the author.

Figure 2: Syrian Medium to Long Range Order of Battle in 2010
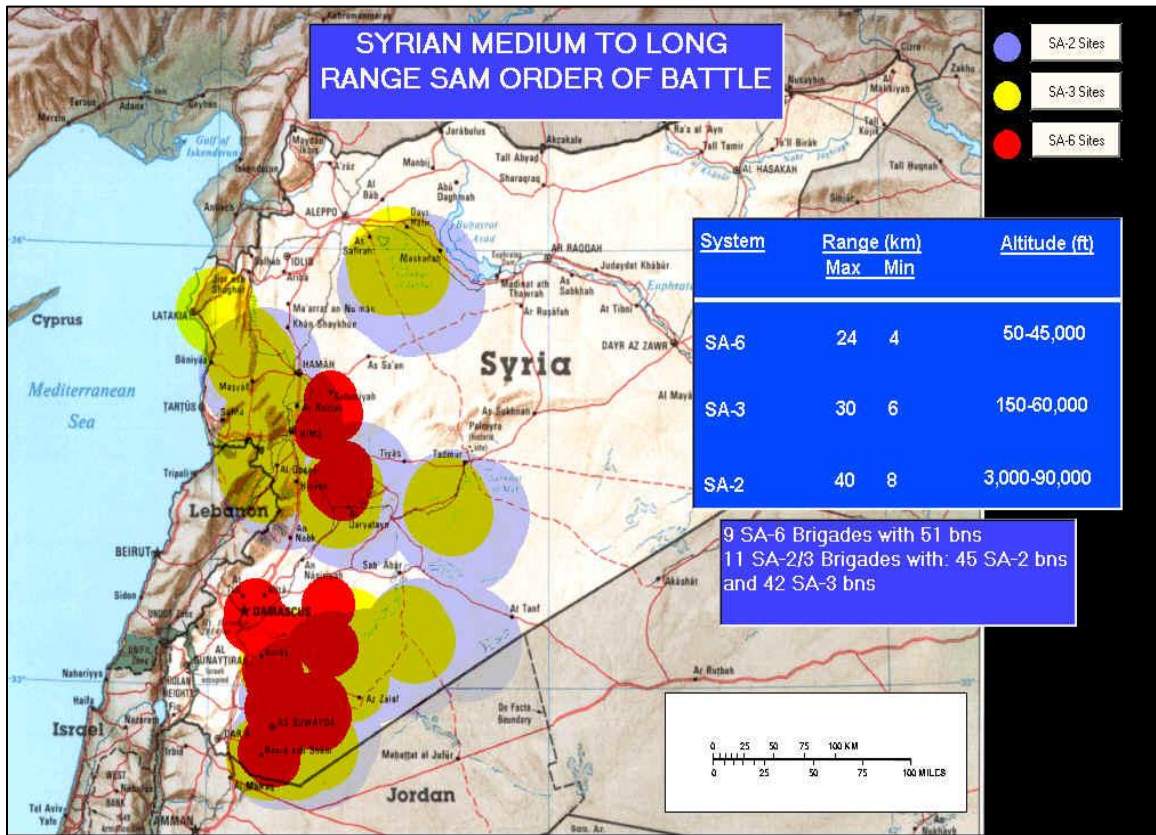
Source: Anthony H. Cordesman & Abdullah Toukan, "Options in Dealing with Iran's Nuclear Program," *Arleigh A. Burke Chair in Strategy Report*, CSIS, March 2010; Anthony H. Cordesman & Abdullah Toukan, "Israeli-Syrian Air and SAM Strength Analysis: Working Estimate of Force Numbers and Locations," *Arleigh A. Burke Chair in Strategy Report*, CSIS, November 25, 2008.

Figure 3: Syrian SAM-5 Ranges in 2009
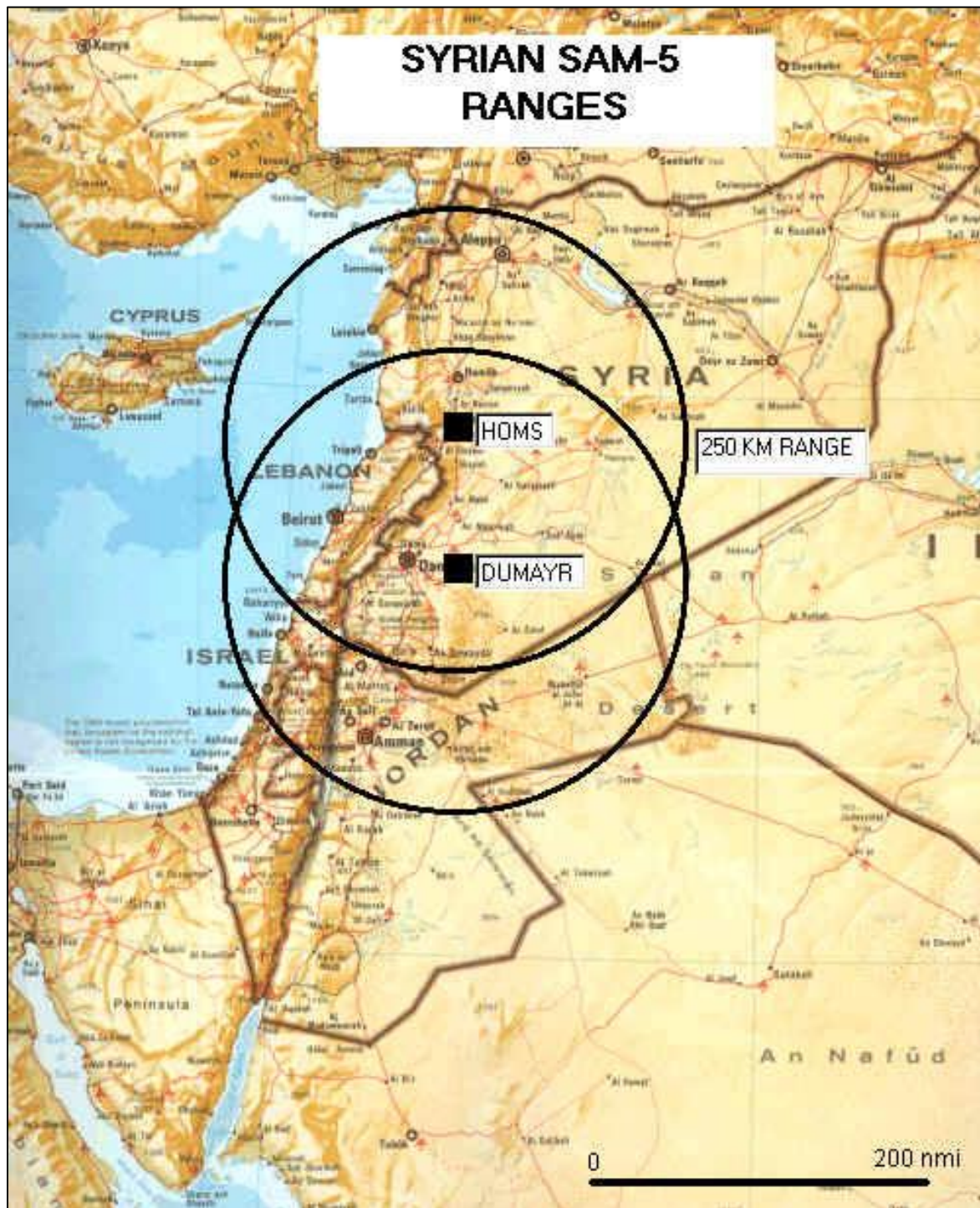
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Electronic Warfare

Syria's air defense and air force suffered massive losses during the Israeli invasion of Lebanon in 1982, and Syria undertook a lengthy and extensive effort to upgrade its electronic counter-measures (ECM) and electronic warfare (EW) support systems. This included acquiring a mix of Russian and some Western ground forces intercept and jamming equipment. In the 1980s, Syria purchased five Italian ESS-2 electronic surveillance systems to collect electronic intelligence against ground based radars operating in the D to J bands. Russia also provided airborne jamming and interception equipment to counter Terrain Following Radar (TFR) and Side looking Airborne Radars (SLAR).[5]

