The Military Balance in a Shattered Levant

Conventional Forces, Asymmetric Warfare & the Struggle for Syria

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June 15, 2015

Request for comments:
This report is a draft that will be turned into an electronic book. Comments and suggested changes would be greatly appreciated. Please send any comments to both Anthony H. Cordsman at acordesman@gmail.com and Aram Nerguizian at anerguizian@csis.org.

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EXECUTIVE SUMMARY

This study focuses on how regional military competition is affected by the political upheavals in the Middle East, economic and demographic pressures, sectarian struggles and extremism, ethnic and tribal conflicts, and how these tensions all combine to produce new complex patterns of competition.

The civil war in Syria in particular has complicated relative stable long-term trends in both regional conventional and asymmetric forces. The conflict also challenges both the US and Iran to find new ways to compete in spite of regional unrest, albeit with the risk of further deepening both regional instability and the overall level of strategic competition.

The Impact of Radical Changes in the Regional Military Balance

Egypt, Israel, Jordan, and Syria have all built up strong conventional forces, but their relative capacity for asymmetric warfare has become steadily more important as non-state actors have come to play a growing role in the region, and both state and non-state actors have come to rely on asymmetric warfare and threats. Moreover, the civil war in Syria, the overthrow of Mubarak, and increasing tensions in Jordan and Lebanon are all having a major impact on the conventional balance while internal struggles are empowering non-state actors.

US military aid to Israel has insured its preeminence in the regional conventional military balance. Neither Egypt nor Jordan now actively competes militarily with Israel. Syria was forced to abandon efforts to achieve strategic parity with Israel in favor of strategic deterrence in the 1980s, and is now caught up in a civil war that seems certain to leave it a far weaker military power at its end.

This, however, is only part of the story. The dynamics of civil conflicts and popular protests have all but shattered the regional conventional military balance. Nowhere is that more the case than in Syria. After years of protests, violence, and an increasingly sectarian civil war, the Syrian military is no condition to compete directly with any of the other regional militaries.

In contrast to the declining significance of the conventional regional balance, the 2006 Israel-Hezbollah war provided the first major indication of the growing significance of regional competition in asymmetric forces. While countries such as Syria have focused on building up their strategic deterrence against Israel, non-state armed groups – such as Iranian and Syrian-backed Hezbollah and Hamas – have become key players in the regional asymmetric military balance.

This threat must be kept in proportion. Boasts by Hezbollah and Hamas about defeating Israel in a future conflict are propaganda fantasy, not reality. Israel, the US and key regional allies do not face anything approaching critical or existential threats from today’s armed groups. Such non-state actors do, however, pose a risk to US preferences on regional stability and the development of the Arab-Israeli peace track, which in turn informs US concerns about their future development and roles in regional security politics.

At the same time, the military competition between the US and Iran in the Levant has been shaped by their respective ties to different regional powers and non-state actors. Both the US and Iran have worked hard to nurture security partnerships and relationships with
regional state and non-state actors to promote their regional interests, project power, and shape the broader regional balance of power.

The Quest for Stability in a Region in Crisis

Any apparent stability in the area between the 1973 War, the end of the Cold War, and the beginning of the uprising in Tunisia in 2011 is now clearly over and is likely to be over for well over a decade. The US needs to recognize that no amount of development assistance can correct or fix underlying socioeconomic and demographic forces that had become compounded over decades, and that it may take decades to find some form of stability.

The US cannot ignore the steep rise in sectarianism in a region spanning well beyond the Levant, from North Africa to Afghanistan. Iran has repeatedly turned to sectarian affiliations and its Shi’a clients in its efforts to balance against the US and its regional allies. However, key US allies – like Qatar, Turkey and Saudi Arabia – have also resorted to leveraging Sunni-Shi’a divisions in their own bids to shape dynamics in Egypt, Lebanon, Syria, and Iraq and in the broader balance of power with Iran.

Ungoverned and under-governed spaces have become fertile ground for increasingly radical Salafi-Jihadi groups like ISIS, Jabhat al-Nusra and Egypt’s Ansar Bayt al-Maqdis. Combined with the scale of regional Gulf competition, the Levant may yield even more space within which Salafi-Jihadi groups can try to consolidate their expansion in the Levant in the wake of regional protests in 2011.

The US cannot afford to ignore groups like ISIS, or to strategically compete to nowhere. Many of the key decisions made by Iran and its Gulf opponents between 2011 and 2015 are the definition of tactics and not strategies. Conflating the two puts both opponents like Iran, and allies like Saudi Arabia, in equal jeopardy and in ways that the US is unlikely to benefit from in either case. The US will have to work with the broadest possible mix of players to create the kind space that may eventually allow for some degree of stability across the Levant.

As the country-by-country analysis will show, however, this is only part of the challenge. US military assistance and aid efforts must be linked to political and economic efforts as well. The US must be prepared to deal with the full range of factors driving instability in each country in the Levant, and as serious as some potential military risks may be, the political, economic, religious, and social upheavals may ultimately prove to be more important.

Syria

While Syria has been a challenge for US policy-makers for decades, the current round of instability is unprecedented. The situation in Syria is not predictable enough for the US to be able to develop a sustainable strategy in the short term. The US and key regional allies have steadily sought to increase pressure on the Assad regime and provide different levels of support to anti-Assad political and insurgent forces. Through these actions, the US and its regional allies are pursuing several aims, not the least of which is to weaken Iran’s role as Syria’s sole major state ally, while at the same time finding ways to halt the spread of military Jihadi grounds in Syria and beyond on favorable terms.

The US had used limited covert or overt arms sales and military aid to Syria to compete with Iran since at least July of 2013. Covert aid presents the problem that it could fall into
extremist hands. Overt aid could only occur if Assad fell and a suitably favorable new regime emerged in Syria. In the meantime, both the Assad regime and its opponents are evolving and devising new strategies and tactics in the hope of shaping relative success in Syria’s civil war.

It would be easy to make the causal leap that Assad forces are certain to buckle, fail, or abandon the regime as a result of these pressures. The Syrian military can do little more than compensate for losses in the field, and has no real-world recourse to mass mobilization. There are also significant fiscal challenges, especially in the wake of the regime’s losses of rent-earning resources that include oil fields now under the control of ISIS, the Nusra Front and other militant groups. Such conclusions remained largely premature in mid-2015.

While the Assad forces had been whittled down by four years of fighting, they were increasingly focused on frontier defense missions in what some increasingly described as Assad’s “vital Syria.” This focus was reinforced by the fact that loyal Alawites largely had nowhere to go, and were more inclined to fight for their towns and villages than to engage in fruitless military adventures in eastern and northeastern Syria – far both from reliable supply lines and a strong enough reason to fight on.

The Assad regime may have lost some -- if not much -- of its ability to raise central government funds or amass foreign currency reserves. However, it could still depend on strategic rent-seeking from Russia and Iran in mid-2015. There is little doubt that both Russian and Iranian aid levels to Syria were driven by each country’s discreet set of national interests. Russia continued to see Syria as bulwark both against perceived interventionist policies in the West, and the loss of what remains of Russian influence in the Levant. Meanwhile, Iran’s priorities tied to Syria were largely dictated by the need to secure its long-term investment in Hezbollah – something it may not be able to do without a pliant Syria.

So long as the US and its Arab allies, and Iran, pursue their respective foreign policy priorities – and as long as no realistic political alternative is found -- Assad will have the opportunity to pursue a duel strategy that has remained largely unchanged since Syria confronted the West and its allies in Lebanon over the 2004 to 2008 period: continue to extract rents from your allies and buy enough time to take advantage of changes in international and regional policy.

All of these patterns make Syria a key prize for the US, its Arab and other regional allies, as well as Iran:

- Despite the continued militarization of the opposition and initial tactical successes against Assad’s forces in an increasingly sectarian civil war, there is no clear US response to this increasingly dangerous phase of instability in Syria. Regime forces and allies have shown the ability to learn on the battlefield, and the forces buttressing the regime will continue to close ranks around Assad. The window for US or Western covert and overt assistance may have come and gone, and could also further deepen tensions with Russia, China and other members of the UN Security Council who do not want to see a repeat of steps taken in Libya.

- The US cannot ignore the regional spillover effects should Syria destabilize further and it needs to adopt a strategy based on containing Syrian instability. How events do and do not play out in Syria will have deep and unforeseen consequences on the precarious sectarian balance in Lebanon, the security of Israel along its northern and eastern flanks, the stability of Jordan at a time of increased
internal unrest, and pressure along Turkey’s southern flank as Ankara tries to contain increasingly assertive Syrian and Iraqi Kurdish groups. A collapse in Syria – controlled or otherwise – may hold the promise of breaking Iran’s umbilical cord to Levant, but it also promises to expose both budding and strategic US allies to waves of uncertainty for years to come.

- While the US may have had reasons to support and grant recognition to some opposition forces that were more moderate or more representative of popular forces in Syria, that will not translate into a more stable Syria at peace with its neighbors in either the short or long term. Based on the current internal Syrian balance, there is no real world basis on which to make the argument that a post-Assad Syria was imminent as of mid-2015 – let alone that it will make peace with Israel, renounce claims to the Golan Heights, or stop providing assistance to Palestinian elements operating in and outside the Occupied Palestinian Territories.

- Despite growing pressure and rhetoric over the 2013-2015 period, there was still only very limited support in the US, Europe, and the Arab world for direct intervention in Syria. Syria is not Libya. If a window to strike Assad existed, it was before the consolidation of radical Salafi Jihadi groups in Syria with an eye on Egypt, Iraq, Jordan and Lebanon. Meanwhile, Assad’s Syria also enjoys strong political, financial and military support from Iran and Russia. 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.

- There still are reasons why the US might directly (or indirectly) take the lead in such efforts. The withdrawal of US troops from Iraq has left many unanswered questions about the future prospects for a stable Iraq, let alone a stable Syria, and the US already finds itself conducting airstrikes against ISIS militants in Iraq that could just as easily be in Syria. Instability in Iraq and Syria presents Washington with the opportunity to undermine Iran’s regional posture, weaken or change the leadership of one or both of its key regional allies, and potentially downgrade the Islamic Republic’s role in the Arab-Israeli conflict through Hezbollah.

- Some analysts have proposed trying to separate Syria’s security establishment and the Alawite community away from the Assad regime. While the approach is sound in principle, the US may need to accept that the chances of doing so are slim. The passage of time and the level of bloodshed have made it more difficult to conceive of a post-Assad Syria devoid of retaliatory measures against the Alawite community. While many Alawites may not like or support Assad, the potential loss of their political and economic autonomy is a key barrier to defections. Even in a scenario where a dominant opposition proved magnanimous in victory, there is little sign that Assad’s base – and the other minorities that support the regime – is betting on such a favorable outcome.

- While events in Syria are challenging to Iran, the strategic choices of the Islamic Republic and its chief ally in the region, Hezbollah, are evolving in an effort to deal with events in Syria and potential shifts in the regional balance of power. While “Plan A” is to try and maintain Assad in power and fend off the local and regional opponents, “Plan B” in the event Assad falls seems to be the prevention of the emergence of a stable Syria under Sunni rule in Damascus. There is continued evidence in 2014 that the IRGC’s Quds Forces, aided by Hezbollah are actively training and equipping mainly Alawite and Shi’a tens of thousands of irregular forces into what appears to be a deeply ideological Jaysh al-Shaab or “People’s Army” meant to take pressure off Syrian regular and special operations forces and fight for the interests of the Alawite community and other allied factions in Syria.

- As the corrosion and decay of Syria’s state and national security structures continues to grow, the militarization of the struggle for Syria all but ensures that militia economics and warlordism will a dominant feature in Syria for years to come. The Syrian military already underwent a process whereby it was stripped down to its most loyal – and predominantly Alawite – core. If the military does not survive institutionally in the long term, or if it does not regain some semblance of national legitimacy, the prospects for demobilizing Syria’s growing archipelago of militias and fighting groups will be extremely slim.

- Syria’s insurgent groups – which are far more likely to have influence in Syria than either external or local political opposition forces – are poor vehicles to socialize, advance, and consolidate external (principally Western) efforts to secure pluralism and stable politics in Syria. Again, while many
insurgent groups include Army defectors, many if not most insurgent groups in Syria still remain local militias in what has become a national struggle. Neither they nor the many more civilians-turned-guerilla-fighters are anywhere near ready to internalize and implement any form of lasting transition plan in Syria. This in turn will also further complicate a lasting cessation of hostilities, the creation of a stable and credible government in Damascus, or a Syria that will actively protect it minority groups.

- The rise of jihadi and militant Islamist factions and fighting groups in Syria with ties to Al-Qaeda like ISIS and Jabhat al-Nusra present another key challenge. While the Syrian armed opposition remains deeply fragmented despite its growing size, Islamist and jihadi units have better access to weapons, are attracting recruits frustrated by the uneven pace of the conflict, and are moving far quicker to consolidate their forces. The presence of ideological and radical forces in Syria’s civil war was always going to be a challenge so long as more moderate factions were unable to overcome their internal divisions and gain access to more military resources.

- While groups like ISIS threaten regional opponents of the US and Saudi Arabia – like Assad’s Syria, Iran and Hezbollah – the adage that “the enemy of my enemy is my friend” does not apply to intolerant extremist groups with transnational aspirations. The presence of these groups in the Levant is instead a case of “the enemy of my enemy is also my enemy.” Neither the Assad regime nor Iran are party to the September 11, 2014 “Jeddah Communique” which brings together an array of regional and Levant states with the intent of combating the spread of ISIS. However, separately, together, or by agreeing to disagree, the US and Iran – but also Egypt, Israel, Jordan, Lebanon, the GCC states and Turkey – will all have to fight the threat from the expansion of groups like ISIS into ungoverned spaces in the Levant.

- The impact of external actors will grow more critical as Syria’s civil war continues to evolve. Countries like Saudi Arabia, Qatar, and Turkey have been active supporters of the armed insurgency against Assad, including indirectly supporting some of the more hard line elements fighting Assad. Meanwhile, the US and European states have been important sources of external pressure and coalition-building against the regime in Damascus. Meanwhile, Russia, Iran, and China continue to wield influence with Assad in a bid to maintain what remains of the regional status quo. There is significant daylight between the competing nations supporting either side of Syria’s civil war. However, as with other similar conflicts – such as Lebanon’s 15-year civil war – external support by competing external actors will be critical to any effort to legitimize a new political order in Syria.

- At present, the best Assad’s regional and international opponents could hope for would be more representative Sunni-led leadership that takes into account the foreign policy priorities of the United States, the Gulf states led by Saudi Arabia, and Iran. At worst, Syria would remain unstable and could deteriorate into a deeper regional sectarian conflict – a conflict which could in turn draw its neighbors – especially Lebanon and Iraq – into a cycle of regional proxy warfare. What is certain, however, is that in any scenario, Syria’s regional role has been severely weakened by a three years of unrest.

- Continued political upheaval and civil war mean that Syria’s economic outlook will only continue to decline. Even in a scenario where key players in the merchant class put their full weight against the Assad regime, there is still no clear sense of an end state in 2014 either on where Syria was going or which players could and would be at the helm. It is also difficult to measure the impact of external rents and aid provided to Assad from Russia, China, Iran and what other few allies the regime still had.

None of the dynamics shaping Syria’s future are simple, definitive or predictable. All illustrate how Syria’s internal battle for power is tied to broader regional Sunni-Shi’a fault lines that neither the Sunni Gulf states, Iran, nor the US can take for granted. The longer Syria lingers caught in civil war and political uncertainty, the more likely it seems the country will emerge as a continuing arena for proxy competition.
However, even with Arab, Turkish or Iranian support, any US-led intervention – political, military or otherwise – would have to take stock of the scale of Sunni-Shi’ite regional polarization and the level of acrimony between the Southern Gulf states and Iran to determine the benefits and potentials costs of deeper US involvement in the Levant.

Both the armed opposition and the regime and its supporters are undergoing a rapid process of political Darwinism and it is not possible to clearly determine who the key players in Syria will be months from now, let alone in 2014 and beyond. What is certain, however, is that regardless of if or when Assad falls or is replaced, Syria will struggle with the militarization of society and the expansion of Islamist and radical forces for years to come. The US would then face increasing difficulty in both staying out of and competing with Iran in Syria.
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I. INTRODUCTION

The US faces an unprecedented level of policy instability in the Levant and Egypt. The Islamic Republic has developed strong ties with Syria and non-state actors in the region, including the Lebanese Shi’a group Hezbollah and the Palestinian Hamas Islamist movement, in what Iranian and Syrian leaders have dubbed the “Resistance Axis.” The civil war in Syria, however, has led to an increasing struggle for influence and control over both Syria and Lebanon between Iran and the Arab states and Turkey, as well as between the US and Iran.

This report addresses the fact that the struggle for power in the Levant has been compounded by a revival of the civil war in Iraq, and a growing overlap between the Syrian civil war and dynamics in Iraq. The rise of Sunni Islamist factions in Syria, and the fact that former Prime Minister Nouri al-Maliki alienated Iraq’s Sunnis to the point of open rebellion, allowed the remnants of Al Qa’eda in the Middle East to reemerge as a new and independent jihadist movement called the Islamic State in Iraq and Syria (ISIS).

ISIS defied Al Qa’eda Central and refused to give the Al Qa’eda-backed Jabhat Al-Nusra the lead role in Syria. Instead, it first took control of a large portion of eastern Syria away from other rebel factions. It then took advantage of Maliki’s alienation of Iraq’s Sunni population to invade Iraq with the support of other Sunni anti-central government factions and many Sunni tribal leaders.