Today, Syria has built up a very dense, if obsolescent, ground based EW and reconnaissance system, most of which is fielded near the Golan Heights and along the borders with Lebanon. Despite these efforts, Syrian conventional military EW systems are ageing and only offer capability in relation to Israel with little to no role in countering other potential threats. Syria does not have the ability to produce sophisticated ECM or intelligence gathering equipment, and continues to have major weaknesses in early warning, air battle management, signals intelligence (SIGINT) and weapons targeting – all critical in controlling any potential combat theater for modern warfare.[6]

The Syrian Air Force

Syria maintains much larger numbers of combat aircraft than it can properly support – in effect, disarming by over-arming. If one only looked at the total aircraft numbers, Syrian forces would have a lead in aircraft in the region. This is driven in part by the large number of obsolete and obsolescent aircraft in the Syrian forces. Syria is also trying to train for, maintain, arm, and sustain far too many different types of aircraft. This puts a major – and costly – burden on the air force and dilutes manpower quality, and does so with little, if any, actual benefit.
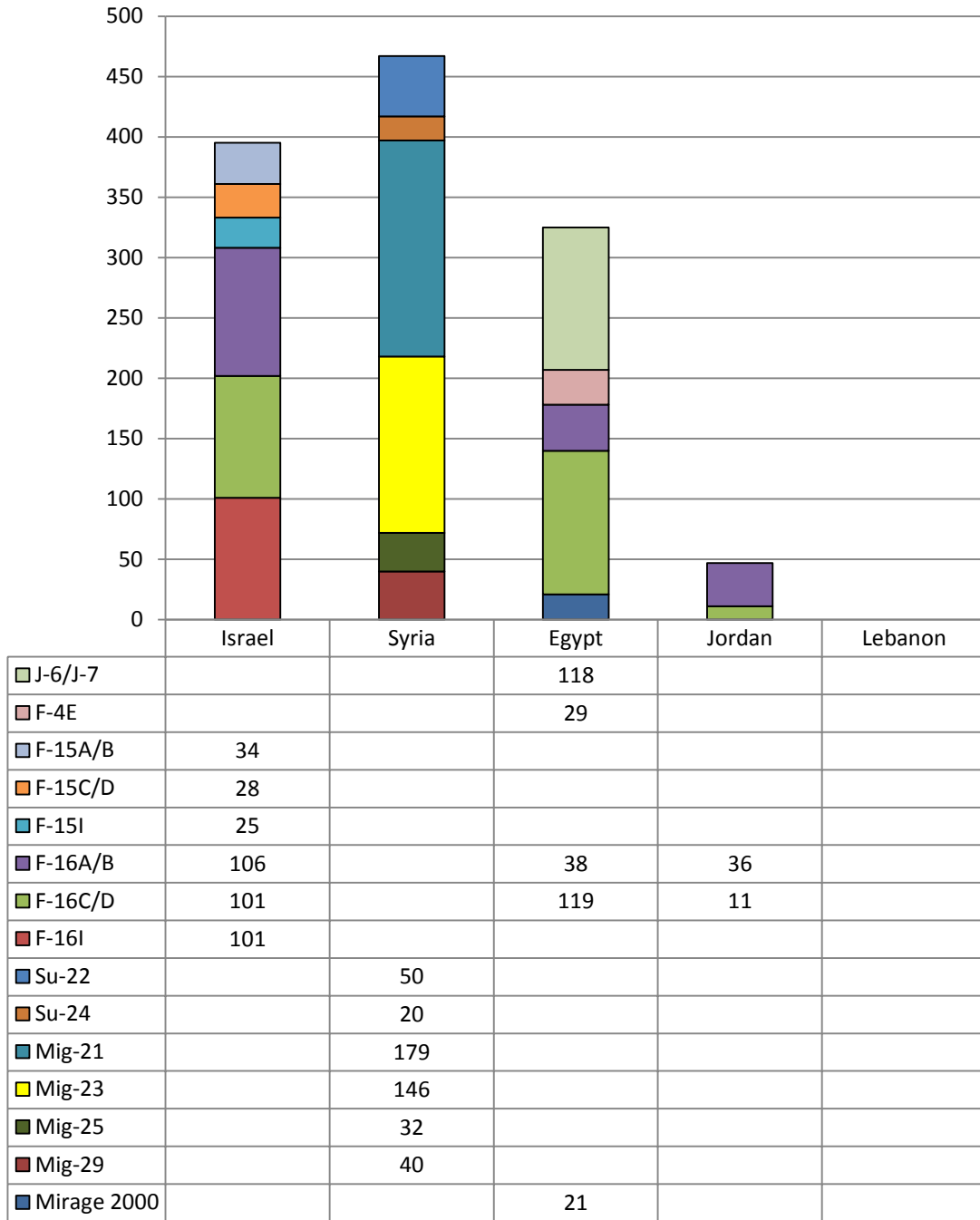
Figure 4 shows the number of high-quality aircraft in the region. While the number of total combat aircraft is not irrelevant, in war-fighting terms, high quality air assets are the ones that really count. **Figure 4** also shows that Syria, whose dated export versions of the MiG-29s and Su-24s now have obsolescent avionics, cannot compete with modern Western aircraft. Still, they do constitute a real threat. Syria has done far more in terms of modernization over the past two to three decades than Libya.

Figure 5 shows the Syrian Air Force's order of battle in 2010. As with Syrian air defense systems, there are no units that were tasked directly with providing overwatch along Syria's northern border with Turkey before the current level of unrest began in Syria, and most of Syria's more capable systems remain focused on Israel and the Golan Heights. Most of the aircraft stationed in the region are ageing Mig-21-type training aircraft. Most of Syria's more modern aircraft, including Su-24, MiG-23, MiG-25 and MiG-29 interceptors and ground attack aircraft are stationed at the Sayqal, Dumayr, Tiyas, and An-Nassiriah airbases near the capital Damascus. It remains unclear whether hangars and shelters at these facilities have been hardened in an effort to counter sophisticated guided "bunker-buster" munitions, such as the GBU-15 and GBU-28, but it is very doubtful that they would survive a hit with the GPS-guided versions of such weapons.

It is far more difficult to gauge the intangible aspects of Syrian Air Force capabilities. There is little information available on the morale of the force. Experts do agree, however, that the force continues to experience long C4I early warning delays, long responses/scramble times by combat aircraft, low operational readiness, low combat sortie rates and an over-centralized battlement management system.[7] During the 1982 conflict with Israel, Syrian pilots showed a readiness to undertake what amounted to little more than suicide missions against the Israeli Air Force (IAF) simply on the order of President Hafiz Al-Asad.[8] While the capabilities gap between Israel and Syria in 1982 is difficult to dispute, today the gap between Syrian and NATO capabilities and the psychological effect on the Syrian Air force are far greater.

Figure 4: High-Quality Operational Arab-Israeli Combat Aircraft in 2011

(Does not include stored, unarmed electronic warfare or combat-capable RECCE and trainer aircraft)

	Israel	Syria	Egypt	Jordan	Lebanon
J-6/J-7			118		
F-4E			29		
F-15A/B	34				
F-15C/D	28				
F-15I	25				
F-16A/B	106		38	36	
F-16C/D	101		119	11	
F-16I	101				
Su-22		50			
Su-24		20			
Mig-21		179			
Mig-23		146			
Mig-25		32			
Mig-29		40			
Mirage 2000			21		

Source*: Adapted by Aram Nerguizian from the IISS*, The Military Balance*, and discussions with U.S. and regional experts.