ISIS took Ramadi and Fallujah at the end of 2013 and then capitalized on popular anger and Maliki’s misuse of the Iraqi security forces to seize much of northern Iraq – including Mosul – up to the boundaries of the Kurdish security zone. It then declared that it was the “Islamic state.” The boundaries between the Levant and the Gulf were virtually destroyed, and what some warned would be a “Shiite Crescent” became a massive clash within a civilization.

Meanwhile, the political upheavals in Egypt produced a Muslim Brotherhood-led government in 2012 that was seemingly less hostile to Iran than the previous Mubarak regime, but that was also strongly Sunni and favorable to forces opposed to the Assad regime in Syria. This initially created a source of tension between Egypt and Iran, led Egypt to be far more sympathetic to the Palestinians, less tolerant of Israel, and less tied to the United States.

A 2013 military-led coup has since removed the Brotherhood from power, banned the group, and labeled it a terrorist organization. A new military – led government under Abdel Fattah Al-Sisi came to power, and Sisi was elected President on June 8, 2014. However, Egypt remains a country very much in crisis, with real questions tied to weak socio-economics, unmanageable demographics and an uncertain foreign policy future.

This has affected the role of other powers outside the Levant like Iran. The Islamic Republic continues to exploit Arab-Israeli tensions in ways that make it an active barrier to a lasting Arab-Israeli peace, while the US must deal with the impact of recurring tensions between Israel and the Palestinians and the risks of new rounds of fighting in Gaza that could increase Arab hostility to the US strategic partnership with Israel. At the same time, the rising tension between Iran and the Arabs, raised regional tension between Sunnis and Shi’ites/Alawites and Arabs and Kurds – all in large part thanks to competing interests in
Syria, Iraq and Lebanon – have pushed Arab regimes back towards closer ties with the US in spite of, policy differences with the US over Egypt, Syria, and US efforts to negotiate an end to Iran’s efforts to seek nuclear have all complicated US-Gulf relations.

The end result has been a growing power struggle between Iran and several key Arab states, continued competition between the US and Iran for influence over both state and non-state actors, and the gradual emergence of Arab Gulf allies as regional wild cards in the Levant. All of these struggles also affect Turkey, Iraq, the Southern Gulf states themselves, as well as Europe, China and Russia.¹

Every state involved is forced to play the strategic equivalent of three-dimensional chess in a game that has no clear rules and constantly changing boards. It is a game that is almost certain to continue for at least the next five years, and where competition will often have to substitute tactics for strategy on a target of opportunity basis. In fact, there is little chance of regional stability for at least the next decade, and most of today’s regimes and power relationships are unlikely to survive in their current forms.

### The Regional State System & Destabilizing Change

The start of a wave of popular protests in the Middle East and North Africa that began in in December 2010 has served to complicate patterns of competition in the Levant that were already complicated by the role of outside powers like the US and Iran, a nuclear arms race between Iran and Israel, and the risk of Israeli preventive strikes on Iran. From 2010 onwards, Bahrain, Egypt, Jordan, Libya, Morocco, Syria Tunisia and Yemen all experienced challenges to well-established authoritarian structures that ranged from protests to regime change and civil war.

In 2013, Egypt – which already saw one uprising in 2011 that deposed President Hosni Mubarak – experienced a military-led counter-revolution against Cairo’s Muslim Brotherhood-led government. While Abdel Fattah al-Sisi – the former commander of the Egyptian Armed Forces – was sworn in as President on June 8, 2014, the outcomes of Egypt’s struggle for power and prospects for socio-economic recovery both remain broadly uncertain.² Jordan also experienced protests, but as of 2014, the Hashemite monarchy continued to stave off growing popular pressures through a mix of political reform, foreign political support and external aid.³

Syria was the hardest-hit of the Levant states. Devastated by more than three years of protests, regime repression, civil war, sectarian radicalization, proxy competition between Saudi Arabia and Iran, and the effects of pro and anti-Assad divisions within the UN Security Council, Syria continues to be the Arab uprisings’ greatest tragedy. The conflict proved to be a magnet and incubator for transnational Sunni jihadi and militant groups that could threaten the stability of every state bordering Syria. Regardless of whether there will ever be a “winner” in Syria, the US, Iran and the broader Middle East will have to deal with the regional effects of the conflict for years, if not generations.

The Arab uprisings in the Middle East and the Levant also intersected with key shifts in ideology and policy in the US, Iran and the southern Gulf states on the best means of securing discreet – and often narrowly national – foreign policy interests. Therein the US has struggled to reconcile its long-term pragmatism in the Levant with brief but potent neoconservative and neoliberal departures in foreign policy-making. Meanwhile, Saudi
Arabia and Iran – key competitors for regional hegemony in the Gulf – have blurred the lines between the use of sectarianism as a tool of foreign policy, and sectarianism as a policy unto itself.

All of these dynamics made the Levant steadily more complex due to changes in leadership, political contestation, the fragmentation of decaying state, and security structures, socio-economic challenges driven by long-term popular discontent amid the effect of regional and international balance of power dynamics. Key regional states – including Egypt, Syria, Lebanon and Jordan – have all been affected by this trend in ways that impact how both the US and Iran chose to compete in the Levant.

The Changing Role of Syria

Ties to Ba’ath-led Syria have long been the cornerstone or Iranian influence in the Levant. However, it is still too early to know how much influence Iran can retain or gain in Syria – particularly if the Assad regime does not survive. Iran faces considerable Arab backlash over its steady support for the regime of President Bashar al-Assad, must deal with growing tensions between Sunnis and Shi’ites in both the Levant and the Gulf, as well as deal with Arab fears that Iran seeks regional domination or influence at the expense of Arab states.

If political instability and civil war in Syria continue to make Assad’s survival partly dependent on Iranian support, this will be a growing factor in US and Iranian strategic competition. It will also affect sectarian alignments. Iran will increasingly rely on its relations with Syria’s Alawites as a matter of politics rather than a matter of any real shared identity between Shi’ite and Alawite religious beliefs. Iran has had to divert increasingly scarce national resources to shore up its beleaguered ally.

Meanwhile, the US and key regional allies have sought to increase pressure on the Assad regime, and provide different levels of support to anti-Assad political and insurgent forces, not the least to weaken Iran’s sole major state ally as well as Iran’s influence over Iraq, Lebanon, and the Palestinians. This makes Syria a key local prize for both the US and its Arab allies, and for Iran.

On the one hand, Iran’s regional ambitions have become increasingly dependent upon Syria’s future. If Assad and the Alawites fall from power, Syria might become far more closely tied to other Sunni regional powers, alienated from Iran, and willing to work with the US. On the other hand, the civil war might lead to a Syria where the Islamic Republic could either see an Assad regime that was far more dependent on Iran than ever before, where the outcome put more pressure on Iraq to support Iran, and where Hezbollah became even more powerful in Lebanon.

On the other hand, there are factors that may have far more bearing on the future of Syria, the region, and how the US and Iran may shape their respective policy choices. Key among them are the proliferation of both domestic and foreign militias and armed groups in Syria – many of them hostile to Iran, the US and even the West’s Arab Gulf allies – the effects of civil conflict on Syrian demographics, and the erosion of state institute institutions over time.

The period between 2013 to 2015 saw the proliferation and near-military preponderance of jihadi militant organizations – some of them with ties to Al-Qaeda – such as the Jabhat al-Nusra (JAN) and the Islamic State of Iraq and al-Sham (ISIS) that rely at least in part on
a steady stream of foreign fighters. While these groups have proven to be a potent threat to the Assad regime and its allies, they also pose a growing threat to more moderate elements within the Syrian uprising as well as other regional states, including Iraq, Israel, Jordan and Syria. Given time and room to maneuver, they could also threaten other key allies in the Gulf – including Saudi Arabia – and Turkey.

The other key sources of instability in Syria include demographic shifts, ethnic cleansing, and the creation of both massive refugee and internally displaced persons (IDP) populations. By mid-2015 some 7.6 million Syrians had become IDPs and an additional 3.9 million were refugees in Lebanon, Jordan, Turkey, Iraq and Egypt – more than 51 percent of Syria’s total population in 2013 estimated at between 17.6 and 22.4 million.

Syria poses both separate and overlapping sets of challenges to both the US and Iran. The threat from mainly Sunni jihadist groups is – if only on the surface – a source of common concern. Both countries also have an interest in seeing some form of stability return to Syria and the Levant in one form or another. However, whereas the US has been reluctant to intervene directly in Syria, Iran and its regional allies have not. Key US Gulf allies such as Saudi Arabia and Qatar have shown a willingness to intervene and to shape events in Syria, even if that meant challenging US priorities and prerogatives in the Levant.

US policy is increasingly shifting to deal with the long term pressures tied Syria’s long term demographic, economic and political challenges. However, this may continue to be complicated by the reality that Iran and its allies – chief among them Hezbollah – on the one hand, and the array of both moderate and radical Syrian opposition groups backed by Saudi Arabia and Qatar may already be shifting their positions to finding new ways to compete in Syria and the broader Levant, regardless of whether Assad stays or goes. The US response to Syria in 2015 will also be complicated by the need to respond to emerging transnational threats to Syria, Iraq, the Levant and the broader Middle East – most notably the perceived threat posed by ISIS.

In the end, more years of conflict may ultimately lead to little more than Syria being both a battleground and casualty of US-Iran and Gulf-Iran competition. It is too early to predict what will emerge: a unified but fundamentally different Syria, a federated state, or a more permanent set of divisions. Regardless of whether there will ever be a “winner” in Syria, the US, Iran and the broader Middle East will have to deal with the lingering effects of the conflict for years, if not generations.

**Indirect Military Competition**

Both the US and Iran have worked hard to nurture partnerships and relationships in the Levant with regional state and non-state actors to promote their regional interests, project power and shape the broader regional balance of power.

US military aid to Israel has insured the country’s preeminence in the regional military balance. In the wake of peace agreements and deepening ties with the US and the West, neither Egypt nor Jordan is actively competing militarily. Syria, which continued to try to compete with Israel, was forced to abandon efforts to achieve strategic parity in favor of strategic deterrence. As such, the Arab-Israeli remained focused on competition between Israel and Syria.
Popular protests in the Arab world have all but shattered the past structure of the regional conventional military balance. Nowhere is that more the case than in Syria. After two years of protests, violence, and an increasingly sectarian civil war, the Syrian military is no condition to compete directly with any of the other regional militaries.

Meanwhile, Egyptian instability has preoccupied that country’s military, and Jordan’s military remains squarely focused on internal security and mitigating spillover effects from Syria. Lebanon remains a de facto non-player with the country’s military far more focused on trying to find ways to insulate the country from instability in Syria.

At the same time, the asymmetric warfare capabilities of state and non-state actors have become steadily more important. The 2006 Israeli-Hezbollah war marked a major milestone in the growing significance of regional asymmetric competition. While countries such as Syria have focused on building up strategic deterrence against Israel at least since the 1980s, non-state armed groups – such as Iranian and Syrian backed Hezbollah and Hamas – would prove to be key players in the regional asymmetric military balance.

All the Levant states, the US, other Arab states, and Iran now compete in shaping the dynamics of regional asymmetric dynamics. All of these countries are critical to the capabilities and development of their regional allies’ respective roles in an ever-shifting asymmetric military landscape.

**Competing in an Unstable Levant State System**

It is impossible to understand any aspect of the balance and security dynamics in the Levant without taking the time to look at the contours of the regional state system in the Levant and the forces that shape it.

The regional system has gone through multiple transformative moments, including the Camp David Accords, Egyptian-Israeli and Jordanian-Israeli deals, multiple regional wars, and shifting alliances. Throughout the last four decades, regional patterns of competition were at least, if not more acute than patterns of US-Iran competition.

Dynamics between Iran and Saudi Arabia are – at least in some ways – more critical to shaping US-Iran patterns than one initially could surmise. Going back at least to the Islamic Revolution of 1979, Saudi Arabia and Iran have been critical to shaping each other’s policies, but also the policy preferences of other regional and international states.

In the wake of the Arab uprisings, this remains largely still the case. However, the danger lies in both countries’ over-reliance on sectarianism as a tool of foreign policy. The scale and pace at which Saudi Arabia and Iran are currently competing all but ensure that the US and other states that either focus on the Levant or are in the Levant may inherit or have to deal with a mess from hell.

While the conventional and asymmetric balances dominate US and Iranian security competition in the Levant, socio-economic and political competition, in addition to military aid patterns, are important as well.

Any discussion on aid to countries in the Levant focuses mainly on US efforts as no equivalent transparent Iranian aid data exists for the purpose of comparison. It also focuses on the deep socio-economic, political and sectarian cleavages, the pervasiveness of the
Arab-Israeli conflict, and a cycle of popular protests that combine to make the Levant and Egypt a growing challenge to the US in shaping its regional struggle with Iran.

**Examining the Broader Struggle for the Levant**

This report asks how the US and its allies compete with the Assad regime and Iran in shaping the Levant conventional and asymmetric military balance, and what are the forces and constraints that shaped this contest in the past, present, and possibly in the future? The report also examines key military dynamics and drivers of instability in Syria to better contextualize what has increasingly become a “shattered” military balance in the Levant.

- The first section of this report introduces the analysis.
- The second section addresses how the US and Iran compete by considering the conventional military balance in the Levant.
- The third section goes beyond conventional forces and considers an area where Iran has been especially effective over time, namely in shaping the regional asymmetric balance.
- The fourth section examines how Syria affects both US-Iran competition and broader trends tied to regional stability and the Levant military balance.
- The final section derives key implications that are likely to shape future US policy towards the Levant.
II. THE CONVENTIONAL MILITARY BALANCE IN THE LEVANT

This section addresses the conventional military balance in the Levant and – where relevant – the role played by the US, Iran, and other outside powers in shaping regional forces. It examines the military forces of Egypt, Israel, Jordan, Lebanon and Syria. Hezbollah, the Palestinian Authority and other Palestinian forces do not have or cannot be described as conventional standing militaries; as such the asymmetric strategies and tactics of groups like Hezbollah and Hamas are discussed in greater detail in the next section.

The competition between outside powers like the US and its Arab Gulf allies, and Iran, does affect the military balance in the Levant. It affects a range of capabilities from low-level terrorism through asymmetric and conventional combat to missile warfare.

The US seeks to preserve the qualitative edge and the support of its regional allies, including Egypt, Jordan, and especially Israel. It also seeks to support military forces in Lebanon as a means of mitigating other sources of risk from the Syrian conflict and the proliferation of mainly Sunni militant and jihadi organizations. Iran in turn continues to try to find the means to erode Israel’s military supremacy in all aspects of the conventional military balance.

While the Levant is part of CENTCOM’s area of responsibility (AOR), the US maintains few ground forces in regional countries, with the exception of Incirlik Air Force Base in Turkey. In contrast to Army and Air Force deployments, US naval forces account for the bulk of American forces in the broader Levant. In addition, the US relies on regional alliances and partnership with states, such as Israel and Egypt, to maintain stability in the region.

In contrast, Iran has few regional allies and none that can project conventional power and deter the US and Israel. Military personnel and trainers from the IRGC and the Quds Force in particular have been actively operating in train-and-equip, command and control, and intelligence collections roles in Syria possibly as far back as 2011 and in growing numbers into the low thousands as of 2014.7

As of mid-2015, Iranian forces were reported to number no more than 1,000 to 1,500 are not present in large scale combat roles, do not enjoy the infrastructure and logistical supply chain that the US benefits from in forward bases and installations across the MENA region, and are narrowly focused on Syria’s own internal struggle for power.8

An Overview of Regional Military Forces

Every country in the Levant has its own unique civil-military history, budgetary environment, manpower pressures, access to arms supplies and technology transfers. Furthermore, each country faced its own unique national security environment. At the same time, the ongoing civil war in Syria has shattered long-held military truths and the sense of uneasy military equilibrium in the Levant.9

In 2015, Israel remained Washington’s principal and most capable military partner in the Levant – a trend that is likely to be sustained for many years to come. Despite military campaign setbacks in the 2006 Israel-Hezbollah war – and in the 2014 round of fighting
with Hamas – the Israel Defense Forces (IDF) remained the most capable fighting force in the Levant and the broader Middle East and North Africa region. Yet, Israel has increasingly had to adapt to deal with asymmetric forces – a process that was not without its challenges. Israel also had to shift its military doctrine in the wake of the 2011 Arab uprisings to be more reactionary as regional states showed growing signs of fragility and unrest – especially in how Israel could deal with a long-term crisis in Syria.¹⁰

For decades, Iran’s role in the conventional balance in the Levant was shaped and depended on the military capabilities of its regional ally Syria. Syria in turn had focused much of its own military energy in terms of resourcing, budgeting and acquisition toward securing, if not maintaining a viable degree of strategic deterrence against Israel through the acquisition of surface-to-Surface missiles, increasingly modern air defense systems and developing a defuse and expansive chemical weapons program.

The conventional balance between Israel and Syria largely defined the regional balance in the Levant between the Camp David Accords in 1978 and the beginning of the political upheavals in the region in 2010. However, after more than four years of fighting and more than an estimated 210,000 casualties by February 2015,¹¹ the conventional military balance in the Levant in 2015 was a shattered balance.

Military losses from defections, desertions, combat fatalities and other attrition affects, the Syrian Armed Forces were estimated in 2014 to be at 50% of its pre-war size.¹² Furthermore, a Syrian military that had spent decades and decreasing national resources on developing capabilities meant to deter a conventional military in Israel found itself fighting an increasingly kinetic counter-insurgency against defuse paramilitary opponents of both Assad rule and Iranian influence in the Levant.

While pro-Assad regime forces – aided by Iran, Hezbollah and Russia –found ways to adapt to confront the multiple threats posed by the plethora of armed groups current facing the Assad regime, there was no way to predict when and how Syria’s conventional forces could or would recover. However, as the following analysis will show, even at full strength prior to protests and the current pattern of violence, the Syrian military was outclassed by Israeli forces in all of the most important areas of the conventional military balance in the region.

Jordan continued to be yet another critical military ally of the US in the Levant. The Jordanian Armed Forces were among the most professional in the region and were considered well-trained and organized despite persistent resourcing challenges. Jordan’s resource-scarcity makes the country imminently dependent upon foreign aid. However, the country proximity to the Israeli, Syria, Saudi Arabia and Iraq made the Hashemite monarchy critical to a key zone of US influence in the MENA region.¹³

It was this importance that prompted the Obama Administration to send US military personnel to Jordan in 2012 for joint military exercises and to help the country plan and deal with potential spillover effects from Syria.¹⁴ Some of the approximately 200 US military personnel have remained in Jordan through mid-2014 – including a contingent of US Patriot anti-missile batteries, F-16 fighter aircraft and command and control personnel.¹⁵
A Levant security architecture favorable to the US would not be complete – let alone feasible – without Egypt and its armed forces. Decades after the 1978 Camp David Accord, the Egyptian Armed Forces remained the largest Levant military force in 2014. Despite a number of high technology transfer from the US supported by annual FMF and other aid programs, the Egyptian military remained far too focused on quantity versus quality with an unwieldy military structure and deep roots in economic life in Egypt – well outside the bounds of other regional military forces.

Despite a military-led regime change in 2013 that ousted the government of President Mohamed Morsi, the US sought to preserve its relationship with Egypt – and critically its military – to preserve what remained of the regional security architecture and a critical if often complicated bilateral peace between Egypt and Israel.16

The Lebanese Armed Forces (LAF) had limited military capabilities when compared in raw terms to all if not most other regional militaries in the Levant. The force also continued to suffer in mid-2015 from decades of neglect in military development terms by successive government spanning back as far as independence from France in 1943. However, the force’s post-civil war officer corps remained broadly competent, professional and well trained over the 1990 to 2005 period, despite the often over-bearing politics of Syrian military fiat over Lebanon. In the wake of the withdrawal of Syrian military forces from Lebanon in 2005, the LAF – supported by the US, the United Kingdom, France and other Western states – underwent a gradual but substantial process of military recapitalization and force development.

Not unlike the IDF in the years between 2000 and 2006, the Lebanese military – though in this case by virtue of Lebanese political divisions – focused primarily on internal stability operations. The advent of the Syrian civil war, however, shifted some if not all of the LAF’s focus on expanding border management systems, ISR, C2 and C4I, training both conventional and SOF units, and bolstering the country’s counter-terrorism capabilities in ways that ultimately coincide with US regional geopolitical preferences. While Lebanon remained a relatively marginal player at best in terms of both US policy and military engagement, the country’s proximity to Israel and Syria and the LAF’s track record of combating Al-Qaeda affiliated and inspired groups increasingly defined the US-Lebanon bilateral relationship in 2015.

At the same time – as the section on the Levant asymmetric balance shows in greater detail – conventional military power steadily lost at least some of its importance as non-state actors came to play a growing role in the region, especially in the wake of the 2006 Israel-Hezbollah war. Both state and non-state actors have come to rely on asymmetric warfare and threats. Moreover, the civil war in Syria, revolution and counter-revolution in Egypt, and increasing tensions in Jordan all had major impacts on the kinds of threats facing Levant states, the US and Iran.

**Ground Forces**

While air and naval forces have experienced important military developments in the Levant, ground forces account for the bulk of military forces. Every regional state prioritized army development when faced with limited resources or funding restrictions. US aid and Israeli military industries – along with Israel’s military professionalism – ensure
Israeli ground forces remained superior to any regional threat. In contrast, Iran could not and cannot help Syria to present a meaningful conventional ground forces threat to either Israel or US interests in the region.

**Military Manpower**

Figure 1 shows the development over time of active duty manpower levels in the Levant. Israel's active manpower strength has not changed radically over time, but has fluctuated according to fiscal and security pressures. Israel also remains dependent on reserve versus active manpower. Israel still has a small active force, although it has halted a recent trend toward force cuts and is rebuilding the training and readiness of both its active manpower and reserves.

Figure 1 also reflects the effect of the Arab uprisings on regional manpower trends. Egypt's standing active duty forces saw a small reduction of some 22,000 troop between 2011 and 2014 from 460,500 to 438,500. By contrast, the Syrian Armed Forces saw the country's civil war slash the country's 325,000-strong force slashed almost by half to 178,000 in 2015 according to IISS estimates\(^1\) - although as will be discussed later, actual figures may be significantly lower.

By contrast, the country that did see an increase in manpower in the wake of the Arab uprisings was Lebanon, which saw its military forces increase by close to 11% from 59,100 in 2011 to 65,500 in 2014.\(^2\) This increase was driven by efforts to rehabilitate and expand atrophied Lebanese air and naval forces, stand up new units – including two land border regiments along the frontier with Syria – in an effort to stem pressures from the presence of fighters from Syrian – including groups like Jabhat al-Nusra and possibly ISIS – operating along the anti-Lebanon mountain range and al-Qalamoun in contested areas along the Lebanese Syrian border.

Israel is one of only two regional states – the other being Jordan – not to undergo dramatic shifts in total manpower levels in the wake of the 2011 uprisings. Ultimately, the combination of Israel's high-quality reserves and its active manpower strength made it far more competitive with its Arab neighbors than a comparison of active manpower would indicate. Historically Syria had recurring manning problems even before its civil war. Syria maintained extremely high manpower levels after the 1982 war with Israel, but had to cut back in the late 1990s, partly because of their cost and partly because it could not properly equip, train, and support such forces.

**Manpower Quality, Training & Military Reform**

Beyond total manpower numbers, training, experience, and personnel management and development are critical "intangibles" that are hard to compare and quantify, and which can differ radically between countries and units.

Virtually all experts agree that Israel has long had a major advantage over Syria, Egypt, Jordan, Lebanon and any other major MENA military power. While this was as a result of high quality training for a professional standing and reserve force, it was also in no small part thanks to the IDF’s ability to pursue often difficult military reforms based on lessons learned after major military engagements. For example, the IDF signaled an intent to refocus emphasis on ground forces, cross-service jointness, and combined arms after the limits of air power became apparent both during and after the 2006 Israel-Hezbollah
conflict. The 2006 war also reversed a process set in motion years earlier intended to disband the post of Corps Commander and brought greater emphasis on training for combat in areas saturated with mines, IEDs, and underground tunnels.\textsuperscript{19}

Manpower numbers, training and reform as lessons learned were only part of the story. Human factors and mission needs driven by emerging and future threats have long been as important. The challenge Israel faced in the wake of the Arab uprisings was how best to reallocate its manpower resources to better respond to current and emerging threats in the Levant – especially in recent cuts and shifts to existing manpower structures. In an indication of the growing importance of Syria and the Golan Heights – once Israel’s quietest military front – the IDF announced in February 2014 the formation of a dedicated division tasked with combating threats from Syria. The new Bashan Division was largely a reconfiguration of a former reserve division tasked with defending sensitive positions in the Mount Hermon sector.\textsuperscript{20}

Only Israel has been able to maintain both excellent SOF units and superior conventional forces. For example, historically, Israel set much higher training standards than its neighbors – especially Syria – although it did reduce many aspects of its training activity between 2003 and 2005. The Israeli-Hezbollah War of 2006 made the Israeli Defense Force (IDF) aware of the need to rebuild its manpower quality as soon as possible, to carry out large-scale exercises of its conscripts and reserves, and to expand and improve the training of its experienced, combat-ready cadres.

Egypt, Jordan, and Lebanon benefit from US, British and other Western training efforts, and all three are trying to stand up increasingly professional career soldiers. Lebanon benefited from unprecedented levels of US assistance over the 2007 to 2015 period, which resulted in the training of thousands of military personnel in that period. By one estimate, the US-sponsored and funded Comprehensive Training Program may have trained as much as 25\% of the Lebanese Armed Forces by 2014 based on the number of personnel trained. Jordan and Lebanon both emphasized the development of their special operations forces (SOF) and both militaries fielded units that their US trainers deemed to be the equivalent of elite forces by regional standards.

The quality of Syria’s active manpower prior to the 2011 uprising was mixed. While poorly trained conscripts constituted the majority of Syria’s active land forces, its special operations forces (SOF) and elite units benefited from higher levels of training. In addition, while the Syrian army was slow to adapt in combat and emphasizes static defense and garrison operations, units such as the Republic Guard and the 4\textsuperscript{th} Mechanized Division have been trained to deal with both conventional and asymmetric combat environments.\textsuperscript{21} As such, these units have seen the most action against the armed opposition in Syria, but with commensurate implications on overall unit readiness and limited opportunities to rotate out of theater for rest and additional training.

As Figure 1 shows, defections, desertions and attrition after four years of civil war saw Syria’s total manpower declined from a high of 325,000 in 2011 to 295,000 in 2012 to an estimated 178,000 since 2013. It should be mentioned, however, that some government estimates further downgrade Syrian troop strength to as little as 70-80,000 active combat troops in 2015.\textsuperscript{22} How Syrian military forces changed and adapt to meet the needs of the Assad regime’s survival strategy is discussed in more detail in a dedicated section on Syria.
What is certain is that the 2011-2015 uprising and insurgency in Syria forced Syrian ground forces, and manpower in general, to either adapt or die.

By early 2013, a major force transformation included having to learn or re-learn how to fight an insurgency in the urban battlefield. Large units were divided up into smaller nimble units, ineffective and ageing leadership were sidelined, and new or emerging junior officers began to take on greater operational responsibility. Meanwhile, the once-critical issues of attrition by defection or desertion had not slowed to a trickle as Syrian military personnel were forced to reassess any future role in an armed uprising increasingly dominated by Salafi-Jihadi groups.23

The days are gone when the Syrian Army was made up largely of conscripts with potentially questionable loyalties. By late 2013, its manpower seemed to have stabilized at roughly 50% of its pre-war fighting strength with casualties being replaced by loyalist recruits, volunteers, and manning from otherwise low-strength units on the path to being disbanded or merged with larger and more capable units.

Army personnel continued to receive their full salaries and even were allowed to rotate out on leave.24 On the one hand, 100,000 to 150,000 loyal troops tested in battle over more than four years of fighting are arguably more lethal than a 300,000-strong Syrian military in 2010, complacent after some 30 years of sitting idle along the Golan Heights.

Despite these perceived gains, the Syrian army has had to contend with severe losses. Even with time away from the frontlines, Syrian army personnel suffer from decreasing morale, the growing effects of battle fatigue after some four years of urban and rural combat operations. Furthermore, the declining ability of the Assad regime to replenish losses through attrition are compounded by the effects of fighting on multiple frontlines amid often dramatic losses in territory to disparate Syrian insurgent groups.

In addition to the restructuring of existing units and in a bid to stop-gap some if not all losses to attrition, desertions and defections, new forces were also brought online or created from existing militia or paramilitary forces. Supported by funding from Iran, the Assad regime deployed a new unit branded the National Defense Force (NDF). Estimates on the size of the force remain uncertain.

In 2014, the NDF was estimated to number some 80,000-strong.25 An amalgam of different locally sourced pro-regime militias, NDF recruits were drawn all but exclusively from the Alawite community and other minority sects that had tied their fates to Assad. Many of the so-called Shabiha organizations – most of which were composed of Alawites – were gradually absorbed into the NDF while other units – like the Popular Front for the Liberation of Iskenderun – were reported to maintain their relative autonomy.26

Former IRGC General Hussein Hamedani commented publically in May 2014, on Iranian and Syrian plans to establish a new organization in Syria based on the model of Lebanese Hezbollah. Hamedani also noted that the Syrian government was integrating new manpower strategies against their asymmetric opponents, including the formation of 42 separate groups, 128 battalions, and some 70,000 Alawite, Sunni and Shi’a fighters to bolster the Assad regime.27
Regional Reserve Forces

The differences in the quality of each country’s full-time active manpower are compounded by more serious quality gaps in the case of most reserve forces.

Israel does have modern and relatively well-trained reserves totaling some 465,000 troops, many of which have had extensive practical experience in asymmetric warfare since 2000. While Egypt maintained some 479,000 forces in reserve in 2015, it was difficult to measure the effectiveness of the entire force, given the level of conscription. Jordan maintained reserves of some 65,000 troops in 2015, but questions remained about their readiness and quality compared to the level of attention standing and SOF units received. Meanwhile, since the end of conscription 2005, Lebanon maintained little to manpower in reserve to speak of, with much of the LAF’s combat units on active deployment across in the country in support of internal stability, counter-terror and border management operations.

Historically, Syria’s reserve military forces – once numbering some 314,000 men – were little more than "paper" forces with no real refresher or modern training, poor equipment and readiness support, and little or no experience in mobility and sustainability. In addition these forces have often been given cadres of low-grade or failed officers and NCOs. They did little more than pointlessly consume military resources that would be better spent on active forces. As of 2015, the state of Syria’s reserve forces was uncertain – especially in light of the Assad regime’s recurring reluctance to draft from increasingly reluctant if loyal pro-regime demographics.

Armor and Equipment

Equipment numbers are another major indicator of conventional strength, although quality again is as important as numbers, along with sustainability, maintenance, and specialized training. Israel dominated Syria in terms of the quality of its artillery – both fixed and mobile – and its ability to deal with battle damage in the field, and the ability to make use of anti-tank guided missile (ATGM) holdings and other light and medium arms.

Israel’s greatest conventional advantage, however, is in joint warfare, combined arms, and especially armored warfare and maneuver. Figure 2 compares total armored forces and equipment. Figure 3 shows the trends in main battle tanks (MBT). This includes both modern high quality armor and aging systems.

While Israel gradually reduced the overall size and mix of its MBTs over time, it nonetheless maintained a distinct lead in tank quality. As of 2015, Israel only held some 500 MBTs in regular active service, including 220 Merkava MkIVs, 160 Merkava MkIIIs and 120 Merkava MkIIs. However, the majority of Israeli MBT holdings in 2015 was either in storage or assigned to reserve units. These included both modern Merkava MBTs and older Magach-7 and M60 variants. In 2013 the IDF planned to order additional Merkava MkIVs even though the military was planning for an overall reduction in the size of Israel’s armored holdings. The multi-year plan was intended to bring new armor online while retiring older M60 and Merkava MkI-based systems.28

Despite plans for future purchases, Israel faced other pressures on how it would chose to manage and direct its efforts to recapitalize its armor holdings. One such pressure that any military can relate to was tighter budget controls. Another was changing threat profiles in a changing Levant security landscape. In 2013, both the Armored Corps and Artillery
Corps had high hopes for new missions and force doctrine. In the case of the former, the IDF was pushing to sustain armor production, curtail downsizing and maintain capacity in the event of a future conventional war. The latter, meanwhile, was hoping to transition from a fire support role that of primary standoff attack in line with the so-called “Fire2025” master plan. Fiscal pressures would, however, force the IDF to adopt a more limited and narrow “interdisciplinary” strategy for training and equipping future land forces.29

The export versions of Syria’s T-72s have competent armor and drive trains, but poor ergonomics and inferior fire control, targeting, and night-vision systems. The armor, night-fighting and long-range engagement capabilities of export versions of such T-72s also proved to be significantly more limited than many unclassified estimates had predicted. While pre-civil war Syria had large holdings in terms of total MBTs, these included some 2,000 obsolete T-55/55s, half of which had been relegated to static positions or storage. This use of tanks could at best only diminish the Israeli edge in terms of mobility, maneuver battle, superior logistics and network centric warfare and then only where they are used in relatively static defenses.30

It is also important to note that preparations for conventional warfighting have not prepared Syrian armored units to deal effectively with an asymmetric internal threat. Figures 2 and 3 do not reflect the degradation of Syrian armor holdings in the wake of more than four years of counter-insurgency and internal security operations against an increasingly significant anti-armor and improvised explosive device (IED) threat posed by the Assad regime’s armed opponents. This was reported to be in no small part thanks to the failure to support tanks with infantry in urban combat theaters and the Syrian military’s overreliance on tanks as de facto static pillboxes.31

There is significant evidence that Syrian rebel groups inflicted significant losses on the Assad regime’s holdings of MBTs and AIFVs. According to one report based on multiple Syrian rebel sources, Syrian T-72s and BMPs were particularly hard-hit, with the regime losing a suggested 534 MBTs, 77 BMPs and some 600 destroyed, damaged or captured vehicles over the March 2013 to July 2013 period alone.32

According to another set of estimates, some 1,000 to 1,800 of Syria’s pre-war holdings of 4,950 T-55, T-62 and T-72 MBTs were destroyed or out of action by early 2015.33 Meanwhile, there were recurring reports in 2014 that Syrian mechanized infantry units were facing increasing difficulty to conduct combined arms maneuvers – even in areas as critical as Damascus – as a result of the combined effects of attrition on infantry and Syrian armor.34

There is no way to qualify with certainty the status of Syria’s armored combat systems based on open source data. It is not clear how many MBTs remain fully combat-capable, have fallen into rebel hands, or are being kept in Syrian Army reserves. However, it is safe to assume that a meaningful number were lost to attrition warfare and anti-tank fire. Critically, reports in late 2013 indicated that the vast majority of the Assad regime’s massive and effective holdings of 2,500 field artillery pieces, 500 MLRS, 1,000 mortars and some 2,000 ground fire-capable anti-aircraft guns were largely intact.35

Regardless of the Syria uprising, years of emphasis on long-range conventional engagements with little training in maneuver warfare added to the vulnerability of Syrian
armor, leading to the increased dependence on artillery, other forms of indirect fire and the heavy use of fixed and rotary wing airpower.