Figure 5: Syrian Air Force Order of Battle in 2010
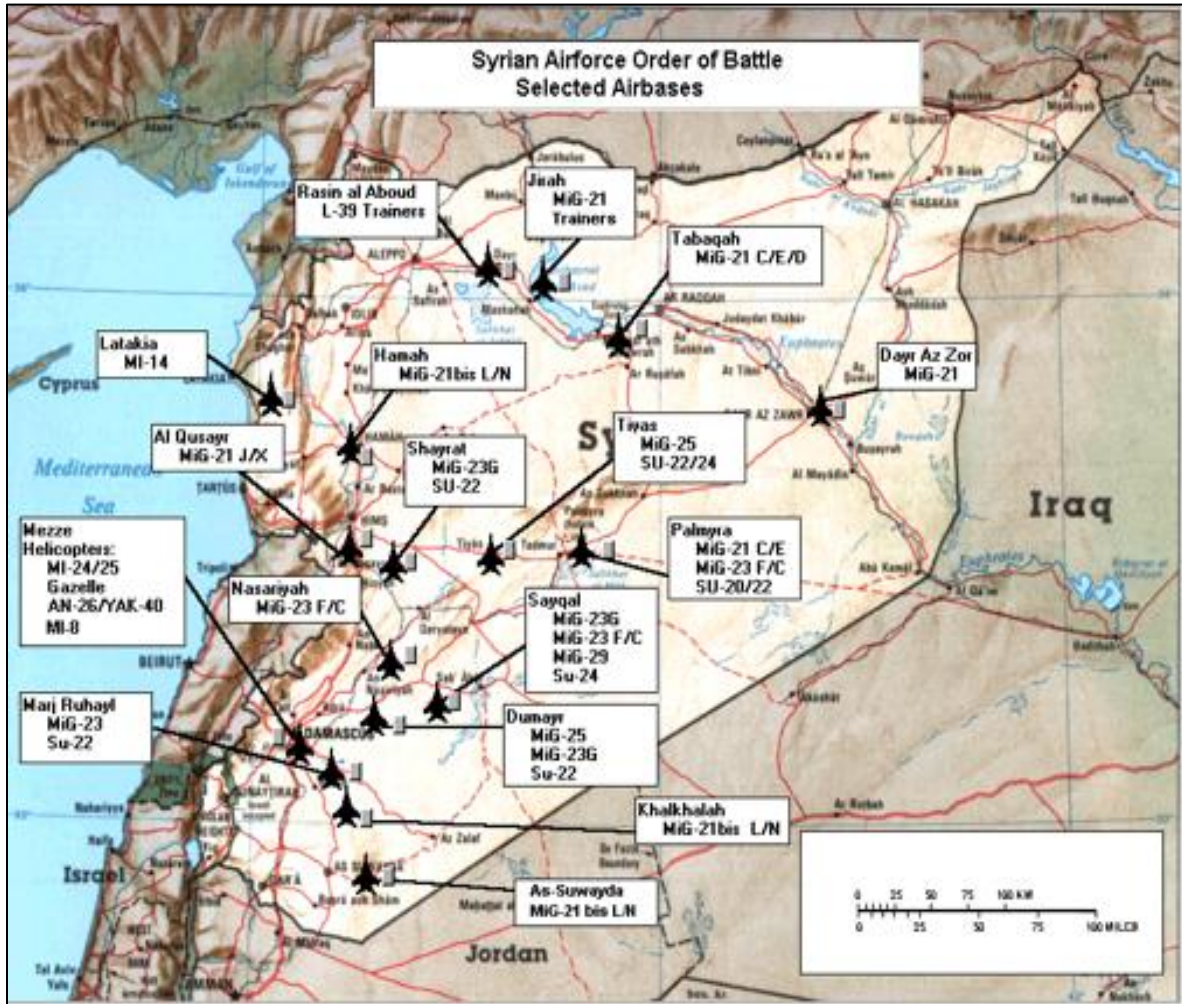
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Syrian Surface-to-Surface Missiles

In the wake of its failures in fighting the Israel Defense Forces (IDF) in 1982, Syria has focused far more on proxy warfare through groups like Hamas and Hezbollah, and it has moved to acquire other means of strategic deterrence such as chemical, biological and surface-to-surface missile (SSM) systems. Syria could turn to its SSM holdings as a means of deterring potential threats and further escalation – SSMs that would have to be accounted for and suppressed.

Figure 6 shows Syrian SSM holdings reported in 2011. There is no definitive or fully reliable open source data on Syria's tactical or ballistic missile holdings, or on the readiness and combat capability of the systems now deployed – including their warhead design and lethality, maximum range with the warheads actually deployed, operational accuracy, reliability, and Syria's targeting plans and capabilities.

In 2011, IISS estimated that Syria had some 850 medium and short range tactical SSM.[9] Meanwhile *Jane's* reported in late 2001 that Syria's Surface-to-Surface Missile Command (SSMC) based in Aleppo managed holdings that included some 100 "FROG-7s" (70 km maximum range), dozens of SS-21 "Scarabs" (120 km range), some 200 "Scud-Bs" (310 km range) and up to 80 "Scud-C" (600 km maximum range) ballistic missiles. *Jane's* also reported that other independent units could be deploying the 700 km range "Scud-D" variant as early as 2001.[10]

Figure 6: Arab-Israeli Surface-to-Surface Missiles in 2011

Country	Med/Long Range SSM	Short Range SSMs	MRLs
Syria	94+ SSM 18 Scud B/Scud C/Scud D 30 look-a-like	18 FROG-7 18+ SS-21 Tochka (Scarab) 4 P-35 (SS-C-1B Sepal) 6 P-15M Termit-R (SS-C-3 Styx)	+/- 200 Type 63 107 mm +/- 300 BM-21 122 mm

Note: Medium range SSMs have a range in excess of 70km and includes SRBMs and IRBMs.

Source: Adapted by Anthony H. Cordesman and Aram Nerguizian from the IISS, *The Military Balance*, various editions. Some data adjusted or estimated by the authors

Figure 7 shows the projected range of Syrian major SSM systems with nominal warheads. Their real world operating range with the weight of warheads actually deployed is unknown, as is how their real world impact on accuracy and reliability varies with distance. **Figure 7** does not show the range of reported "Scud-D" holdings. Many if not most countries that have applied growing pressure on Syria in the wake of protests are within theoretical range. However, outside the Arab-Israeli arena, it is unlikely that Syria can turn that into a strategic capability to gain diplomatic advantage. That being said, these systems remain a serious threat by virtue of their mobility and the inherent difficulties in accounting for and killing all of Syria's major missile systems.

Syrian holdings of "Scud-B" missiles have a nominal range of 300 kilometers, a 985-kilogram payload, and operational accuracies of 1,500-2,000 meters. Reports of circular error probabilities (CEPs) as low as 450 meters are theoretical rather than real.

Syria also has up to 150 "Scud-C" missiles with 18-26 launchers. These are North Korean modifications of Russian designs – probably variants of the "Hwasong 5" although some elements of "Rodon 1" technology are possible – and have accuracies that range from 1,500-2,200 meters – although theoretical CEPs as low as 500 meters are reported in some sources. Reports that Syria's "Scud-D" holdings had a CEP of only 50 meters do not seem accurate. The "Scud C" has a nominal range of 500 kilometers, but a small warhead could extend the range.

Syria can, however, use the uncertainties in such threats against Israel and its other neighbors. On December 4, 2011, Syria test-fired a "Scud-B" in a move many interpreted as a signal against any foreign intervention in the country.[11] While Syria's larger SSMs may lack accuracy, their unconventional use as a delivery system for potential BCW payloads presents a far more potent risk. While the US and its regional allies – including Israel, Saudi Arabia and Turkey – have invested in anti-missile capabilities, the consequences from a potential BCW strike on civilian population centers or critical military and infrastructure systems – especially in Israel – cannot be ignored or cast aside.

Many experts believe Syria has chemical warheads for its Scuds, and other rockets and missiles. Some experts believe these include cluster bomb warheads with both chemical and conventional munitions. No unclassified data exist on the lethality of such warheads, but states of the former Soviet Union are known to have transferred some data on such designs, and Syria is believed to have mustard gas, and a range of nerve agents, including persistent nerve gas.

In 2001, *Jane's* reported that Syria test-launched a "Scud-B" carrying a simulated chemical warhead, adding that Syria was believed to have large stockpiles of mustard, Sarin and VX agents as options for arming its SSMs.[12] Another report went on to add that of all the agents in its biological and chemical warfare (BCW) arsenal, Sarin nerve gas is the most common; Syria was reported to be producing the agent in the mid-1980s.[13]

It is unclear, however, whether Syria has advanced beyond unitary or relatively simple cluster warhead designs and delivery systems. It is equally unclear that Syria has the capability to test chemical weapons warheads, and redefine any design to produce high levels of reliability and lethality for a given weight of agent. The operational lethality of a chemical missile warhead might well be a small fraction of its theoretical lethality, and the weight of agent would have to be much smaller than in a bomb of similar weight and far harder to disperse even if the system functioned perfectly. As a result, they could be little more than "terror" weapons, and far more effective as a threat than in actual use.

All of the countries in the Levant, except Lebanon, have the technology base to manufacture first and second-generation biological weapons, but no reliable data exist to prove they are doing so. There are some indicators that Syria and Iran have at least explored the production of both chemical and biological weapons, and it is possible Syria could have biological designs. The lethality of any such warheads, however, would be extremely uncertain without extensive operational testing against live targets, and would present far more problems in producing an effective and reliable weapons system than line source delivery from low flying aircraft or cruise missiles. While some expert disagree, there also does not seem to be any reliable way to simulate the real world

operational lethality of biological weapons and much of the effectiveness data in the open literature grossly exaggerates probable real world capability. In practice, such warhead might fail to have any effect.

It should also be noted that while most threat analysis focuses on missiles, Syrian aircraft can almost certainly deliver chemical bombs, including cluster weapons. It is unclear that Syria has high payload unmanned combat aerial vehicles, but these might also deliver chemical weapons, and an aircraft or UCAV that slowly dispersed a stable biological agent would be far more effective than any probable missile warhead. Moreover, dry storable biological agents can be used in covert attacks. The use of such weapons does not seem likely, and would provokes a level of retaliation that would almost certainly destroy the Syrian regime, but it is important to look beyond missile warfare in assessing potential chemical and biological threats.

Figure 7: Projected Ranges of Current Syrian Missile Delivery Systems
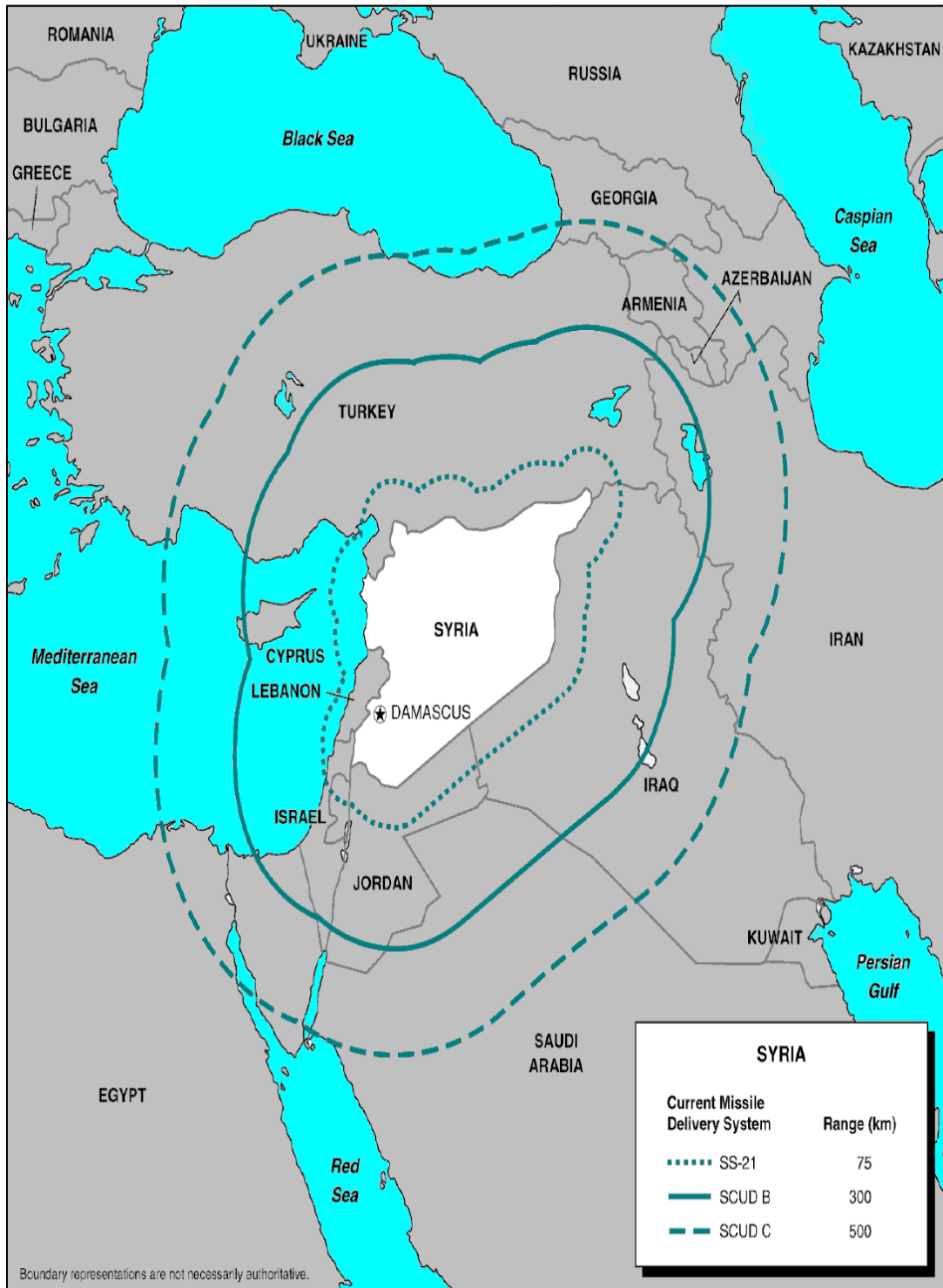
Source: Anthony H. Cordesman & Abdullah Toukan, "Israeli-Syrian Air and SAM Strength Analysis: Working Estimate of Force Numbers and Locations," *Arleigh A. Burke Chair in Strategy Report*, CSIS, November 25, 2008.

Syrian Anti-Ship Defenses

Syria's shift toward "strategic deterrence" of Israel also led to the increased acquisition of ship-mounted as well as on-shore mobile and static anti-ship guided missiles rather than more modern naval vessels. Given the need for ship-based C4ISR, naval aviation and other naval operations, the quality and capabilities of Syria's anti-ship systems are of critical concern as members of the international community ponder the pros and cons of intervention in Syria.

In 2008, Syria's coastal defenses had two infantry and two artillery brigades for coastal surveillance and static defense. One coastal anti-ship missile brigade was reported to be armed with 8-12 batteries of aging SS-C-1B "Sepal" and SS-N-2 "Styx" anti-ship guided missiles (ASGMs).[14] Syrian land-based "Sepal" and "Styx" batteries positioned in Banias, Latakia and Tartus are older systems and are regarded as obsolete by current standards.[15] In addition to land-based systems, Syria also has 16 *Osa*-class and six *Tir*-class fast attack boats armed with the SS-N-2C "Styx" and the more modern CSS-N-8 "Saccade" anti-ship missiles (ASMs) respectively.[16]

Anti-ship cruise missiles (ASCMs) mounted on small fast patrol craft have become an increasingly important element of Syria's coastal defense strategy as part of the "lessons learned" from the 2006 Israeli-Hezbollah war. These include the Iranian-built "Noor" ASCM, a clone of the Chinese C-802 ASCM with a range of 120 km. The system proved effective in 2006 when Hezbollah used it to successfully target and severely damages the Israeli Navy's flagship, the *Sa'ar 5*-class missile corvette, the INS *Hanit*.[17]

These systems are vulnerable to active defenses and countermeasures, but the acquisition of truly modern anti-ship systems by Damascus would make it far more difficult and costly to consider military intervention in Syria, in addition to impacting the broader Israeli-Syrian conventional military balance. In 2007, Russia agreed to provide Syria with the highly capable SS-N-26 "Yakhont" supersonic ASCM system. In late 2010, Russia indicated it would honor the controversial deal, potentially as a means of protecting its naval base in the Syrian port city of Tartus (which is expected to undergo major upgrades and modernization to accommodate larger vessels in 2012). Multiple sources reported that Russia delivered unspecified numbers of "Yakhont" ASCMs to Syria in December 2011 to fulfill the $300 million deal.[18]