**Figure 1: Total Arab-Israeli Active Military Manpower: 1973-2015**

(Troops in thousands)

Source: Adapted from the IISS, *The Military Balance*, various editions. Some data adapted based upon discussions with US experts and regional military personnel.
Figure 2: Total Arab-Israeli Armored Forces in 2015
(Numbers of major combat weapons)

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<thead>
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Note: Includes Egyptian, Israeli, Jordanian and Syrian holdings in reserve or storage. Syrian figures are pre-civil war estimates. Does not include old half-tracks and some combat engineering and support equipment. Lebanese holdings include 10 M60A3s transferred from Jordan in 2009. Syrian figures are pre-civil war figures.

Source: Adapted from the IISS, *The Military Balance*, various editions. Some data based upon discussions with US experts.
Figure 3: Israel versus Egypt, Jordan, Lebanon and Syria: Operational Main Battle Tanks by Type in 2015

Note: Numbers do not include Egyptian, Israeli, Jordanian or Syrian equipment in storage. Syrian figures are pre-civil war estimates. Israeli reserve holdings significantly outnumber active duty systems. These include 440 Merkava MKI, 290 Merkava MKII, 270 Merkava MKIII, 140 Merkava MKIV, 111 Magach-7 and 711 M60A1-A3. Some equipment categorizations include modified versions (e.g. Egypt Ramses II is modified T-54/55).

Source: Adapted from the IISS, *The Military Balance*, various editions. Some data adjusted or estimated by the author. Data differ significantly from estimated by US experts.
Air Forces

US aid to Israel shapes the air aspects of the regional balance in ways that neither Syria nor Iran can directly counter – although Iranian and Syrian transfers of longer range rockets and missiles to Hezbollah have had an important indirect impact.

While Syria maintained a large number of pre-civil war combat aircraft, it did not present a viable air threat to Israel. If one looks only at the total aircraft numbers, Syrian forces at their peak would have had a lead in aircraft. However, this was only because there were so many obsolete and obsolescent aircraft in the Syrian forces.

Fixed Wing Combat Assets

Figure 4 shows the number of high-quality aircraft in the region in 2015. 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 5 shows regional holdings of reconnaissance and ISR-capable platforms in the Levant.

Figure 4 shows that Israel maintained major air superiority over Syria, whose export versions of the MiG-29s and Su-24s were equipped with obsolescent avionics and could not compete with Israeli types on a one-on-one basis. In a 2011 report, RAC MiG revealed that the company had upgraded four of Syria’s MiG29s to the MiG-29SM standard. If accurate, these aircraft would have been equipped with an upgraded N019ME radar, the ability to carry larger payloads and some upgrades to cockpit displays and navigational equipment.

The standard MiG-29SM was equipped with the ability to carry a larger mix of air-to-ground weapons systems, including the Kh-29T/TE (AS-14 Kedge) and Kh-31A/P (AS-17 Krypton) air-to-ground missiles and KAB-500KR guided bombs. Despite some potential upgrades to its fleet of existing MiG-29 aircraft, Syria had still largely failed to effectively sustain its ageing mix of combat aircraft, and it is believed that many of Syria’s current holdings are no longer combat capable.

In 2013, the IISS reported that Syria maintained 50 Su-22, 20 Su-24, 120 MiG-21MF/U, 100 MiG-23s, 32 MiG-25s and 40 MiG-29s. However, in 2014 the IISS reported by contrast 40 Su-22, 20 Su-24, 95 MiG-21MF/U, 90 MiG-23s, no MiG-25s and 30 MiG-29s. If these figures were reliable – and there was nothing to indicate that they were, the Syrian air force had lost some 87 aircraft within a year. Figures in 2015 only serve to further downgrade estimates of Syria’s air order of battle, why may now count no more than 36 Su-22, 19 Su-24, 79 MiG-21MF/Us, 41 MiG-23s, 6 MiG-25s and 30 MiG-29s.

Reporting on the attrition rates of Syrian fixed wing aircraft remained uncertain. Other reports showed that rebel estimates of the number of downed Assad regime combat aircraft stood at 120 as of September 2013; however those figures did not distinguish clearly between fixed wing and rotary aircraft. Syrian L-39 Albatros trainers – which were extensively used in from 2011 to 2015 in a close air support role – may have also been eliminated from Syrian military holdings thanks to the overrunning by rebel forces of key airfields in northern Syria.

The Syrian air force seems to have continued to try and rebuild and sustain its fixed wing assets in 2014 despite limits on resourcing and the national budget. In May 2014, Jane’s
*Defense Weekly* reported that 12 MiG-29M/2M multirole fighters ordered by Syria were planned to be delivered in 2016 or 2017. The report noted that the aircraft were ready for deliver, but that obstacles remained in terms of a stable delivery schedule tied to the pace and scale of the Syria conflict.

In 2011, Syria had ordered 36 YaK-130 jet trainers/light fighters which could support Assad ground force in a close air support (CAS) role. There were indications in 2013 that the planned delivery may have initially been put on hold. However, the Russian newspaper *Kommersant*, citing Russian industry sources, noted that the deal may have gone through and that the first nine YaK-130s could be delivered by the end of 2014.40

None of the reporting – including from the IISS and IHS *Jane’s* could accurately capture the state of Syrian fixed wing air power in 2015. However, long before its civil war, it was clear that Syria was trying to maintain, arm, sustain and train for far too many different types of aircraft, and the size and scale of Syrian holdings put a major – and costly – burden on the air force. It meant maintaining and fielding a mix of aging fixed and rotary aircraft diluted manpower quality. This burden was compounded by a lack of spare parts, airframe fatigue, general wear and tear, field and base repair, and logistics associated with the current high tempo of Syrian air force operations against anti-Assad insurgent groups.

The IISS reported that Jordan had some 38 F-16 *Fighting Falcon* variants in 2015, although the total number of Royal Jordanian Air Force (RJAF) F-16s – initially standing at 60 aircraft – could expand further. Jordanian squadrons were configured to fulfill attack and ground attack roles and were supported by a core of very effective fixed wing pilots.

In addition to buying costly high-performance maneuver platforms like the F-16, plans were announced in mid-2014 to boost Jordan’s close air support (CAS) capability by converting one of two existing RJAF C295 transport planes into a gunship platform. The converted C295 would in the footsteps of the RJAF’s existing two AC235 gunships by integrating mission and fire control systems, electro-optical and radar sensing, AGM-114 *Hellfire* missile rails, a side-mounted M230 30mm chain gun, 70mm guided rocket systems and an integrated defensive suite.41

While Jordanian efforts to expand and consolidate holdings helped, years of chronic underfunding had nonetheless forced the RJAF to operate with lower levels of fleet modernization, modern electronic warfare and combat systems, or the kinds of battle management systems that could approach the standard set by Israel.

As Figure 5 shows, the RJAF had expanded its force to incorporate low-cost and easily sustainable fixed ISR platforms centers largely on the Cessna 208B *Grand Caravan* platform. However, as of 2015, Jordan still lacked Airborne Early Warning & Control (AEW&C) aircraft. Were it not for increased multi-year US FMF support, the RJAF would face real challenges in pursuing long-term air power sustainment.

In 2015, Egypt was second only to Israel in the regional fixed wing air power balance. The Egyptian air force was considered one of the most capable in the Levant with capable aircrew, good aircraft serviceability and high standards of maintenance following the introduction of mainly US combat systems after decades of reliance on Soviet aircraft and support. Egypt’s priority in 2015 remained largely unchanged from its goals set prior to mass protests in 2011: upgrading its air arm, modernizing the country’s existing fleet of
197 F-16 multirole fighter variants. While not as political or influential as the country’s land forces, the Egyptian air force was nonetheless considered an elite and western-oriented service centered on large pool of fixed wing aircraft.  

Efforts to recapitalize Egypt’s fixed wing combat capability faced multiple and often persistent challenges. The first was that Egypt had yet to truly incorporate modern precision-guided munitions and battle management systems. Another was that Egypt had not engaged in real-world air combat operations since a brief border war with Libya in 1977. A more immediate challenge may have been the effects of military-led regime change in Cairo in 2013. In July 2013, a dozen or so remaining F-16s deliveries to Egypt were suspended in the aftermath of President Morsi’s removal.  

In March 2015, the Obama Administration lifted the executive hold on military sales to Egypt, including the sale of the 12 F-16s.  

Lebanon had never maintained a sizeable air force and had not maintained or acquired modern combat systems since it purchased 12 Mirage III E/Ds in the 1960s that it could neither sustain nor deploy with any real degree of effectiveness. After decades in mothballs and storage in France, Lebanon eventually sold its 10 remaining Mirage III E/Ds to Pakistan in 2000.  

By the time Syrian forces had withdrawn from Lebanon in 2005, The Lebanese Air Force maintained only three vintage Hawker Hunter Mk70/70A ground attack aircraft in relative operational condition. The Lebanese air corps also had only a handful of qualified pilots in 2005 and the air service was the smallest branch of the Lebanese Armed Forces. 

Support from US FMF, Section 1206, and other funds over the 2007 to 2015 period, did, however, allow the Lebanese Air Force to gradually rebuild both the pilot corps and the country’s fixed wing holdings. While still the LAF’s smallest service, the Air Force expanded from a total of 1,000 men in 2007 to a force of 1,680 by 2014 -- as it stood up new or rehabilitated fixed wing units and the manpower needed to sustain national holdings. 

Yet, Lebanon’s fixed wing holdings in 2015 remained limited to one armed Cessna AC208 Armed Caravan and one unarmed Cessna B208 Grand Caravan that was converted to armed AC208 standard in early 2015. Both aircraft were equipped with sophisticated electro-optical ISR packages mounted in an under-fuselage ball turret, and both were equipped with M299 railings for AGM-114/R Hellfire guided missiles. Both aircraft had also seen extensive service conducting ISR, Recce and CAS operational deployment throughout the 2013 to 2015 period. 

Lebanon’s Armed Caravans were used extensively in combat missions against Al-Qa’eda affiliated militants near the north-eastern Lebanese town or Arsal starting in August 2014. The Lebanese air force was expected to receive a third aircraft in future fiscal cycles for a total of three 208 variants, and Lebanon was on track to acquire another future ISR-capable light attack armed reconnaissance (LAAR)-type platform - possibly based on the Embraer EMB314 Super Tucano – to build up the country’s fixed wing CAS and ISR capabilities. 

On June 9, 2015 The US Defense Security Cooperation Agency notified Congress of a possible sale worth an estimated $462 million of 6 A-29 Super Tucanos to the LAF. The planned sale would also include provisions for ALE-47 Countermeasure Dispensing Systems paired with AN/AAR-60(V)2 Missile Launch Detection Systems (capabilities that
none of the Lebanese military’s active duty military aircraft had as of mid-2015) and 2,000 Advanced Precision Kill Weapon Systems. It should be noted that this planned purchase may be tied to extra-budgetary funding provided by Saudi Arabia in late 2014, and that this may be just an initial order of what may be a far larger program to bring online additional A-29s over time in LAF holdings.

Despite the efforts of other regional states, what was clear from both Figure 9 and Figure 10 was that Israel was very likely to maintain aerial fix wing superiority, if not outright supremacy for the foreseeable future – especially if the Israeli Air Force manages to cost-effectively integrate future deliveries of F-35 Joint Strike Fighters into Israeli holdings. The civil war in Syria, the Assad regime’s financial problems and the limits on both Iran and Russia in terms of resupply and redevelopment of the Syrian air force also ensure that this Israeli lead can only grow in the near term. Israel has much better real-world access to aircraft improvement programs and to the next-generation F-35 platform. Israel had access to many next-generation upgrades in US systems with “stealth,” “supercruise,” advanced avionics, and advanced guidance packages, and both access to and military research and development cooperation with the US is only likely to expand further.

**Rotary Wing Combat Assets**

Figure 6 shows total air force and army strength in rotary-wing combat aircraft – less naval assets – in the Levant in 2015.

Israel maintained truly advanced attack helicopters such as the AH-64 Apache. In 2015, it was taking final delivery of 18 AH-64D Apache Longbow helicopters with extremely advanced avionics and “fire and forget” capabilities that do not require the aircraft to wait and track the missile to its target.

Israel was also the only country with access to cutting edge rotary craft such as the V-22B Block C Osprey tilt-rotor craft, of which it ordered six in 2014. Syrian attack helicopter units were considered elite units prior to the country’s civil war, but Syria was not able to modernize its rotary-wing combat forces, and its training and tactics have not been fully updated over the last two decades.

Syria’s ageing mix of rotary wing aircraft was sharply degraded by its civil war due to structural and airframe damage from continued use against rebel forces and increasing incidents wherein insurgents successfully targeted, damaged, and/or destroyed Syrian helicopters using anti-aircraft guns or short range man-portable air defense systems (MANPADS).

The first shoot-down by rebels was believed to have taken-place in August 2012. Unarmored transport platforms like the Mil Mi-8/17 Hip have proven especially vulnerable to fire – especially in the wake of rebel units acquiring truck-mounted 23 mm ZU-23-2 anti-aircraft guns.

By the end of August 2012, members of the Ahrar al-Sham Islamist militant group claimed to have destroyed as many as 10 helicopters at the Taftanaz airbase in Idlib province. Meanwhile in late November 2012, the first major report emerged of a rebel surface-to-air missile hitting and downing a Syrian military transport helicopter near Aleppo. Despite a growing number of downed transport helicopters, there were initially few verifiable and confirmed losses of Syrian combat helicopters such as the Mi-24 Hind. In 2012, Syria was
reported to have as many as 36 Hinds. However, their operational readiness levels were increasingly uncertain.\textsuperscript{49}

Regime losses to attrition, the overrunning of military bases and rebel acquisition of MANPADS and other systems following the Western military intervention in Libya all further degraded Syria’s rotary holdings. According to some estimates, the seizure of Taftanaz airbase in Idlib province in 2013 led to at least 25 Mil Mi-8/17 Hips and one Mi-25 Hind falling out of regime control.\textsuperscript{50} However, rebel forces were unable to make use of these helicopters due to the absence of sufficient flight crews, a WWI-equivalent level of command and control, and the very real threat that regime surface to air missiles (SAMs) and anti-aircraft guns still posed.

Egypt’s military ties to the US gave it the ability to dramatically modernize Egyptian rotary holdings. On paper, Egypt had the Levant’s largest holdings at 105 attack or attack capable helicopters in 2015. These included 35 modern AH-64D Apache helicopter gunships. However, Egypt also maintains a mix of attack lighter and less capable rotary platforms such as the SA342K/L Gazelle, which offered little protection to aircrews when operating at low altitude.

By contrast, Israel maintained 44 more capable variants of the AH-64D in addition to its holdings of older but still very capable 33 AH-1E/F Cobra attack helicopters. Egypt did, however, take steps to acquire newer BkII Apache Longbows, of which it ordered 19 in 2009.\textsuperscript{51}

Jordan and Lebanon maintained far more limited combat-capable rotary aircraft fleets than their larger or better funded neighbors. The JDAF maintained a small force of 25 AH-1F Cobra attack helicopters. The JDAF also had some combat-capable EC635s. Meanwhile, Lebanon – which had not modernized its attack-capable aircraft since the 1975-1990 civil war – continued to operate 8 multirole SA342L Gazelle helicopters armed with .50 caliber guns and often with limited or insufficient stocks of HOT ATGMs. Lebanese Gazelles have proven repeatedly vulnerable at low altitude and during strafing runs. An LAF SA342L sustaining damage at low altitude from 14.5mm anti-aircraft fire during a gun strafing run against Salafi Jihadi militants near the north-eastern town or Arsal in early August 2014.

With the resumption of US military assistance to Lebanon, the LAF moved to gradually replace or modernize its rotary fleet which remained heavily reliant on a fleet of 23 older (if not vintage) UH-1H Huey light transport helicopters. In 2012, Lebanon placed an order for 6 new Huey II transport helicopters. However, it remained unlikely in 2015 that the LAF would find a short term solution to its inadequate attack helicopter holdings. This may change in light of increased fighting between the LAF and Sunni militants with tied to or inspired by Al-Qa’eda. In the interim, the LAF took steps to up-arm other rotary craft, including some of the LAF’s 10 AS330/IAR330 Super Puma medium transport helicopters.

\textbf{Munitions and Sustainability}

It is difficult to make comparisons of air-to-air and air-to-ground munitions, but the disparity is increased by the fact that Israel can modify imports and has a wide range of its own systems, some of which are classified. It is clear, however, that Israel has extensive stocks of state of the art systems and ready access to US weapons and technology.
Syria’s stocks were often badly dated before its civil war began, and Syria faces particularly serious limits in terms of comparative precision strike and long-range air-to-air missiles that have high terminal energy of maneuver and effective counter-countermeasures. The IAF also has a significant advantage in the ability to add specialized external fuel tanks, add on pods with special electronic warfare and precision strike capability, the ability to modify and develop external jammers, and adapt wing loading to new munitions needs.

Israel has taken significant steps over the past decade to sustain, maintain and expand its holdings of sophisticated air-to-air weapons systems. In 2007, Israel placed an order for 200 AIM-120C-7 AMRAAM and 500 AIM-9M Sidewinder air-to-air missiles. It expanded its inventory of shorter-range air-to-air missiles by placing an order in July 2014 for some 600 AIM-9X-2 Sidewinder Block II missiles and 50 CATM-9X-2 Captive Air Training Missiles.