The "Yakhont" is capable of reaching a maximum speed of Mach 2-2.5, and can deliver a 200 kg warhead out to a range of 300 km with a "hi-lo" high altitude trajectory and a range of 120 km on a "lo-lo" sea-skimming trajectory. Unlike most other ASMs, the "Yakhont" relies on passive homing for the majority of its flightpath and only resorts to active tracking in the final stages of flight. Coupled with its speed and low altitude approach, the "Yakhont" significantly reduces warning time, thereby increasing the vulnerability of ships offshore to attack.[19]

Reports indicate that the missiles are meant to operate as part of the "Bastion" land-based mobile coastal defense system, which can field as many as 36 missiles; Damascus has indicated interest in acquiring at least two "Bastion" systems. Russian sources claim that the "Bastion" system is extremely easy to man and operate with a command and control deployment time of 3-4 minutes and less than 5 minutes to bring the missile system to combat readiness from its stowed position.[20] However, these reports are unverified and

there is no reliable data on whether the "Bastion" is operation in Syria. If and when the system becomes operational, the "Bastion" can provide the Asad regime with the means to deter naval military forces along Syria's entire coastline.[21]

Wildcards of Intervention

A western-led military campaign to suppress Syrian air defenses, fighter aircraft and SSMs, and to cripple the country's C4ISR[22] may be successful in achieving those limited goals. However, a number of wildcards could complicate any effort to conduct military intervention in Syria.

Why Syria is not Libya

Syria is not Libya. **Figure 8** illustrates Syrian and Libyan national and military indicators in early 2011. Libya is geographically far larger and mostly empty with a smaller population and very limited military capacity overall. In contrast, Syria's population is more than three times larger than Libya's, has almost 30 times the latter's population density and a much larger and far more capable military overall. Libya has persistent tribal and ethnic divisions. However, Syria's sectarian and ethnic divisions run far deeper and resonate far more with regional tension along Sunni and Shi'a lines.

Unlike in Libya, Syrian opposition forces do not control strategic territory, nor do they currently have military resources at their disposal to mount more than hit-and-run attacks. The Asad regime enjoys a far greater degree of control over the country than did the Gadhafi regime. While Syria's state structure is not robust by any measure and has shown signs of deep stagnation and decay for decades, 40 years under Gadhafi utterly decimated Libya's state structure and any semblance of state-society relations. Meanwhile, the Asad regime has shown it can rely far more on praetorian military units and a significant cross-segment of the Syrian population, including most minority groups (either out of fear or by choice) to either defend its interests or not to undermine the regime further. The bulk of the security forces remain largely loyal in no small part thanks to decades of over-recruiting from the mainly rural Alawite community, which has resulted in a strong corporatist military culture.

While Libya's opposition forces were divided, Syria's are far more so, with little unity or agreement on the use of violence as a means to an end, and discord about the potential role of foreign intervention. Unlike Libya, Syria complicates the calculus of external actors by virtue of its sectarian and ethnic divisions. By some estimates, Syria's population includes 74 percent Sunni Muslims, 10 percent various Christian groups, and the Alawite community and the Druze account for the remaining 16 percent. Meanwhile, Arabs account for some 90.3 percent of the population while Kurds, Armenians and other minorities account for the remaining 9.7 percent.[23]

Taken together, these factors complicate any calculus on NATO-style military intervention in Syria, whether in terms of the level of potential military opposition, or with regards to the risk of high civilian casualties.

Figure 8: Comparing Syrian & Libyan National and Military Indicators in 2011

	Syria	Libya***
Total Population Size*	**22.5 million**	**6.5 million**
Area	**185,180 sq km**	**1,759,540 sq km**
Population Density**	**110 per sq km**	**4 per sq km**
Military Active Manpower	**295,000**	**76,000**
Military Reserve Manpower	**314,000**	**40,000**
Army Manpower	220,000	25,000
Main Battle Tanks (MBTs)	4,950	800
Armored Infantry Fighting Vehicles (AIFVs)	2,450	1,000+
Armored Personnel Carriers (APCs)	1,500	945
Artillery	3,440+	2,421
Anti-Tank Missiles	2,600	3,000
Light Air Defense	4,184+	424+
Navy Manpower	5,000	8,000
Major Naval Surface Combatants	2	2
Minor Naval Surface Combatants	22	16
Mine Warfare Capable	7	4
Air Force Manpower	40,000	18,000
Total Combat Capable Aircraft	555	394
Surface-to-Air Missiles (SAMs)	4,707	216+

"*": Based on IISS data.
"**": Based on United Nations population data.
"***": Libyan estimates show levels before the uprising and subsequent military operations in the country
Source: Adapted by Aram Nerguizian from the IISS, *The Military Balance*, various editions. The United Nations Population Division. Some data adjusted or estimated by the author.

The Syrian Population

Syrian opposition forces calling for a Western-backed no-fly zone are doing so at least in part to provide relief to the Syrian population in the wake of a crackdown by the Asad regime with at least 5,000 people dead according to UN estimates. While the creation of a no-fly zone over Syria may go some way towards accomplishing this goal, it is also fraught with risk and could exacerbate the plight of average Syrians.

As was mentioned above, Syria has a relatively large population with densely packed urban centers. A number of key military installations are located close to urban centers. These include the core of the Syrian Armed Forces' command and control structure in Damascus, the headquarters of the 2nd Corps in Zabadani near the capital, the 3rd Corps in Aleppo – the country's largest city, naval bases and coastal defenses in or near major cities such as Banias, Latakia and Tartus, and other targets. Even with advanced targeting, it is unlikely that airstrikes in or near major urban centers will result in fewer casualties than the number of Syrians the Asad regime is thought to have killed so far.

Refugee flows to Syria's neighbors is another challenge. Military operations at Jisr al-Shughur earlier in the year prompted thousands of Syrian refugees to cross over into Turkey. Any outside military intervention is likely to trigger a much larger wave of migration as refugees, fearing the prospect of civil war, flee to neighboring countries such as Turkey, Lebanon or Jordan.

Military intervention, however unlikely, will not come as a surprise; backing from the Arab League or escalating rhetoric in the UN or NATO will mean that Syrians will likely expect escalation. Many could take steps to seek shelter outside of Syria, while a good deal are likely to seek shelter in other parts of the country; potentially creating a large scale internally displaced persons (IDP) crisis.

The regime of Bashar Al-Asad has consistently played the sectarian card to rally Alawite and Christian minority support, but there are indications that this strategy is increasingly difficult for Damascus to control.[24] Divisions between pro and anti-regime Syrians coupled with sectarian tension could lead to population groups growing increasingly segregated – divided along communal lines in a form of soft cleansing that could quickly shift to violence not unlike levels seen in Iraq. Military intervention and the perception the balance may be shifting against the regime only serves to up the stakes and increase the likelihood of communal violence in Syria.

The Syrian Military

There have been defections from the Syrian military's lower ranks; however the bulk of the Syrian military has so far remained loyal to the Asad regime. How these forces react in the lead-up to, during and after intervention is critical both to the Asad regime and its opponents at home and abroad.

There is no accurate data on the sectarian composition of the Syrian military, let alone on the true scale of Alawite manpower or control of key posts. What is certain is that Alawites – which have traditionally hailed from the country's poorer rural periphery – have had a strong presence in the military at least since independence. Recruits from the sect accounted for more than 55 percent of the non-commissioned officers in 1955.[25] More affluent Sunnis – both then and now – are less inclined towards military service and, unlike the Alawites, are far less likely to gravitate towards Ba'athi corporatist politics.[26]

By one account, Alawites accounted for more than 61 percent of the officer corps in 1995, with most of those hailing from Asad's own Al-Kalbiyyah tribe.[27] Alawites had also gradually risen to lead core units of the military, commanding at least seven out of nine army divisions by 1992.[28] Today, Sunnis are reported to make up the bulk of the army's mainly-conscript force while the Alawites continues to dominate the officer corps and key command postings.[29]

In 2011, the IISS reported that the Syrian Armed Forces had 295,000 active forces, including some 220,000 in the Army and another 100,000 paramilitary forces associated to the ruling Ba'ath party. The Army, which constitutes the bulk of the military's manpower, counts some 175,000 poorly-trained conscripts on 30-month long tours of service. While the land forces include significant holdings of main battle tanks (MBTs),

other armored vehicles and artillery, the emphasis on static defense and garrison duties have had detrimental effects on force quality and adaptability.[30]

The Syrian Army counts among its ranks some highly capable units as well. These include special forces units with higher levels of operational experience and training in both conventional and asymmetric warfare. The regime can also count on the fiercely loyal heavily Alawite Republican Guard Division and the 4th Mechanized Division, both of which are commanded by President Asad's brother Maher.