The chances of Israel using its air-to-air munitions in any large quantity in the Levant remained low in 2015, given peace with Egypt Jordan, the absence of a viable Lebanese Air Force and the declining quality of Syria’s air force – let alone its historic aversion to engage in air to air combat since the 1982 air war over Lebanon.

US FMF was also critical, however, to enabling Israel in acquiring more modern air-to-ground munitions systems. Air-to-ground systems form a critical aspect of Israeli munitions holdings, given the IDF’s targeting requirements tied to any future confrontation with Hezbollah in Lebanon or Palestinian militant groups.

In 2005, Israel ordered 100 GBU-28 5,000-pound laser-guided “bunker busting” bombs. Two years later, the IDF placed an additional order for an additional 50 GBU-28s, in addition to 10,000 Joint Direct Attack Munitions (JDAM) tail kits, 4,000 Paveway II kits for Mk-82, Mk-83 and Mk-84 warheads. Israel also ordered some 10,000 Mk-84, 1,500 Mk- 82 and 2,000 BLU-109 live bombs. In 2008, Israel ordered 1,000 GBU-39 small diameter bombs (SDBs) – 250-pound precision guided glide bombs intend to provide aircraft with both the ability to carry more bombs and to deliver them on target from long range and with greater accuracy.

Despite the size of its air force, Egypt did not undertake large-scale recapitalization of its munitions systems. In 2008, Egypt requested 450 AGM-114K3A Hellfire II guided missiles. Meanwhile, other plans tied to modern missile acquisition were principally for ground-based use. Jordan, however, did order air-to-air systems, in part driven by the RJAF’s recent acquisition and integration of the F-16 Fighting Falcon. In 2009, Jordan order 85 AIM-120C-7 AMRAAM air-to-air missiles.

Lebanon for its part had no meaningful stores of air-to-air systems – let alone aircraft in 2015 capable of deploying them. However, Lebanon did receive 20 AGM-114R Hellfire air-to-ground missiles in 2009 for deployment on Lebanon’s sole Cessna AC-208 Armed Caravan CAS/ISR platform. The LAF also placed a request for an additional 100 Hellfires – a request that become far more urgent in 2014 as the LAF engaged Al-Qa’eda inspired Jihadi militants in north-east Lebanon in August 2014.
Figure 4: High-Quality Operational Arab-Israeli Combat Aircraft in 2015
(Does not include stored, unarmed electronic warfare or combat-capable RECCE and trainer aircraft)

Source: Adapted by Aram Nerguizian from the IISS, *The Military Balance*, various editions, and discussions with U.S. and regional experts.
Figure 5: Operational Arab-Israeli Electronic Warfare, ISR or Combat-Capable RECCE Aircraft in 2015

Note: Syrian Mig-25Rs are non-operational.

Source: Adapted by Aram Nerguizian from the IISS, *The Military Balance*, various editions, and discussions with U.S. and regional experts.
Figure 6: Operational Arab-Israeli Attack and Armed Helicopters in 2015
(Does not include antisubmarine warfare or antiship helicopters)

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Note: Table does not include 10 retrofitted or weapons-capable Lebanese AS330/IAR330 Puma.

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

**Surface-to-Air and Missile Defenses**

While countries in the Levant maintained very different levels of readiness and investment in either surface-to-air systems or modern missile defenses, this nonetheless remained a key and increasingly relevant piece of the regional conventional balance.

**Israel**

No country in the Levant could compare – or come close – the scope, scale and sophistication of Israeli surface-to-air and missile defense systems. The Israeli Air Defense Corps (ADC) – along with the IAF’s fighter squadrons – was tasked with the defense of
Israeli airspace. This included protection of northern Israel from incursions across the UN Blue Line separating Israel and Lebanon. In 2015, The ADC had three batteries with the Arrow/Arrow II high altitude air defense systems, six batteries of the Iron Dome short range anti-rocket defense system, 17 batteries equipped with older MIM-23 I-HAWK surface-to-air missiles (SAMs) and six batteries equipped with the MIM-104 Patriot SAMs.\textsuperscript{56}

While modern surface-based air defenses were not unimportant and Israel continued to invest in and modernize its holding, the IAF’s regional air superiority was a key deterrent to any regional airpower threat. The real challenge from the point of view of Israel was the need for overlapping layers of low, medium and high altitude defenses against missile attacks at a time when Hezbollah alone was estimated to have more than 80,000 rockets in 2014 – including some that could target any part of Israel. The IAF was unique relative other regional air forces in that it could rely on local industry – albeit often in partnership with the US – to develop a complex and comprehensive mix of multi-tiered missile defense systems. Once completed, the planned defense structure would include:\textsuperscript{57}

\begin{itemize}
\item \textit{Iron Dome}; short range rocket interception; \hspace{2cm} ranges of 4 km to 70 km.
\item \textit{David’s Sling}; medium range missile interception; \hspace{2cm} ranges of 70 km to 250 km
\item \textit{Arrow II}; upper atmosphere missile interception; \hspace{2cm} ranges of 250 km to 1,500 km
\item \textit{Arrow III}; ballistic missiles space interception; \hspace{2cm} ranges of 1,500 km to 2,500 km
\end{itemize}

As of mid-2014, only \textit{Iron Dome} and the \textit{Arrow II} system were operational and on active deployments. Due to budget shortfalls, the operational deployment of \textit{David’s Sling} was reported in 2014 to be slipping beyond 2015.\textsuperscript{58} While the \textit{Arrow III} system was slated for entry into operational service in 2015, it too may fall prey to unexpected developmental or budgetary hurdles.

Despite nominal setbacks that are common to any ground-breaking major combat system, Israel remained unique among regional states in its ability to tap into its technologically advanced national defense sector – both private and tied to the Israeli government – in pursuit of force modernization and development of key ballistic systems. The Israeli-developed \textit{Silver Sparrow} missile system was one such example. Developed in 2013 by Rafael Advanced Defense Systems, the \textit{Silver Sparrow} is a medium-range air-launched ballistic missile used as a target missile in trials of the \textit{Arrow III} anti-ballistic missile system. The \textit{Silver Sparrow} – which could carry a high explosive warhead – was unique in that it was designed specifically to simulate the characteristics of Iran’s \textit{Shahab-3} ballistic missile – which had a range of 1,500 to 2,000 km – to aid in the development of the top-tier anti-missile system.\textsuperscript{59}

It is also important to point out just how critical US military assistance, funding and partnership on research and development have been to Israel’s effort to build up its multi-tier anti-missile systems. \textbf{Figure 7} shows historical data on US aid and support in the funding and development of \textit{Iron Dome, David’s Sling, Arrow II} and \textit{Arrow III} from FY2006 to FY2015. Given growing Israeli national defense budgetary pressures discussed later in this section, US funding was also critical in funding Israeli efforts to sustain its inventory of missile defense holdings.
The US continued to play an important role in helping to develop and bring to fruition Israeli missile defense capabilities. In March 2010 the Obama Administration announced that it would provide Israel with $205 million in defense aid for the purchase of up to 10 *Iron Dome* anti-rocket batteries. The Iron Dome system was successfully used for the first time in April 2011, with batteries deployed in Ashdod, Ashkelon, and Beersheba by August 2011.\(^6^0\)

In May 2012 the US House of Representatives authorized an additional $680 million in Iron Dome funding, to be spread over three years.\(^6^1\) The US Congress and successive administrations have supported joint-US Israeli missile defense projects, including ongoing work on David’s Sling, which is designed to counter medium-range (40km to 300 km) threats, and longer-range high altitude systems such as the *Arrow III*.\(^6^2\)

From FY2006 to FY2014, the US allocated some $2.5 billion to the current mix of Israeli missile defense programs and an additional $272.7 million for FY2015. On August 4, 2014, the Obama Administration signed broadly supported congressional legislation allocating a further $225 million to support the restocking of Israel’s *Iron Dome* short-range rocket defense systems after weeks of fighting between the IDF and the Palestinian militant group Hamas.\(^6^3\)

**Syria**

Neither Syria nor any other Levant state has a capability that can compete with Israel’s multi-tiered air defense systems. However, neither the US nor its regional allies can afford to ignore Syria’s air defenses, even after more than three years of bloody civil conflict and the degradation of Syria’s air force.

On paper, with some 200 active SAM batteries and early warning complexes, Syria had the largest integrated air defense system (IADS) in the MENA region. However, in real terms, Syria maintained largely aging surface-to-air systems with little or no missile defense capability and cannot afford the latest weapons and technologies. Israel had a much more modern and better integrated mix of radars and other sensors, IS&R, and battle-management systems to integrate its surface-to-air and anti-missile defenses. Syria’s early warning (EW) system which was based primarily on ageing P-12/18 *Spoon Rest* radar systems were far less capable than more modern Israeli EW holdings.\(^6^4\)

According to the IISS, Syria’s 30,000-strong Air Defense Command had pre-civil war air defense holdings that included two air defense divisions composed of some 25 aid defense brigades armed with at least 150 SAM batteries with S-125 *Pechora* (SA-3 *Goa*), 2K12 *Kub* (SA-6 *Gainful*), S-75 *Dvina* (SA-2 *Guideline*) and some batteries equipped with 9K33 *Strela-2/M* (SA-7A *Grail*/SA-7B *Grail*).

Syria also operated two air defense regiments armed with two battalions equipped with 2 S-200 *Angara* (SA-5 *Gammon*) long-range SAMs.\(^6^5\) In addition, Syria maintained Soviet-made short-range air defense (SHORAD) systems centered around the 9K35 *Strela-10* (SA-13 *Gopher*) and 9K33 *Osa* (SA-8 *Gecko*). These in turn were supplemented by hundreds of anti-aircraft artillery (AAA) and man-portable air defense systems (MANPADS).\(^6^6\)

**Figure 8** shows the estimated spread and coverage of medium and long-range Syrian SAMs before the civil war began to affect the force. Syria’s major SAMs were stationed...
in four key areas: the Mediterranean coast, the area between Homs and Aleppo, Damascus and along the south-west near the Israeli-occupied Golan Heights. When counting SAM sites at Deir el-Zor and the in the east, Syria’s IADS provides coverage of all major cities and military facilities in the country thanks to overlapping fields of fire and force redundancy. However, coverage was only one part of the story. The US and its allies have had access to Soviet-era SAMs for years, found ways to defeat all or most of the older legacy systems, and conceived of effective tactics and electronic warfare strategies to counter Syria’s IADS.67

Damascus faced the vulnerability of its IADS and SAM forces in 2007 when the IAF penetrated deep in to Syrian territory, bypassed or defeated Syria’s EW network, and destroyed a nuclear reactor Syria had been building in Deir el-Zor.68 This only served to accelerate a process that had begun a few years older to either upgrade or close key gaps in Syria’s air defense network.

In August 2007, the Russian press reported that deliveries of modern 96K6E Pantsyr-S1E (SA-22 Greyhound) SHORAD gun and missile systems. A mobile platform combining twin 30 mm guns with guided missiles, the Pantsyr-S1E could target and down incoming precision munition systems and was intended as a turn-key system for the defense of critical infrastructure – such as larger immobile SAM sites. Syria also sought to upgrade its medium-range SAM capability. In 2011 Syria took deliveries of 9k40 Buk-M2E (SA-17 Grizzly) SAM systems – the first Syrian medium SAM platform capable of multi-target acquisition. It was also reported that some Syria’s aging S-125 had been upgraded to conform to the Pechora-2M standard.69

The IISS did not provide an account of Syrian modern SAM holdings in 2014. However, IHS Jane’s analysis compiled by Sean O’Connor noted that Syria maintained the following systems in inventory in 2014:

<table>
<thead>
<tr>
<th>System</th>
<th>Fire Units</th>
<th>Missiles</th>
<th>Active</th>
<th>Inactive</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-75/S-75M</td>
<td>5/52</td>
<td>384/2,047</td>
<td>42</td>
<td>74</td>
</tr>
<tr>
<td>S-125M1A Pechora</td>
<td>47</td>
<td>1,927</td>
<td>31</td>
<td>22</td>
</tr>
<tr>
<td>S-200VE</td>
<td>8</td>
<td>164</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>2K12 Kub</td>
<td>50</td>
<td>3,800</td>
<td>42</td>
<td>31</td>
</tr>
<tr>
<td>Pechora-M2</td>
<td>12</td>
<td>n/a</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Pantsyr-S1E</td>
<td>36</td>
<td>700</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Buk-M2E</td>
<td>8</td>
<td>160</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

While Syria did much to enhance its medium-range SAM capability in the wake of the 2007 IAF attack near Deir el-Zor, questions remained in 2014 surrounding Syria’s plans to acquire major long-range SAMs. Acquisition of sophisticated S-300P series major SAM system would have complemented the country’s upgraded short and medium range capabilities, replaced ageing S-200VEs, modernized the country’s IADS and enhanced Syrian air deterrence against Israel.

Whether or not Assad’s Syria would ever have received, let alone fully integrated the S-300P into its forces, is unclear. In 2010, Syria did sign a deal worth $900 million with Russia to acquire the system, and the sale of the S-300P quickly became a strategic football
between the US and its allies on the one hand and Russia, Iran and Syria on the other. The US and Israel both repeatedly applied pressure on Russia to forestall if not cancel the planned sale of strategic air defense systems to Syria. Nonetheless, reports in the Russian press surfaced in January 2014 that Moscow had begun the delivery of S-300P components, including 48N6E2 missiles. However, an August 11, 2014 report by Russian news agency RIA Novosti seemed to indicate that Moscow may have been ready scrap the sale and delivery of S-300P complexes to Syria altogether.

The intensification of Syria’s civil war and advances by rebels against key regime facilities have since made the security of the country’s SAM network far more precarious. According to IHS Jane’s, since 2012, attacks by armed factions opposing the Assad regime threatened no fewer than eight Syrian military facilities equipped with air defense systems, SAM positions and early warning assets. These included the loss of two EW facilities in northwest Syria. The loss of regime territory in Aleppo and Der’a provinces had the potential to threaten seven S-75, four S-125 and five 2K12 batteries, in addition to ten EW assets. However, as of 2014, none of Syria’s newer holdings have been compromised, and IHS Jane’s reported that the Syrian IADS remained broadly intact due to the country’s layered air defense infrastructure.

Israel presented another threat to Syria’s IADS in the wake of protests in 2011. Driven by its long-term concern that non-state armed grounds would continue to pursue the acquisition of increasingly modern air defense, anti-tank and anti-ship systems, the IAF was both able and willing to conduct counter-proliferation airstrikes over intervals against alleged Syrian and Hezbollah targets in Syria in 2013. Weapons transfers from Iran and Syria to Hezbollah are discussed in greater detail in the next section. Among these Israeli airstrikes, at least two appeared to have targeted Syrian SAM assets. The first such strike was in May 2013, when the IAF may have targeted Buk-M2E SAMs. The second strike against Syrian air defense assets appeared to be an October 2013 strike against a Pechora-M2 battery. In both cases, the reporting cited Israeli concerns that these and/or other systems were about to be transferred to Hezbollah.

While some aspects of Syrian air defenses in and around the greater Damascus region had been upgraded by 2015, the failure of Syria’s IADS to engage Israeli aircraft in 2013 still led to mixed assessments of Syrian SAM systems and Israeli air power. Some argued that the IAF’s utilization of stand-off munitions from outside Syrian airspace reflected Israeli risk-aversion in the face of newer and more capable short and medium SAM systems like the 96K6E Pantsyr-S1E and the Buk-M2E respectively. Others saw the IAF’s choice of munitions and tactics centered on terrain masking to minimize the risk of detection by Syrian EW systems as the latest in a long line of lapses in Syria’s air defenses. Either way, Syria’s ability to deter attacks from the air by either Israel or allies like the US remained in serious jeopardy.

**Egypt, Jordan and Lebanon**

Like Israel and Syria, Egypt had an extensive national air defense system in 2015, with a mix of some ageing Soviet SAM systems and some more recent and more capable US systems. According to the IISS, Egypt’s 80,000-strong Air Defense Command still operated legacy systems such as the S-75M Volkhov (SA-2 Guideline) and more than 210
S-125 Pechora-M (SA-3A Goa) strategic SAMs. Egypt has also turned to US military assistance to acquire more modern surface-to-air and EW systems. These included Skyguard-Sparrow launcher/illuminator systems equipped with RIM-7F Sea Sparrow SAM. These were complemented by 12 MIM-23B I-HAWK major SAM batteries, Skyguard towed SAMs and shorter range Crotale and M48 Chaparral SAMs.  

While Egypt steadily sought to acquire more sophisticated systems, most of its acquisitions showed little signs of a wholesale effort to upgrade the country’s IADS in 2015, focusing instead on modernizing some of its holdings and acquiring limited numbers of largely mobile short range SAM systems. These included orders in 2005 of 25 Avenger fire units and 164 Stinger BkI configured for vehicle launch ordered in 2007. Egypt also acquired 40 Skyguard AMOUN solid-state transmitters to support the upgrade of the Skyguard-Sea Sparrow systems Egypt maintained in inventory. Lastly, Egypt – along with Jordan – sought US support in 2014 to upgrade Egypt’s 12 MIM-23B I-HAWK batteries – the country’s only static major SAM system.

While Jordan had far more limited air defense capabilities than Egypt, the Kingdom’s importance as a key regional non-NATO ally, and growing instability from Syria’s civil war served as reasons to enhance Jordan’s air defense systems and deterrence. In June 2013, the US deployed MIM-104C PAC-2 to Jordan. While the missiles were initially deployed by US forces in a bid to defend the Kingdom from the risk of missile attacks from neighboring Syria, the US government later announced that it would abide a request by the Jordanian government to keep the Patriot batteries – along with F-16 fighter aircraft – in Jordan for an indeterminate period.

As of 2015, Jordan’s air defense forces included five to six MIM-104C PAC-2 Patriot batteries. However, beyond PAC-2 batteries supported by the technical expertise of US military personnel, Jordanian air defenses remained limited to five batteries equipped with MIM-23B Phase III I-HAWK SAMs and six batteries equipped with Skyguard/Aspide SAMs. Not unlike Egypt, Jordan was also reported to be modernizing missiles tied to the country’s I-HAWK systems.

Lastly, in 2015, Lebanon remained the only country in the Levant without any major SAM holding, medium SAMs, modern SHORADs or even ageing electronic warning capability. The IISS reported that Lebanese man-portable air defense systems (MANPADS) holdings included some 83 9K32 Strela-2/2M (SA-7A Grail/SA-7B Grail), however it was not clear whether these systems were combat-capable or disposed of altogether in light of their age and obsolescence. Lebanon also maintained some towed and mobile anti-aircraft artillery (AAA), including 57 23 mm ZU-23s.

In early 2014, The Lebanese Armed Forces (LAF) began trilateral negotiations to acquire some $3 billion-worth of new weapons and combat systems from France with funding from Saudi Arabia. While the final end-state of the planned acquisition path remained uncertain in mid-2015, the LAF was nonetheless hopeful that the effort could secure the future delivery of limited EW and ground radar capability, along with limited deliveries of relatively modern short range SAM systems.
### Figure 7: Defense Budget Appropriations for U.S.-Israeli Missile Defense: FY2006-FY2016

(in Historical $U.S. Millions)

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Arrow II (High Altitude)</th>
<th>Arrow III (Short-Range)</th>
<th>Iron Dome</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY2006</td>
<td>122.866</td>
<td>10.0</td>
<td>-</td>
<td>132.866</td>
</tr>
<tr>
<td>FY2007</td>
<td>117.494</td>
<td>20.4</td>
<td>-</td>
<td>137.894</td>
</tr>
<tr>
<td>FY2008</td>
<td>98.572</td>
<td>37.0</td>
<td>-</td>
<td>155.572</td>
</tr>
<tr>
<td>FY2009</td>
<td>74.342</td>
<td>72.895</td>
<td>-</td>
<td>177.237</td>
</tr>
<tr>
<td>FY2010</td>
<td>72.306</td>
<td>80.092</td>
<td>-</td>
<td>202.434</td>
</tr>
<tr>
<td>FY2011</td>
<td>66.427</td>
<td>84.722</td>
<td>205.0</td>
<td>415.115</td>
</tr>
<tr>
<td>FY2012</td>
<td>58.955</td>
<td>110.525</td>
<td>70.0&lt;sup&gt;a&lt;/sup&gt;</td>
<td>305.700</td>
</tr>
<tr>
<td>FY2013&lt;sup&gt;b&lt;/sup&gt;</td>
<td>40.800</td>
<td>137.500</td>
<td>194.0</td>
<td>479.736</td>
</tr>
<tr>
<td>FY2014</td>
<td>44.363</td>
<td>149.712</td>
<td>460.309</td>
<td>729.091</td>
</tr>
<tr>
<td>FY2015</td>
<td>56.201</td>
<td>137.934</td>
<td>350.972</td>
<td>618.814</td>
</tr>
<tr>
<td>FY2016&lt;sup&gt;(Request)&lt;/sup&gt;</td>
<td>11.200</td>
<td>37.100</td>
<td>55.0</td>
<td>159.000</td>
</tr>
</tbody>
</table>

Note:  
<sup>a</sup> These funds were not appropriated by Congress, but reprogrammed by the Obama Administration from other Department of Defense accounts.

<sup>b</sup> Figures for FY2014 calculated after factoring in budget sequestration.

Source: Adapted by Aram Nerguizian from Jim Zanotti, “Israel: Background and U.S. Relations,” CRS Report, the Congressional Research Service, RL33476, February 27, 2015, p. 36-37.
Figure 8: Syria’s Uncertain Surface-to-Air Missile Coverage in 2014

Naval Forces

Every country in the Levant has invested in mixes of naval forces that represent each country’s national security priorities and access to new technologies, its real-world budgetary constraints, and its ability or inability to effectively plan for naval force development. Figure 9 shows Arab-Israeli naval holdings by category in 2015. Other than Israel, only Egypt had naval assets that could be considered capable. Syria maintained a navy with only limited attack and interception capability that posed no threat to the Israeli Navy’s modern naval combat systems.

The US still has a major naval presence in the Mediterranean. There are more than 7,000 vessels in the Mediterranean at any given time and the security of choke points from Gibraltar in the west to the Suez Canal in the east make regional maritime security critical to US national security interests. In addition to a need to secure merchant shipping routes, more than 4 million barrels a day of crude oil (4.5% of global production) are shipped through the canal or the adjacent SUMED pipeline.86

Iran can send ships into the Mediterranean, but cannot compete with the US or Israel in in shaping the balance of conventional sea power in the Mediterranean. Short of limited transfers of missile-capable patrol craft, Iran also could not provide any of the region’s naval forces with any kind of system that could either compete with US systems or provide an edge in naval warfare. However, as the next section will later show, Iran did create new asymmetric threats through the transfer of systems like anti-ship missiles and mines to both Syria and non-state actors like Hezbollah.

The US Naval Presence

The US has maintained a naval presence in the Mediterranean since WWII. In 2011, under the overall command of the Commander in Chief, US Naval Forces, Europe (CINCUSNAVEUR), the US Navy’s 6th Fleet was responsible for planning and conducting contingency, overwatch, and civilian evacuation operations, as well as protecting US interests and generally providing a strong US naval military presence in the Mediterranean. This pattern remained broadly unchanged as of 2014 with no major fleet re-assignments taking place within the Mediterranean naval theater.

While the Horn of Africa, the Gulf of Aden, and the choke point at Bab al-Mandeb had become increasingly less secure due to instability and increasing piracy, 80% of all contingencies that US military and naval forces had to respond to since the end of the Cold War took place within the 6th Fleet’s area of responsibility (AOR).87

This trend remained broadly unchanged over the 2011 to 2015 period in the wake of regime change in Libya and Tunisia, revolution and counter-revolution Egypt, Syria’s three year old civil war, the persistent threat of asymmetric and conventional military escalation from the Arab-Israeli conflict, and competition between Turkey, Cyprus and key Levant states over potential regional oil and gas reserves in the Levant Basin.

The 6th Fleet’s offensive and defensive posture were centered on the Fleet’s carrier battle groups, supported by modern surface combatants, nuclear attack submarines, and modern fighter and fighter-attack aircraft. Additionally, the Fleet could count on ELINT, C4I, ASW aircraft and US Marines aboard amphibious landing and logistic support ships. The
combined force posture in the Mediterranean included some 40 ships, more than 175 aircraft and 21,000 military and support personnel. Figure 10 shows the 6th Fleet’s nominal command structure as of 2011, and it is not clear how much this will change over time as a result of any major rebalancing of US forces to Asia.

The US has also had to the evolving threats and challenges that have emerged since September 11, 2001. NATO member states, along with the alliance’s Mediterranean Dialogue and Partnership for Peace (PfP) continue to contribute forces and intelligence capabilities to Operation ‘Active Endeavour’ (OAE). Intended to deter terrorist groups and contribute to stability in the Mediterranean region, OAE’s Maritime Component Command (CC-Mar) is headquartered in Naples, Italy. OAE’s role is also critical to the security of regional energy infrastructure and liquid petroleum gas-type carrier vessels.

The struggle for power in Libya in 2011 saw US naval military power play a major role. In the spring of 2011, the 6th Fleet engaged Libyan ships near the port city of Misrata to halt indiscriminate ship-to-shore bombardment by pro-Gaddafi forces. US naval aviation and guided missile destroyers also targeted Libyan coast guard vessels and coastal defenses. In addition, more than 110 Tomahawk cruise missiles strikes from US surface and sub-surface combatants degraded Libyan early warning and air defense systems.

The prospects for a similar level of naval military intervention surfaced in Syria in August 2013, when the Assad regime used chemical weapons against anti-regime forces and civilians in populated areas near Damascus. The Washington Times reported that at least four US navy destroyers from the US 6th Fleet – each armed with at least 90 Tomahawk cruise missiles – stood ready to engage regime targets were the order to be given to conduct military operations against the Assad regime.

These forces were never used after Assad agreed to eliminate his stocks of chemical weapons. At the same time, US restraint may have reflected both a desire not to become involved in a broader use of force in the Syrian civil war and the risk that any direct military intervention by US naval forces in the Mediterranean would have presented a critical challenge to the foreign policy interests of Iran – Assad’s principal regional ally.

US naval action would have also affected Russia, which remained wary not only of the possibility of US military action against a client state in the Levant, but deployed Russian naval vessels off the coast of Syria and was increasingly hostile because of continued instability in the Ukraine. There was also at least a token risk that US naval action could have tested the quality and readiness of both Syrian and Hezbollah anti-ship systems, which could have targeted US, Israeli and other allied military and commercial vessels.

**Iran’s Limited Naval Role**

Iran has never been able to compete with US naval power in conventional terms, and threat posed by Iranian asymmetric naval forces remained questionable at best. Figure 11 shows Iran’s naval holdings in 2015 and just how important small and fast missile-capable craft had become to Iranian naval forces.

Iran’s small attack craft could not reach let alone operate in the Mediterranean. Meanwhile, the Islamic Republic’s mix of older surface combatants posed little real threat to US interests in the Mediterranean. Even if Iran wished to forward deploy some of its six active duty corvettes to the Levant, the country did not have the resources, command and control,
or logistics to sustain even a skeletal expeditionary deployment in what remained at best a remote show of force in blue waters dominated by regional opponents such as the US, Israel and Egypt.

This did not mean that Iran could not pose some challenges to US forces, allies or interests in the eastern Mediterranean. Iranian ship deployments via the Suez Canal – while historically rare – did increase in the wake of the 2011 Arab uprisings and during 2011 to 2014, and were a limited cause of US concern.

The first such Suez crossing in the wake of the uprisings occurred in February 2011 when two Iranian warships on route to Syria were perceived by the US and its regional allies – especially Israel – as only the latest in a long line of regional provocations by Iran. The crossing also raised questions at the time about the long-term implications of a change in leadership in Egypt – a long-standing pillar of US policy in the Middle East, not the least of which in the confrontation with Iran. Many of these concerns largely abated in the wake of the military-backed overthrow of the Morsi presidency in July 2013.

Iran made further deployments to the eastern Mediterranean – and the de facto AOR of the US Navy’s 6th Fleet – in 2012 and 2013. In February 2012, Iran once more sent two warships to the Mediterranean, in part as a show of support for Tehran’s beleaguered allies in Damascus. January 2013 saw Iran attempt to send a slightly larger deployment comprising two ships – one submarine and one surface warship – as part of fleet actions in the Red Sea.

Iran found another opportunity to deploy naval forces to the 6th Fleet’s AOR in August 2013 in the prelude to what many assumed were imminent US air and naval strikes against the Assad regime. However, according to reports at the time, only Russia planned to deploy naval assets to shore up its regional allies in Syria. These Iranian deployments to the Mediterranean did, however, pose only a largely symbolic threat to Israel and the US, and Israel replied in kind. In 2009 the Israeli Navy deployed Dolphin (Type 800) attack submarines to the Red Sea, potentially en route to the Gulf, Iran interpreted this as a direct provocation.

In any actual confrontation, Iranian vessels would find themselves largely unsupported in the Mediterranean in the event of escalation with Israel or the US. However, that could not be the case for Israeli sub-surface vessels operating in the Arabian Gulf in the AOR of the US Navy’s 5th fleet. In short, it is unlikely that Iran can do much to disrupt the conventional US naval posture in the Levant. At best, Iran is little more a maritime irritant to the US and its allies.

The Impact of the Israeli and Egyptian Navies

Traditionally, the navy has had third priority in both the Israeli and Egyptian armed forces. However, the shifting priorities of the 21st century have accelerated Israeli and Egyptian efforts to recapitalize their naval forces. For Israel, developing effective naval power that could work closely with air power and in support of ground forces was crucial to survivability in counter-terrorism and asymmetric warfare efforts in Gaza and Lebanon, the sustainment of Israel’s ability to interdict arms smuggling from Iran to Hamas or Hezbollah, and of more recent importance, the securing of Israel’s large off-shore gas discoveries.
In 2015, the Israeli Navy (IN) had relatively modern and effective submarines and surface forces, backed by effective airpower. It also had effective anti-ship missiles, as well as superior systems and targeting/electronic warfare capabilities. Its three Sa’ar 5-class corvettes were modern ships with considerable long-range capability by local mission capability standards. Israel’s eight Sa’ar 4.5-class missile patrol boats, commissioned during 1994-2002, had also been regularly modernized. All of the IN’s Sa’ar-class vessels were armed with updated versions of the Harpoon anti-ship missile and had modern radars and electronic warfare suites. Israel’s three Type 212 Dolphin-class submarines were also modern vessels commissioned during 1999-2000.

The IN’s recapitalization efforts could enhance both sub-surface and surface vessels in the fleet. In addition to the current three Dolphins in service, two more were expected to enter service in 2014, while Israel was expected to take delivery of an additional sixth by 2016. Additional submarines would expand the IN’s ability to conduct reconnaissance and special warfare operations both in the Mediterranean and the Arabian Gulf – particularly off of Iranian coastal waters.

Meanwhile, Israel saw expanding and modernizing its fleet of surface combatants as a priority. In 2008, the IDF had signed an initial agreement to acquire four of the new class of US Littoral Combat Ships (LCS) in a deal estimated worth some $1.9 billion. However, defense cost-cutting in Israel forced the IN to cancel plans to acquire the LCS, prompting Israel to consider the acquisition of four Korean-built Incheon-class modular frigates instead. Nominally, Israel hoped newer and more capable surface combatants like the Incheon-class could enter service with the IN by 2017.

Egypt made an effort in the late 1990s to build and sustain a modern “two-fleet” force capable of operating both in the Mediterranean and the Red Sea. More recently, its need to police waters off Gaza, interdict arms smuggling in the Sinai Peninsula and defend Egypt’s water ways became critical in the wake of the instability of the 2011 Arab uprisings.

Despite three years of instability in the wake of protests in 2011, the Egyptian Navy maintained close ties to the US Navy as did their common ally in the Gulf, the Saudi Red Sea Fleet. Egypt’s 8,500-strong navy was the largest naval force among the Levant states in 2014 – including eight frigates, six of which were armed with RGM-84C Harpoon anti-ship guided missiles (ASGMs) while the remaining two were armed with HY-2/CSS-N-2 Silkworm ASGMs. The Egyptian navy also operated two corvettes armed with RGM-84C Harpoons and some 29 smaller craft armed with a mix of ASGMs, including Otomat MkII, MM-38, Exocet, RGM-84L Harpoon Block II, and P-15 Termit/SS-N-2A Styx ASGMs.

While the acquisition by the Egyptian navy of more modern US-sourced surface combatants was a relative success, the country’s current and future challenge remained replacing the country’s obsolete Soviet-made Romeo-class diesel-electric submarines. In 2012, Jane’s indicated that the Egyptian navy was negotiating with the Germany government and German firm Howaldtswerke-Deutsche Werft (HDW) to acquire two Type 209 Dolphin submarines.

While there was no confirmation that the deal had gone through, reports surfaced in early 2014 that Egypt intended to acquire an additional two Type 209s for a total of four submarines. French newspaper La Tribune reported that the contract for the first two
vessels was worth some 920 million euros, that they would be armed with UGM-84 Harpoon Block II ASGMs and that delivery was scheduled for 2016.\textsuperscript{105}

Despite their “cold peace,” Israeli and Egyptian naval developments did not go unnoticed by either regional state. Israel remained uneasy with Egypt’s efforts to acquire offensive naval systems. Meanwhile, Egypt continued to view Israeli concerns surrounding its military edge as a persistent impediment to Egyptian military development efforts. Beyond these dynamics, questions also remained about the sustainability of both the Israeli and Egyptian naval development efforts given growing pressures on defense expenditures and cuts to spending.

Despite these shortfalls, ties to the US represented a unique regional asset to any regional naval force. By contrast, Iran had no clear allies anywhere in the Indian Ocean or Red Sea, no real Mediterranean naval ally in a Syria focused on an internal civil war, found it difficult to project and sustain sea power in any region outside the Arabian Gulf for any length of time, and was unable to provide meaningful air cover to its expeditionary naval forces.

**The Limits of the Syrian Fleet**

Syria’s navy is largely obsolete, ineffective, and dependent on aging anti-ship missiles. This reflected in no small part the country’s limited economic resources and constraints on funding for maritime forces. When combined with the effects of three years of civil war, Syrian naval forces were expected to only further degrade in 2014 and beyond.

As Figure 9 shows, Syria maintained multiple guided missile-capable ships in inventory. In 2015, the IISS reported that the Syrian navy had some 22 patrol and fast attack boats armed with ASGMs. Syria’s other holdings included older coastal patrol craft, mine warfare and mine countermeasure craft and limited amphibious landing capability.