These units have proven instrumental in containing and confronting unrest in Syria. However, given their duties focused on defending Damascus and manpower levels at some 25,000 to 35,000 troops, the Republican Guard and the 4th Mechanized Division cannot be at all places at once. One strategy the Asad regime has had to turn to is to deploy Alawite-led elite units to conduct clear-and-hold operations before sending in less capable (and often mainly Sunni) relief units from the regular army to take up static duties. The elite units could then be rotated to conduct operations elsewhere as needed. This is not without risks: the regular military is nowhere near as loyal and has also proven increasingly unreliable[31].

There is not enough data of any quality to assess the impact of these operations on the Army's capacity to conduct military operations. It is also unclear which effect the focus on internal security could ultimately have on elite units: to weaken their overall force posture or to enhance their baseline level of readiness to conduct future operations. The morale of the regular army, however, is less difficult to extrapolate. Before the unrest, Syria's regular army was considered to be plagued by low morale. This has only been further aggravated by both months of unrest and the military's brutal role in deepening sectarian cleavages in the country.[32]

Despite these and other challenges, the Syrian military remains a force to be reckoned with. While many Alawites and even more Sunnis within the ranks may be unhappy with the role the military has been asked to play, so far there are few indications of serious divisions within the military and desertions still remains far more likely than defections to opposition forces. Meanwhile, regime loyalists within the military are unlikely to have a future in a post-Asad Syria, and in the event of intervention, they will have few options at their disposal.

Given the growing level of sectarian tension between Sunnis and Alawites, an Alawite-led internal military coup could dislodge the ruling order without securing the community's future. Similarly, standing down the armed forces does little to address the security concerns of Alawites, minorities and Sunnis tied to the regime. In the end, Syria's praetorian military forces might have little choice but to stand alongside Asad, no matter the cost.

The Free Syrian Army

The so-called "Free Syrian Army" (FSA) is one of the main proponents of foreign military intervention in Syria.[33] The FSA has complicated the political and diplomatic efforts of an as-yet unconsolidated Syrian opposition both in and out of the country, which has struggled with the costs and benefits of resorting to violence against the Asad

regime. It has also complicated the long term durability of the Arab League as Damascus insists it is fighting an insurgency rather than peaceful political forces.

The FSA consists mainly of Sunni defectors from the Syrian Army. The FSA operates loosely across Syria with a base in a refugee camp in Turkey close to the Syrian border. The FSA claims to have some 15,000 men, however it is likely that this number is inflated and that the force does not exceed a fraction of that size. The force does not have heavy weapons and relies on small arms and rocket-propelled grenades (RPGs). [34]

One of the core arguments in favor of armed intervention in Syria is to create a geographic space for the FSA and other anti-Asad militant groups to control and operate out of. Armed insurgents in Syria opposed to the regime do not have a major geographic foothold near core centers of power, such as Damascus or Aleppo. Meanwhile, cities where the FSA has asserted itself, including Idlib, Homs, Hama, Deyr al-Zor and Der'aa cannot ultimately be held by opposition forces without much larger forces, supply lines and in the face of overwhelming Syrian military force.

While there are reports that the FSA is working to organize its ranks to form battalion-size units with a higher degree of command and control, it is still unclear how united these forces are, the nature of their chain of command, their capabilities and their freedom of maneuver in a Syria where the regime has gotten what it has hoped for since the start of protests: an armed uprising. In the event of armed intervention in Syria, it is unclear whether the FSA will be a source of potential stability, or yet another divisive wild card in an increasingly divided country. [35]

The Risk of Destabilization & Civil War

External military intervention of any kind could accelerate what many fear has already become an escalating path to civil war in Syria. The hardening of sectarian rhetoric and the increase in tit-for-tat sectarian violence across the country also mean that any large-scale internal conflict is likely to be sectarian.

There is little doubt that the regime did its utmost to ensure the re-emergence of sectarian fault lines, chiefly between the country's Sunnis on the one hand and the ruling Alawite minority and other Christians and the Druze on the other. By waving the prospect of destabilization and sectarian strife in Syria, the Asad regime hoped it could get its local, regional and international opponents to back down. Ultimately, the law of unintended consequences is such that the Asad regime may have gotten far more than it bargained for. There is little to no certainty that sectarian tensions that have been under the surface for years can be reversed or undone even under the best of circumstances. In an effort to secure its own future, the Asad regime is risking a far broader sectarian civil war in Syria.

Assumptions that any civil war in Syria will be short-lived ignore the reality that wars are rarely expected to last longer or cost more than a fraction of what they actually do. They also ignore local and regional factors, including the disposition of the population, the scale of armed opposition, the corporatist nature of loyal military units, and the scale of external support on either side of any conflict. Given the many factors listed above, including internal communal divisions, the praetorian nature of elite units and the risk of internal displacement, external intervention is far more likely to further divide Syria – potentially geographically or along ethno-religious lines – than to avert a crisis.

Iran

With the exception of Syria's fighting political forces, Iran truly has the most to lose should its key regional ally suffer further destabilization. Military intervention even on the most limited scale would be particularly troubling. Whenever Damascus has faced wholesale international pressure in the past, Iran has traditionally responded with high-stakes foreign policy choices that often complicated matters further rather than helped to secure and stabilize Syria's regional position.[36]

Iran has already signaled (unsuccessfully) its Palestinian allies, including Hamas, to escalate instability in Israel, while Hezbollah remains largely held in reserve (though the group is also constrained by growing Sunni-Shi'a tension in Lebanon). Iran also appears to have provided support to the Asad regime as it confronts both peaceful protesters and armed insurgents.

In the event of more direct international intervention, there is no reason to assume that Iran will not seek to support the Asad regime by deepening its own role in the country. This could include mobilizing elements of the Iranian Revolutionary Guard Corp (IRGC)'s Quds Force to play a more heavy-handed role, turning to Shi'a allies in Iraq, and bolster clandestine operations and asymmetric competition with the US, the EU and their key (mainly Sunni) regional allies including Saudi Arabia and Turkey. Should the Asad regime truly destabilize, Syria will likely supplement if not outright replace Iraq as a key arena for regional competition between Iran on the one hand and the US and its allies on the other.

Hezbollah

For Hezbollah itself, the potential loss of Syria – a key lifeline of support from its patron Iran – could prove critical to the group's long term local and regional posture. Hezbollah has worked hard to minimize its regional footprint, not the least of which in the wake of growing anti-Shi'a sentiment across the region. The group's relative quietism could be put to a serious test, however, should Iran and Syria require Hezbollah to escalate along the UN Blue Line as a response to intervention in Syria. This could also raise questions about proliferation risks should Damascus decide to transfer additional sensitive military hardware, such as advanced SSMs, major SAMs or ASCMs to the Shi'a group.

Russia

At the international level, Russia has signaled that intervention in Syria is a foreign policy red line. Such signals may be more a gesture than real, but here are a number of reasons for Russia's posture:

- First, Russia hopes to balance against the US and the West in a region where Moscow faces declining influence. Russia has few prospects of recovering financial losses in post-Gadhafi Libya and apart from arms deals with Damascus worth some $4 billion, Moscow may have also invested billions in Syrian infrastructure, energy and tourism related ventures. Military intervention and the potential rise of political forces hostile to Moscow further downgrade Russia's role in a changing region.
- Second, it hopes to ensure the viability of a key regional ally that provides Russia with the potential to project naval power and foreign policy influence in the

Mediterranean. Russian naval facilities in the port city of Tartus are undergoing a major refit and expansion to accommodate larger military vessels. Tartus, unlike Sevastopol in Ukraine, would allow Russian naval assets to maneuver away from the prying eyes of US NATO ally Turkey which closely monitors all activity through the Bosporus straits and in the Aegean Sea.