One rare area where Iran was able to support Syria was in the provision of ASCM-equipped light patrol craft. In 2006, Iran provided the Syrian navy with six Tir-II-class patrol boats armed with Noor (C-802/CSS-N-8 Saccade) ASGMs. Iran’s decision to augment Syria’s holding of light ASGM and ASCM-equipped surface craft reflected at least in part key lessons learned from the Israel-Hezbollah war wherein the Lebanese militant group successfully targeted and damaged the INS Hanit, a Sa’ar 5-class corvette and flagship of the Israeli navy.\textsuperscript{106}

However, these limited Iranian transfers did little to augment Syria’s naval offensive or defense capabilities. Syria’s 16 Osa I and Osa II patrol craft did not appear to have been significantly modernized as of 2013 and continued to operate older P-15M Termit-M (SS-N-2C Styx) ASGMs. Syria also had two Petya III-class frigates armed with guns and torpedoes, but these did not appear to have been upgraded with ASGMs and did spend little meaningful time at sea. Its three Romeo-class submarines never performed meaningful combat roles and have been withdrawn from service.

While ties to Iran did little to augment Syria’s naval forces, the alliance with Russia did allow Damascus to tentatively expand its land-based naval deterrence capabilities. In December 2011, reports emerged that Russia had provided Syria with its sophisticated and lethal long range SSC-5 Bastion radar guided anti-ship cruise missile (ASCM) coastal defense system based on the SS-N-26 Yakhont supersonic ASCM.\textsuperscript{107}
The *Yakhont* was capable of reaching a maximum speed of Mach 2-2.5, and could 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 anti-ship missiles, the *Yakhont* relied on passive homing for the majority of its flight path and only resorted to active tracking in the final stages of flight. Coupled with its speed and low altitude approach, the *Yakhont* significantly reduced warning time, thereby increasing the vulnerability of ships offshore to attack.\(^{108}\)

The systems were initially ordered in 2009 to replace ageing SS-N-2 *Styx* and SS-C-1B *Sepal* anti-ship missiles, and could impact how US, Israeli and allied ships operated in the Eastern Mediterranean. Delivery of the *Bastion* bolstered Syrian naval deterrence against deeper intervention in Syria and signaled 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.

One consequence of Syria’s efforts to correct the shortfalls in its coastal defenses may have been Israeli military action both to degrade Syrian military capabilities but more crucially to deter the transfer of modern ASMs to non-state armed groups – especially Hezbollah in Lebanon. The *Sunday Times* reported that on July 5, 2013, Israeli *Dolphin*-class submarines conducted target ship-to-shore strikes against arms depots in Syrian port city of Latakia. The report noted that the alleged strike was carried out in close coordination with the US and that the intended targets were 50 SS-N-26 *Yakhont* ASCM delivered earlier that year. The submarine strike may have also been supported by firepower from the IAF.\(^{109}\)

Whether or not Israeli strikes degraded or eliminated sophisticated ASMs from Syrian holdings remained unclear. Weeks after the July 5, 2013 strike, the *New York Times* reported that some if not all Syrian *Yakhont* ASCMs may have survived the attack, or were removed from their launchers and warehouses prior to the initial strike.\(^{110}\) What was clear – however – was that any attempt by Syria or Iran to proliferate these systems, or efforts by the Assad regime to bolster its own deterrence, may be met by repeated and credible threats of Israeli and allied military force.

**Jordan, Lebanon and Constabulary Naval Forces**

While Israel, Egypt and Syria all tried to build up offensive “blue water” naval capability, Jordanian and Lebanese naval forces remained far more limited, focused on coastal defense, maritime security, counter-terrorism and counter-smuggling missions. Jordanian and Lebanese constabulary naval forces did not include ASM-capable vessels, and neither state fielded ships with real-world offensive capability.

Both Jordan and Lebanon expanded their holdings of patrol craft to bolster their ability to police their own territorial waters. 15 of Jordan’s 22 patrol craft were acquired as recently as 2006. Meanwhile Lebanon obtained 11 of its 35 coastal patrol craft over the 2006 to 2012 time frame, including one modern LCSC-42 coast security craft. In addition, both Jordan and Lebanon sought to upgrade their coastal radar and surveillance capability.\(^{111}\) However, despite these efforts to build up their forces, it must be noted that as of 2015, neither Jordan nor Lebanon planned to dramatically alter the focus of their naval forces.
Figure 9: Arab-Israeli Major Combat Ships by Category in 2015

Note: Israeli other patrol craft are SSM-capable. Lebanese holdings include one Coastal Patrol Craft delivered in 2013 and do not show craft in storage or in disrepair.

Figure 10: U.S. Military Presence in the Levant: Command and Control structure of the U.S. Navy’s 6th Fleet

Note: The diagram above is not intended to represent an accurate or current picture of the 6th Fleet’s command and control in 2014.

Source: GlobalSecurity.org
Figure 11: The Iranian Navy in 2015

<table>
<thead>
<tr>
<th>Manpower</th>
<th>Regular Forces</th>
<th>IRGC Forces</th>
</tr>
</thead>
<tbody>
<tr>
<td>(18,000/20,000+)</td>
<td>18,000</td>
<td>20,000+ (incl. 5,000 Marines)</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Submarines (29/0)</th>
<th>3 Kilo-class SSK</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 SSC Fajr-class</td>
</tr>
<tr>
<td></td>
<td>17 SSW/“midget” submarine (16 Qadir-class; 1 Nahang-class)</td>
</tr>
<tr>
<td></td>
<td>8 SDV (5 Al Sabehat-class for SOF insertion/mine-laying; 3 other)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Corvettes (6/0)</th>
<th>1 Jamaran (UK Vosper MK 5) with CSS-N-4 Sardine ASGM, SM-1 SAM (1 under construction, expected 2013)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3 Alvand (UK Vosper Mk 5) with C-802/CSS-N-4 Sardine ASGM</td>
</tr>
<tr>
<td></td>
<td>1 Bayandor (US PF-103) with C-802/ CSS-N-4 Sardine ASGM</td>
</tr>
<tr>
<td></td>
<td>1 Bayandor (US PF-103)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SSM-Capable Patrol Craft (25/46)</th>
<th>14 Kaman (FRA Combattante II) with C-802 ASGM</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4 Mk13 with C-704 Nasr ASGM</td>
</tr>
<tr>
<td></td>
<td>4 China Cat with C-701 Kosar ASGM</td>
</tr>
<tr>
<td></td>
<td>3 Paravini with C-704 Nasr ASGM</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Other Patrol Craft (38/67)</th>
<th>15 Kashdom</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 M155</td>
</tr>
<tr>
<td></td>
<td>3 Kayvan</td>
</tr>
<tr>
<td></td>
<td>6 MKII</td>
</tr>
<tr>
<td></td>
<td>10 MKIII</td>
</tr>
<tr>
<td></td>
<td>3 Kajami</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mine Warfare (5/0)</th>
<th>2 Type-292 coastal minesweepers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 Shakrokh (in Caspian Seas as a training ship)</td>
</tr>
<tr>
<td></td>
<td>2 Riazi (US Cape) inshore minesweepers</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Amphibious (24/4)</th>
<th>3 Farsi (ROK) LSM (9 tanks; 140 troops)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4 Hengam LST (1 helicopter; 9 tanks; 225 troops)</td>
</tr>
<tr>
<td></td>
<td>6 Fouque LSL</td>
</tr>
<tr>
<td></td>
<td>8 UCAC (6 Wellington; 2 Tondar)</td>
</tr>
<tr>
<td></td>
<td>2 LCT</td>
</tr>
<tr>
<td></td>
<td>1 Liyan 110 LCU</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Logistics (38/0)</th>
<th>47 support craft</th>
</tr>
</thead>
</table>

Comparative Trends in Military Expenditures

The trends in defense expenditures in the Levant remain critical to mapping the future regional conventional forces and the limited resources countries allocated to develop force quality and depth to varying degrees. How the US and Iran could or could not shape regional defense spending was another key challenge, albeit one where the US maintained a disproportionate advantage through its ability to sustain multi-year military aid to countries like Egypt, Israel, Jordan and Lebanon.

Figure 12 shows more recent trends in military expenditures in current U.S. dollars based on IISS figures ranging from 1999 to 2014. When evaluating these data, one must factor in considerable uncertainty because changes in methodology over time have included estimates for some countries that cut across fiscal cycles rather than present actual data for any given fiscal year. In addition, the data in Figure 12 do not adjust for inflation, rod they directly account for the impact of US military aid to Egypt, Israel, Jordan and Lebanon – which was significant.

In contrast to Figure 12, Figure 13 shows the long-term trend in military effort as a percent of GDP over the 1983 to 2014 timeframe. Whereas Figure 12 shows broadly increasing trends in overall national defense spending, Figure 13 shows that the same data indicated an overall decline in the share of defense spending as a percentage of GDP.

While Jordan and Israel did buck this trend somewhat through spurts of heightened spending relative to GDP, they too suffered from continued declines through 2014. However, much like the metrics presented in Figure 12, the data presented in Figure 13 must also be caveated, especially given how different economic activity and per capita GDP were across countries in the Levant.

Israel

Israel’s edge in military resourcing was evident across the period from 1999 to 2014. Israeli defense spending efforts dropped significantly after 2001 in spite of recurring cycles of conflict with the Palestinians, partially reflecting other Israeli security-related spending increases meant to pay for such civilian programs as roads and settlements. However, as Figure 13 shows, Israel appeared to have broadly stabilizing its defense spending between 2011 and 2014 and or near 6 or 7 percent of GDP.

Defense expenditures in Israel remained relatively consistent over the 1997-2009 in terms of net spending. However, not unlike the other countries in the Arab-Israeli balance, defense spending as a percent of GDP has declined over the 1983-2009 period. In light of the 2006 Israeli-Hezbollah war, differences of opinion remain between successive governments and the IDF over defense spending. However, Israeli expenditures expanded dramatically starting in 2007 in the wake of the 2006 Israel-Hezbollah war.

The IDF’s Teffen 2012 five year plan aimed to significantly expand Israel’s capabilities to address capabilities and training shortfalls – especially with regards to the performance of ground forces against asymmetric and irregular warfare threats. Air power development, which still crucial, was seconded to building up Israeli ground forces and missile and rocket defense programs like the Iron Dome, David’s Sling, the Arrow II, and Arrow III programs.
The continued development of Israel’s ballistic missile systems – centered on the *Jericho* ballistic missile program – were also prioritized.\(^{114}\)

Israel continued to build up defense spending, reaching a high of some $16.9 billion in 2012 – a more than 150% increase over spending levels a decade earlier in 2001. Meanwhile, Israel’s 2013-2014 State Budget Proposal stated that defense spending could increase by 5.2% in 2013 before a 1.3% cut in 2014. The cut was based on the premise that increased future spending over the 2015-18 fiscal cycles would make up for any shortfall. However, protests from the Israeli Ministry of Defense based on concerns about declines in IDF readiness appeared to reverse planned cuts in spending.\(^{115}\)

There were other ways that Israel could deflect fiscal pressures on national defense expenditures. One of the most effective was Israel’s unique ability to transfer part of annual US FMF to the country’s national budget. It appeared to do so in October 2013 when the Knesset Finance Committee authorized the transfer of ILS 1.8 billion – roughly $470 million in 2013 US dollars – in surplus/unspent FMF left over from 2012.\(^{116}\)

### Syria

Unlike Israel, Syria faced serious challenges in sustaining its national defense spending efforts over time. Its military expenditures continued to decline over most of the first decade of the 21st century and were been less than one-third of the level needed to pay for the mix of manpower quality, readiness, and modernization it would need to compete with Israel in overall conventional force quality.

As Figure 13 shows, Syrian defense spending of 3.2% of GDP in 2010 was a fraction of peak spending levels in 1985 of 21.8% of GDP and it was unlikely that Syria would be able to effectively budget for meaningful conventional military development without significant external debt relief or grant assistance.

Syria increased its nominal defense spending starting in 2008, driven in part by efforts to acquire coastal and air defense systems, which would not have been possible without Russia’s 2005 decision to write off 73 percent of Syria’s debt to Moscow – worth some $9.8 billion.\(^{117}\) As Syria entered the second year of its civil war in 2012, it became increasingly difficult accurately gauge both Syrian defense spending and central government expenditure data. The absence of pertinent data continued through 2015.\(^{118}\)

It was noteworthy that Syria’s military burden relative to GDP was so close to that of Israel from 2002 to 2006. However, as Figure 13 shows, Israel invested far more on defense than Syria as a percentage of GDP over the 2007 to 2014 period. This indicated that Syria’s slow economic development has been a major factor limiting what it can spend. Either way, the broad trend in Figure 13 was clear: Syrian defense spending as a percentage of GDP – not unlike almost every other state in the Levant – had been declining incrementally for decades.

### Egypt

While Egyptian defense spending was among the highest levels in Africa, it could not compete with either Israel in the Levant or Saudi Arabia in the Gulf. After a low in spending in 2003, Egypt’s budget allocations for defense gradually increased in nominal terms, increasing by over 50% between 2006 and 2012. Egyptian defense spending remained
likely to continue increasing if the country’s economic fundamentals could find their footing after some three years of protests, regime change, and partial counter-regime change starting over the 2011 to 2014 period.\textsuperscript{119}

Egyptian defense expenditures showed broadly similar declines as a percentage of GDP over the same period. From a peak of 13.7\% of GDP in 1984, Egyptian defense spending was cut significantly over time, fluctuating between 2.4\% and 3.1\% over the 2000 to 2009 period until reaching 1.9\% of GDP by 2013. However, unlike Syria, which lost its Soviet patron at the end of the Cold War, Egypt could offset cuts in spending by relying on sizeable US FMF grants in the wake of the Camp David Accords.

\textit{Jordan}

Jordanian defense spending was a fraction of that of most of its neighbors during the 1999 to 2013 period. As Figure 13 shows, however, Jordan spent more on defense as a percentage of GDP than most if not all other states in the Levant in nominal terms. Figure 12 shows that Jordanian defense expenditures increased significantly over the 2001 to 2009 before experiencing a nominal cut in spending in 2010 due to public-sector wide cuts across the Kingdom’s national budget.

Fortunately for Jordan, increased levels of US FMF allowed the government in Amman some leeway to pursue force modernization and capabilities development, especially with regards to Jordanian special operations forces (SOF) and border management efforts. However, even with US military assistance, chronic deficit spending and persistent economic challenges continued to hinder Jordanian efforts in 2014 to push beyond incremental modernization and sustainment.\textsuperscript{120}

\textit{Lebanon}

Lebanon faced many of the same challenges that confronted Jordan in terms of national defense spending. However, what Jordan lacked in revenue and internal funding it made up for in political unity and unity of purpose when it came to devising and sustaining forces that were integral to the survival of Jordan as a state. That was not the case in Lebanon, and certainly throughout much of the post-civil war period spanning from 1990 to 2005, competing Lebanese forces broadly budgeted against meaningful military development. Lebanese defense expenditures only began to increase in the wake of the 2006 Israel-Hezbollah war, prompted in part by capital costs associated with equipping and deploying units to the UNIFIL II area of responsibility south of the Litani River.

As Figure 12 shows, Lebanese defense spending rose steadily from $733 million in 2007 to some $1.2 billion by 2013 – capping a 140\% increase in defense spending over a ten year period. Higher defense spending was necessary to pay for increases in power levels despite the repeal of the national flag service in 2005, efforts to properly man under-strength regiments and brigades, support the development of military infrastructure in the North, South and the Bekaa – areas where the LAF had only intermittently deployed in force since Lebanese independence in 1943 – and limited though increasing costs tied to sustainment and procurement. The scale of the crisis in Syria and the knock-on effects on Lebanon’s own stability were such that contrary to their “better” nature, Lebanon’s competing factions increasingly saw military development as being integral to the survival of a political system they all had a stake in.
Not unlike Egypt, Israel or Jordan, Lebanon’s military development would not have been possible were it not for US FMF and associated military aid programs. Much like other country recipients of US aid, the data shown in Figure 12 did not reflect the margin afforded by US military assistance. It is also important to note that Figure 13 did not show 2014 data on either the planned scale of close to $3 billion in Saudi-funded acquisitions from France, or hundreds of millions that Saudi planned to deposit in August 2014 at the Lebanese Central Bank to support nationally-funded Lebanese short-to-medium term force recapitalization.
Figure 12: Arab-Israeli Military Expenditures by Country: 1999-2014
(in current U.S. Millions)

* Number reflects amounts budgeted as opposed to expenditures as the IISS no longer reports expenditures. The IISS could not report defense spending figures for Syria in 2013 as a result of the country’s on-going civil war. Figures do not show the effect on foreign aid and external grants on national defense spending.

Figure 13: Trend in Percent of GDP Spent on Military Forces: 1983-2014: Half the Burden of the Early 1980s

Note: Figures do not show the effect on foreign aid and external grants on national defense spending.

The Shattered Levant Military Balance

The Impact of US Military Assistance to Egypt, Israel, Jordan and Lebanon

The US has sought to make military aid and arms transfers an important tool in competing with Iran, building up and sustaining US influence in the Arab states in the Levant and supporting Arab-Israeli peace treaties. The US has used military aid to support key Arab allies, such as Egypt and Jordan, while working to build support in regional “battleground” states and arenas, including Lebanon and the Palestinian Territories. US military aid to the Levant during 1971-2001 totaled some $82.5 billion, with aid to Israel and Egypt accounting for 61.2% and 33.4% of total loans and grants.121

Figure 14 shows the pattern of more recent US foreign military assistance to Egypt, Israel, Jordan and Lebanon over the 2002 to 2016 period. Meanwhile, Figure 15 shows major orders of defense articles by Egypt, Israel, Jordan, Lebanon and Syria by supplier over the 2000 to 2011 period. Figure 16 in turn shows major US orders more narrowly by Levant states over the 2005-2014 period. It is important to remember that such notifications only offer an approximate and potential picture of future arms sales 3-10 years on the horizon.

The US has used foreign military aid to Egypt and Jordan as key tools in securing each country and the Arab-Israeli peace treaties, while also seeking to strengthen US ties with other states in the region that policymakers consider moderate.122 Building up strong military partnerships and aid ties are also tools the US has used to try to keep international and regional players hostile to the US from undermining US interests and the stability of US regional allies.