- Third, Russia faces its own risks of political instability from upheaval in Syria and the region. The mainly Sunni breakaway region of Dagestan in the North Caucasus may be of particular concern as a theater for Sunni insurgency against Moscow.[37]

Russia has taken several key steps so far to forestall and confront intervention in Syria. It – along with China – have and will continue to block any UN Security Council resolution on Syria that leaves openings for international intervention not unlike that seen in Libya. Further binding action from the international body will be difficult without taking into account Russia's foreign policy interests.

Second, Russia is deploying a small but significant naval force to the Mediterranean, including the Russian Navy's flagship, the carrier/missile cruiser *Admiral Kuznetzov*. Given the presence of the US Navy's 6th Fleet, the *USS George H.W. Bush* carrier battle group, Turkish and Israeli vessels, and naval units operating as part of NATO's Operation Active Endeavor, the Russian naval presence could serve as a deterrent to further intervention and as a means of shoring up support for the Asad Regime. The naval presence does pose risks however and communication will be critical to ensuring that ships in close quarters do not lead to a far wider international incident that nobody wants.

Lastly, as was previously stated, there are multiple reports that Russia has provided Syria with its sophisticated and lethal long range "Bastion" ASCM-based coastal defense system. This too serves to bolster deterrence against deeper intervention in Syria and to signal Russia's support for its regional ally. This is a significant statement from Moscow with ramifications for the regional military balance. Should Russia decide to provide Syria with much-delayed major SAM systems, such as the S-300 or the S-400, this would constitute yet another signal that further intervention in Syria is a red line.

Syria's Potential Responses to Pressure & Intervention

With growing external pressure on Syria, the Asad regime is likely to purse strategies that risk deeper regional destabilization as a means of deterring its regional and international opponents. It could also undertake desperate efforts to secure the future of the Alawite community. Syria's potential responses range in scale, and vary considerably based on what triggers Syrian escalation and the reaction of its regime, but some have potentially catastrophic consequences for Syria and the region.

First, Syria could try to rely on its regional allies to shift some of the pressure away from itself. In the Levant, this includes turning to non-state armed groups like Hamas and Hezbollah to increase security threats to Israel. Given the group's Sunni Islamist orientation, there is little chance that today's embattled Hamas can do much to assist Syria without alienating its mainly Sunni Palestinian base. Hezbollah, being a Shi'a group backed by Iran, does not face similar pressures. Without Syria, Hezbollah's regional posture will be uncertain and the Shi'a militant group has come out strongly in support of Asad.

How much Hezbollah can and will do, however, is also a byproduct of the interests of its Shi'a constituency inside Lebanon. While the community is by far the most militarized in Lebanon, it hardly wants to risk another potentially destabilizing conflict with Israel that could set back the Shi'a decades economically and in terms of military and political clout. Hezbollah has been careful to avoid broader escalation along the Blue Line. If Iran and Syria decide that the time has come for Hezbollah to escalate directly, the group will either do as it is told or face the most significant existential crisis since its founding in the 1980s. Syria can also try to rely on other less well-known groups in Lebanon, including Sunni militant groups and elements within the Palestinian refugee community.

A Second strategy focuses on the region's Palestinian refugee population. Syria has long served as bulwark against Palestinian anti-Israel agitation along the Golan Heights. It has also fought the PLO in Lebanon during the country civil war. However, it has maintained close control over a number of armed Palestinian groups, including the Popular Front for the Liberation of Palestine General Command (PFLP-GC) along the Lebanese-Syrian no-man's land. Syria could set loose these and other groups to destabilize Lebanon, Israel's northern flank, and potentially along the Golan.

There is a high likelihood that the IDF, the Lebanese Armed Forces (LAF) and even Hezbollah are all likely to move quickly to contain if not confront destabilizing and predominantly Sunni Palestinian agitation. Syria could also try to foment Palestinian instability in neighboring Jordan, although that strategy is even less likely to succeed.

Third, Syria could seek to deploy the Kurdish question against Turkey. The Asad regime has had a strained relationship with the country's Kurds for decades, suppressing their secessionist efforts at home and encouraging them abroad – largely as a tool against Turkey and Iraq, its one-time rivals. Rapprochement with Ankara since 1998 has led to Syria reeling in the most militant Kurdish movements – such as Abdullah Ocalan's PKK – in a bid to gain greater regional clout through closer ties to Turkey. In the wake of the Syrian uprising, ties with Turkey have deteriorated dramatically with Ankara increasingly supporting the regime's mainly Sunni opponents. Should Syria try to inflame Kurdish separatist movements in southern Turkey, or lose control over its own restive Kurdish population, this could trigger a Turkish military response with unforeseeable consequences.

A fourth potential response is for Syria to threaten to use its ballistic missile and BCW capabilities against Israel or other regional opponents. The threat of a "scorched earth" strategy, whereby the regime threatens to engulf the region in uncertainty if the international community intends to escalate, is fraught with dangers both for Syria and the broader Levant. Much skepticism exists about the viability of this potential response, however, recent Syrian military posturing and test fires of its "Scud" theater ballistic missiles are part of the Asad regime's effort to shape the strategic calculus of key US allies in the region and of the international community as a whole.

While there is always the hope that before or as a result of military intervention, the Asad regime could destabilize and make way to other stabilizing forces, worst case scenarios cannot be ignored in a regional context where the only certainty is uncertainty. Scenarios for Syria's potential responses could grow far more destabilizing should military intervention become inevitable.

This brings us to a fifth scenario: a last-ditch effort to secure the future of the Alawite community should intervention become certain. A US, UN or NATO-led military intervention would almost certainly signal the end of existing military and political structures in Syria. Even limited suppression of enemy of air defense (SEAD) operations would probably crystalize perceptions within Syria that the Alawite-led regime was on its last legs.

The Asad regime, the military's mainly Alawite elite units and most of Syria's Alawites would have nowhere to go. Even in a best-case transition scenario, there is no chance that the Alawites – aligned with Asad or not – can avoid either losing their political autonomy or escape retaliatory measures from the country's Sunni majority.

In such a worst case, the Alawites (with or without Asad) could try to secure a toe-hold along the Mediterranean. This would require abandoning mainly Sunni parts of the country (including Aleppo, Damascus, Homs, Hama and others) and focusing on the ancestral Alawite villages of the Nusayri Mountains and the coastal areas around Banias, Latakia and Tartus. This could lead to the acceleration of both soft and hard ethnic and sectarian cleansing.

Whether such a desperate scenario has any chance of success is less important than the fact that Syria – and the broader region's – future stability will be unpredictable should any of these scenarios come to pass.

Spillover Effects

In the event of Syrian responses to international pressure, further deteriorates or if some form of military intervention takes place, it is highly unlikely that the regional spillover effects can be contained. Lebanon's Sunni-Shi'a tensions could escalate leading to miscalculation and potentially deeper communal violence. Israel, which has struggled to insulate itself from Syria, will face a broadening of instability in the Levant. Jordan, though largely stable now, will also have difficulty insulating itself and faces pressure from its own internal Islamist political forces. All three countries could also face difficulties in managing their large Palestinian refugee populations should Syria deteriorate further. Turkey's core focus remains the Kurdish question, which is likely to escalate both in Turkey and along the frontier with Syria should Damascus destabilize further. While sensitive to US and Saudi foreign policy concerns, Iraq remains a mainly Shi'a country on the border of a mainly Sunni Syria. Growing Sunni-Shi'a regional acrimony could inform how Iraq reacts to further instability in Syria.

Implications for US and Allied Policy

Some consider military intervention in Syria to be a potential next step in shifting the regional balance in favor of the US and its allies. There is little question that sustained military operations in Libya would have been impossible without American logistics, targeting, command and control and sheer military capacity. In the case of Syria, military intervention is similarly unlikely to succeed without US involvement. However, military intervention, in the Middle East, let alone near the epicenter of the Arab-Israeli conflict, always involves serious risks and the impact of the law of unintended consequences.

There now is only limited support in the US, Europe, and the Arab world for direct intervention in Syria. However, the same could also have been said in the lead-up to

operations in Libya. There are also reasons why the US might directly (or indirectly) take the lead in such efforts. The withdrawal of US troops from Iraq has left many questions about the future role and influence of the US, especially in the context of strategic competition with Iran. Instability in Syria presents Washington with the opportunity to undermine Iran's regional posture, weaken or change the leadership of one of its key regional allies and potentially to downgrade the Islamic Republic's role in the Arab-Israeli conflict through Hezbollah.

As previous sections have shown, Syria is not Libya. Syria has a population that is more than three times larger than Libya's, has almost 30 times the latter's population density and a much larger and far more capable military overall. All of these factors complicate any calculus on military intervention in Syria, whether in terms of the level of potential military opposition, or with regards to the risk of high civilian casualties.

Opposition forces in Syria do not control territory, and most attacks by the FSA, while potentially coordinated, seem to have limited tactical or strategic depth and have yet to present a serious challenge to units loyal to the regime. While Libya's opposition forces were divided, Syria's are far more so, with little unity or agreement on the use of violence as a means to an end, and discord about the potential role of foreign intervention. The bulk of the security forces remain largely loyal thanks to a strong corporatist military culture.

As the US and its allies weigh options for their next-steps in their Syria policies, they need to consider a number of key military and political factors that shape the prospects for any form of direct intervention:

- Syria's military forces have many qualitative limitations, particularly in terms of modern weapons, combat readiness, and recent combat experience. They are, however, very large and months of protests, and concern over a potential Israeli strike on Iran, have made them more alert. They would need to acquire more modern and capable systems, such as major surface-to-air missiles (SAMs) and a new sensor and C4I network to defeat a major US-led air operation, but it would take a far more advanced operation than was the case in Libya, and Syria's leverage over Hezbollah, and Syrian long range missiles, air and coastal defense systems, and Syria's chemical and biological stockpiles present another kind of challenge.

- Despite defections and desertions, Syria's praetorian military units may have little choice but to rally around the Asad regime. Given their limited prospects in a post-Asad Syria, heavily Alawite elite units with sizeable numbers of loyal Sunnis will likely perceive no alternatives to defending the regime in the event of wider intervention.

- Armed opponents of the regime, such as the Free Syrian Army, are an important development. However, their size, structural limitations, their predominantly Sunni character and as-of-yet limited command and control and offensive capabilities mean that the FSA has limited prospects in the short term for presenting a meaningful counterweight or alternative to the Syrian military. It is

far more likely that the group's insurgency will be used as a platform by the Asad regime to weaken an already divided Syrian opposition.

- Syria's internal divisions are not new. However the Asad regime has managed to escalate Sunni-Alawite tension to the point that it has taken a life of its own and could be difficult to bring under control by any of the country' political forces. This presents the risk that any escalation in Syria's instability is likely to be sectarian, with real prospects for deepening divisions and broadening communal segregation. A divided Syria, once an unlikely worst case scenario for Syrians, grows increasingly probable as a result.

- Given Syria's relatively high population density and the close proximity of civilian and military centers, it is unlikely that airstrikes in or near major urban centers – even with advanced targeting – will result in fewer casualties than the number of Syrians the Asad regime is thought to have killed so far.

- The Asad regime may react by pursing strategies that risk deeper regional destabilization as a means of deterring its regional and international opponents. It could also undertake desperate efforts to secure the future of the Alawite community. Syria's potential responses – which include turning to regional proxies and its BCW-capable ballistic missile holdings – range in scale but all have potentially catastrophic consequences for Syria and the region. They also vary considerably based on what triggers Syrian escalation.

- In the event of further escalation in Syria, there is no certainty that regional spillover effects can be contained. Lebanon, Jordan and Iraq are susceptible to instability, as are Israel and Turkey. The scale of Sunni-Shi'a regional acrimony, the stalled Arab-Israeli peace process and uncertainty about future political forces warrant a degree of caution.

- The prospect of direct escalation in Syria may trigger kneejerk reactions from both Iran and its Lebanese ally Hezbollah. This includes deflecting attention from Syria and heightening the costs of intervention by escalating tensions with Israel. Should intervention take place, there is little to prevent Iran and its allies in Lebanon and Iraq from undertaking potentially destabilizing action in Syria not unlike the cycle of violence in Iraq in the wake of the US invasion.

- Russia has emerged as a key player in balancing against further intervention in Syria. It is likely that Moscow will opt to heighten the stakes further through military posturing in the Mediterranean and "game-changing" military aid to Syria to deter the US and its allies from further escalating in Syria and raising the prospect of Libya-style intervention in the Levant. Other members of the so-called "BRICS" countries, crucially China, can also be expected to bandwagon with Russia at least at the level of the UN Security Council.

It could be argued that even without further escalation, a year of Syrian instability has been a critical setback not only to the Asad regime, but also to Iran and Hezbollah. Syria's future will be governed largely by uncertainty and prolonged malaise. Given the range of risks, the US and its allies should consider carefully the potential costs and unintended consequences of further intervention in Syria.

[1] Term first articulated by F. Gregory Gause III, June 20, 2011.

[2] Term first articulated by F. Gregory Gause III, June 20, 2011.

[3] Anthony H. Cordesman & Abdullah Toukan, "Israeli-Syrian Air and SAM Strength Analysis: Working Estimate of Force Numbers and Locations," *Arleigh A. Burke Chair in Strategy Report*, CSIS, November 25, 2008, p. 21-24.

[4] Anthony H. Cordesman & Abdullah Toukan, "Israeli-Syrian Air and SAM Strength Analysis: Working Estimate of Force Numbers and Locations," *Arleigh A. Burke Chair in Strategy Report*, CSIS, November 25, 2008, p. 21-24.

[5] Anthony H. Cordesman & Abdullah Toukan, "Israeli-Syrian Air and SAM Strength Analysis: Working Estimate of Force Numbers and Locations," *Arleigh A. Burke Chair in Strategy Report*, CSIS, November 25, 2008, p. 25, 28.

[6] Anthony H. Cordesman & Abdullah Toukan, "Israeli-Syrian Air and SAM Strength Analysis: Working Estimate of Force Numbers and Locations," *Arleigh A. Burke Chair in Strategy Report*, CSIS, November 25, 2008, p. 25, 28.

[7] Anthony H. Cordesman & Abdullah Toukan, "Israeli-Syrian Air and SAM Strength Analysis: Working Estimate of Force Numbers and Locations," *Arleigh A. Burke Chair in Strategy Report*, CSIS, November 25, 2008, p. 48.

[8] Anthony H, Cordesman, Aram Nerguizian and Ionut C. Popescu, *Israel and Syria: The Military Balance and the Prospects of War*, Westport CT: Praeger International Security, 2008, p. 178.

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[12] David C. Isby, "Syrian Scud carried a simulated chemical warhead," *Jane's Missiles and Rockets*, September 1, 2001, available at http://www.janes.com.

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[15] Richard Scott, "Russia's anti-ship arsenal targets export markets," *Jane's Navy International*, October 1, 2003, available at http://www.janes.com.

[16] Doug Richardson, "Russia to supply Yakhont anti-ship missiles to Syria," *Jane's Missiles & Rockets*, October 5, 2010, available at http://www.janes.com.

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[21] "Russia Delivers Missiles to Syria: Report," *Defense News*, December 1, 2011; Doug Richardson, "Russia to supply Yakhont anti-ship missiles to Syria," *Jane's Missiles & Rockets*, October 5, 2010, available at http://www.janes.com.

[22] "C4ISR" stands for command, control, communications, computers, intelligence, surveillance and reconnaissance.

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[25] See Hanna Batatu, *Syria's Peasantry, the Descendants of Its Lesser Rural Notables, and Their Politics,* Princeton NJ: Princeton University Press, 1999.

[26] Hanna Batatu, *Syria's Peasantry, the Descendants of Its Lesser Rural Notables, and Their Politics,* Princeton NJ: Princeton University Press, 1999, p. 158-159.

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