Egypt, Israel and Jordan have been allies of the US and had access to priority delivery of US excess defense articles (EDA), the ability to purchase depleted uranium (DU) anti-tank shells, are eligible for no-cost loans of materials in support of cooperative research and development programs with the US, and other benefits.123 Syria is the only regional country that does not have security or military aid ties with the US.

This use of military aid and arms sales has its critics. Some see such aid as supporting oppressive regimes and regional critics charge that US aid to Israel could be indirectly contributing to Palestinian fatalities in ongoing clashes between the IDF and Palestinians. Others point to the impact of foreign military aid in bolstering conservative authoritarian regimes or undermining democracy and human rights in the region.

More analysts feel, however, that US military aid significantly boosted Israeli security, ensured Egyptian stability, consolidated ties of friendship between America and Jordan, and are helping Lebanon mitigate the impact of Syrian instability. The promise of Foreign Military Financing (FMF) dollars helped move Egypt and Jordan to sign peace deals with Israel.124

As for Iran, it has not been able to compete directly with the US in using aid and arms transfers to build up traditional military partnerships in the region. The Islamic Republic has had to resort to supporting armed Palestinian and Lebanese non-state factions as a means of undermining US allies in the Levant.
Transfers and Aid to Israel

Israel has been the top recipient of US military aid since 1976, and the largest cumulative recipient since WWII. Israel has also had access to a number of other benefits that other countries in the region do not have access to, such as the ability to use US military aid dollars for research and development in the US or use 26.3% of annual aid funds towards military purchases from Israeli industry. The US delivers all assistance earmarked for Israel in the first 30 days of a given fiscal year, unlike other countries that receive staggered installments of aid at varying times.

The end result is that Israel is heavily dependent on US FMF, which represents 21 to 22 percent of Israeli defense spending. In 2007, the Bush Administration announced that US military aid to Israel would increase by $6 billion over the coming decade, reaching an annual aid level of $3.1 billion by FY2018. In addition to offsetting the end of US economic support funds in FY2007, it is expected that increased levels of FMF will allow Israel to fund sophisticated US purchases, such as a possible sale of F-35 Joint Strike Fighter (JSF) aircraft.

Transfers and Aid to Egypt

Egypt has also benefited from major US aid and arms sales since 1979. The promise of US military (and economic) aid was critical to bringing post-Nasser Egypt closer to the US and helped the ruling establishment under President Hosni Mubarak consolidate peace with Israel. Egyptian military aid has settled into a relatively consistent pattern, with FY2013-FY2016 requests for $1.3 billion in FMF holding at similar levels of funds provided or estimated for Egypt in FY2011 and FY2012.

US FMF aid has allowed the acquisition of new systems, upgrades for existing military systems, and follow-on support and maintenance. Egypt generally seeks to allocate 30% of annual FMF to new systems acquisition in order to gradually replace what remain of aging Soviet holdings with US equipment.

Egypt receives additional “as is, where is” aid worth hundreds of millions of dollars through the excess defense articles (EDA) program. The Egyptian military also participates in US international military education and training (IMET) programs. In recent years Egypt has lobbied the US to increase US FMF dollars in a bid to offset the rising costs associated with contract support and maintenance.

Despite temporary holds on US security assistance programs, the flow of US military aid has not been significantly disrupted by the recent upheavals in Egypt and the ousting of long-time US ally President Hosni Mubarak. One anecdotal indicator that the military-to-military relationship between the US and Egypt continues to be robust is a July 5, 2011 notification to Congress for the potential sale and co-production of 125 M1A1 Abrams tank kits, supporting weapons systems, equipment and maintenance worth some $1.3 billion. Another would be US plans to go ahead with the delivery of 12 AH-64D Bk II Apache Longbow attack helicopters initially ordered in 2014.

Transfers and Aid to Jordan

Jordan, another key regional ally, has been a recipient of US military aid since 1951. US aid dollars are in recognition of Jordan’s position as a key moderate state, an important
regional ally and as a means of sustaining some two decades of formal peace with Israel. US FMF allocations to Jordan increased significantly in the wake of the 1994 peace agreement, jumping from $7.3 million in FY1995 to $200 million FY1996, with elevated levels since then. On September 22, 2008, the US and Jordan agreed on a five-year aid framework over the FY2010-FY2014 fiscal cycles that saw US commitments of FMF to Jordan increase to $300 million per year.\textsuperscript{131}

US aid has helped Jordan modernize its air forces through recent purchases and upgrades of F-16 fighters, air-to-air missile systems and radar equipment. FMF also allowed Jordan to modernize its logistics and transport helicopter fleet. This facilitates Jordanian border management operations and supports Jordanian contributions to UN peacekeeping operations.\textsuperscript{132} While patterns of aid are generally stable, Figure 2 shows that aid levels have gradually increased over the 2006 to 2014 period.

**Transfers and Aid to Lebanon**

Lebanon received some $268 million in FMF over the 1946 to 2005 period. While the bulk of those funds were allocated in 1983 at a time of heightened US interest in Lebanon, this was followed by very limited aid during 1985 to 2005, mainly IMET. The US has provided significantly higher levels to Lebanon, however, in the wake of Syria’s withdrawal from the country in 2005. Lebanon received more than $1.35 billion in US military assistance over the FY2006 to FY2015 period, driven by FMF and “Section 1206” counter-terrorism funds.\textsuperscript{133}

This was a significant increase given Lebanon’s tenuous regional position, the presence of Hezbollah and a continued technical state of war between Lebanon and Israel. Unlike Egypt, Israel and Jordan, it is still uncertain as to whether Lebanon may enter into a stable pattern of assistance from the US. While aid levels were reduced to some $75 million in FMF starting in FY2011, that level held firm through FY2014 with supplemental support from Section 1206 and other “pseudo” funds in key fiscal cycles.

However, escalating instability along the Lebanese-Syrian frontier and recurring skirmishes between the Lebanese Armed Forces and a mix of radical Islamist militant groups prompted a dramatic increase in US supplemental aid in FY2015 by some $150 million.\textsuperscript{134} Without this increase in aid – in addition to new or increased levels of aid from the UK, France and Saudi Arabia – Lebanon may have faced even greater threats to its stability and a far more restricted ability to recapitalize its military forces.

**Security Aid to the Palestinians**

Figure 14 does not show US security assistance to the Palestinians, as aid dollars are not provided from FMF funds. Security aid to the Palestinian Authority (PA) is driven by funds from the International Narcotics Control and Law Enforcement (INCLE) account, which has earmarked some $629 million to the PA over the FY2008 to FY2013 period with an addition $140 million requested for FY2014 and FY2015 at a relatively stable level of $70 million per year.\textsuperscript{135} INCLE funding, training and equipment were intended to assist security forces loyal to President Abbas (mainly in the West Bank) in their efforts to counter militants belonging to groups the US labels as terrorist organizations, such as Hamas and Palestinian Islamic Jihad.
Security assistance to the PA was also intended to strengthen rule of law and the criminal justice sector for a future Palestinian state. The US effort to train and equip Palestinian security forces has not been an easy task and has been hobbled by the inherent idiosyncrasies of US aid programs, the challenges of building up domestic legitimacy, the perception of the US and Israel as sponsors of the PA, and the disconnect between US aid prerogatives and local security realities.

**The Impact of U.S. Arms Orders on Force Recapitalization in the Levant**

As Figure 15 showed, the US is not the only country selling major combat systems to the Levant states. However, the US is the only major arms exporter that generates any real-world public data on the size, scale, costs and nature of the systems it sells or provides to countries in the form of grant assistance.

Figure 16 puts this US aid in greater perspective by showing the overall patterns of military orders in the Levant by country of origin over the 2000 to 2011 period. The US remains the most important source of military sales to the region, with Israel and Egypt as its top clients. Military sales to Jordan and Lebanon are similarly dominated by imports from the US. Syria, which continues to have a mutually confrontational relationship with the US, has traditionally relied on Russia for its arms acquisition and modernization needs. China has also played a growing role when it comes to Syrian arms imports.

The data compiled by the Congressional Research Service and illustrated in Figure 15 has not been updated since 2012, in part as a side-effect of cost-cutting and sequestration. As such Figure 16 more effectively illustrates current US major military orders from Levant states. These orders have lead-times to delivery that range nominally between two to seven years, depending on the size, scale and complexity of the order in question. Major orders from U.S. by Egypt, Israel, Jordan over the 2005 to 2014 period amount to about $38 billion in foreign military sales (FMS).

Figure 17, Parts I and II shows the breakdown of orders from the US by country in the Levant (excluding Syria and the Palestinian Authority who do not receive FMF) over the 2005-2015 period. The first part shows the total number of total major FMS orders by country. The second part shows the total value of orders by country.

As Figure 17, Part I clearly shows, Egypt has made the largest number of total orders over the 2005-2015 period, followed closely by Israel. However, it is important to remember that the number of orders is a limited estimate of acquisition and recapitalization without factoring the scale, complexity and costs of any single order. It is equally critical to note that any single order may be an amalgam of multiple FMF or national funding-supported FMS cases.

Figure 17, Part II illustrates these nuances effectively. Israel maintains the lion’s share in terms of total value of major orders and remains the single largest recipient of FMF-funded FMS. This is largely thanks to its ability to get into acquisition pipelines tied to cutting edge combat systems that other regional states either do not have access to, or are unable to sustain or resource with either national funds or grant aid. Key Israeli orders include 75 F-35 CTOL JSF aircraft, large orders of Joint Direct Attack Munitions (JDAM) and 6 V-22B Block C aircraft. Israel also relies on FMF to acquire principally JP-8 jet fuel from the
US, including more than 1.3 billion gallons worth some $5.97 billion – which alone is worth the approximate value equivalent of all Egyptian major orders over that same period.

There are some caveats when analyzing any estimate of the scale of acquisition in the Levant. First, different countries have different cycles of overlapping orders and deliveries. The 2005-2015 period, which can conflate or deflate assessments overall force recapitalization over a much longer timeframe. These estimates also undervalue the overall pattern of orders over this period, as 36b notifications to Congress only account for major arms sales, which include major defense articles valued at $14 million or more, defense articles or services valued at $50 million or more, or design and construction efforts valued at or in excess of $200 million.139

Many if not all of these countries have multiple orders that do not meet these thresholds, and while the amounts appear small on their own, they accumulate over time and in scale. On paper, Lebanon has only ordered some $705 million-worth of systems based on major orders over the FY2012 to FY2015 period. However, this would largely ignore a minimum of $317.7 million in orders over the FY2006 to FY2012 period. Lebanon is a key example in this regard: Figure 17, Part I and II cannot accurately reflect the true scale of Lebanese military recapitalization efforts, which are valued in the hundreds of millions thanks to multiple separate smaller FMS and pseudo-FMS orders, backed by FMF or Section 1206 funds.
Figure 14: Actual and Projected US Military Assistance to Arab-Israeli States from 2002 to 2016
(In thousands of current US dollars)

<table>
<thead>
<tr>
<th>Year</th>
<th>Lebanon</th>
<th>Jordan</th>
<th>Egypt</th>
<th>Israel</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>560</td>
<td>102,012</td>
<td>1,301,2</td>
<td>2,040,0</td>
</tr>
<tr>
<td>2003</td>
<td>700</td>
<td>606,400</td>
<td>1,292,7</td>
<td>3,086,3</td>
</tr>
<tr>
<td>2004</td>
<td>700</td>
<td>208,010</td>
<td>1,293,6</td>
<td>2,147,2</td>
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<tr>
<td>2005</td>
<td>0</td>
<td>307,411</td>
<td>1,290,8</td>
<td>2,202,2</td>
</tr>
<tr>
<td>2006</td>
<td>15,097</td>
<td>1,301,2</td>
<td>1,288,2</td>
<td>2,257,2</td>
</tr>
<tr>
<td>2007</td>
<td>256,305</td>
<td>1,301,2</td>
<td>1,301,2</td>
<td>2,340,0</td>
</tr>
<tr>
<td>2008</td>
<td>23,540</td>
<td>1,290,7</td>
<td>1,301,2</td>
<td>2,380,0</td>
</tr>
<tr>
<td>2009</td>
<td>210,830</td>
<td>1,301,3</td>
<td>1,301,3</td>
<td>2,550,0</td>
</tr>
<tr>
<td>2010</td>
<td>283,300</td>
<td>1,295,7</td>
<td>1,301,3</td>
<td>2,775,0</td>
</tr>
<tr>
<td>2011</td>
<td>77,326</td>
<td>1,301,8</td>
<td>1,301,8</td>
<td>2,994,0</td>
</tr>
<tr>
<td>2012</td>
<td>77,372</td>
<td>1,301,7</td>
<td>1,301,7</td>
<td>3,075,0</td>
</tr>
<tr>
<td>2013</td>
<td>82,756</td>
<td>1,301,8</td>
<td>1,301,8</td>
<td>2,943,2</td>
</tr>
<tr>
<td>2014</td>
<td>102,227,500</td>
<td>1,301,8</td>
<td>1,301,8</td>
<td>3,100,0</td>
</tr>
<tr>
<td>2015</td>
<td>50</td>
<td>82,750</td>
<td>1,301,8</td>
<td>3,100,0</td>
</tr>
<tr>
<td>2016</td>
<td>15,097</td>
<td>1,295,7</td>
<td>1,301,8</td>
<td>3,100,0</td>
</tr>
</tbody>
</table>

* Data for 2015 reflect estimated amounts.
** Data for 2016 reflect requested amounts.

Note: Includes supplemental funding and FMF/IMET funds tied to the Wye River Agreement. Data shown include FMF, IMET and Department of Defense Section 1206 funding for Lebanon. FY2014 figures for Lebanon include $25 million in Section 1206 funds and FY2015 figures for Lebanon include $150 million in supplemental funds. “FMF” is Foreign Military Financing, “IMET” is International Military Education and Training and Section 1206 is “Title 10” funding.

Source: Adapted by Aram Nerguizian from Congressional Budget Justification for Foreign Operations, various fiscal years.
Figure 15: Arab-Israeli Arms Orders by Supplier Country: 2000-2011 (Arms Agreements in $U.S. Current Millions)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>All Others</td>
<td>300 600 100</td>
<td>0 0 200</td>
<td>200 0 0</td>
</tr>
<tr>
<td>Other Europe</td>
<td>0 100 0</td>
<td>0 0 0</td>
<td>100 300 100</td>
</tr>
<tr>
<td>Major W. Europe</td>
<td>0 0 0</td>
<td>0 0 0</td>
<td>0 0 0</td>
</tr>
<tr>
<td>China</td>
<td>0 500 200</td>
<td>0 0 0</td>
<td>0 100 0</td>
</tr>
<tr>
<td>Russia</td>
<td>400 5,700 1,700</td>
<td>0 0 200 0</td>
<td>400 400 500</td>
</tr>
<tr>
<td>US</td>
<td>0 0 0</td>
<td>0 0 300</td>
<td>700 700 1,500</td>
</tr>
</tbody>
</table>

Note: 0 = less than $50 million or nil, and all data rounded to the nearest $100 million.

## Figure 16: Select U.S. Foreign Military Sales Congressional Notifications for Egypt, Israel Jordan and Lebanon 2005-2015
(In current US dollars)

<table>
<thead>
<tr>
<th>Country Recipient</th>
<th>Date</th>
<th>Weapon System/ Equipment</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Israel</td>
<td>April 29, 2005</td>
<td>100 GBU-28 with equipment and services</td>
<td>$30 million</td>
</tr>
<tr>
<td>Egypt</td>
<td>July 29, 2005</td>
<td>200 M109A5 155 mm SP howitzers with equipment and services</td>
<td>$181 million</td>
</tr>
<tr>
<td>Egypt</td>
<td>June 27, 2005</td>
<td>25 AVENGER Fire Units with equipment and services</td>
<td>$126 million</td>
</tr>
<tr>
<td>Egypt</td>
<td>June 27, 2005</td>
<td>50 CH-47D, T55-GA-714A turbine engines for CHINOOK Helicopters with equipment and services</td>
<td>$73 million</td>
</tr>
<tr>
<td>Israel</td>
<td>July 14, 2006</td>
<td>JP-8 aviation fuel</td>
<td>$210 million</td>
</tr>
<tr>
<td>Jordan</td>
<td>July 28, 2006</td>
<td>M113A1 to M113A2 APC upgrade and sustainment with equipment and services</td>
<td>$156 million</td>
</tr>
<tr>
<td>Jordan</td>
<td>September 26, 2006</td>
<td>C4ISR System with equipment and services</td>
<td>$450 million</td>
</tr>
<tr>
<td>Jordan</td>
<td>September 28, 2006</td>
<td>UH-60L Black Hawk helicopters with equipment and services</td>
<td>$60 million</td>
</tr>
<tr>
<td>Israel</td>
<td>August 3, 2007</td>
<td>JDAM, PAVEWAY II tail kits, MK-83 bombs, MK-84 bombs, GBU-28, BLU-109, components, equipment and services</td>
<td>$465 million</td>
</tr>
<tr>
<td>Israel</td>
<td>August 24, 2007</td>
<td>200 AIM-120C-7 AMRAAM air-to-air missiles with equipment and services</td>
<td>$171 million</td>
</tr>
<tr>
<td>Israel</td>
<td>August 24, 2007</td>
<td>30 RGM-84 BkII HARPOON SSMs, 500 AIM-9M SIDEWINDER air-to-air missiles with equipment and services</td>
<td>$163 million</td>
</tr>
<tr>
<td>Egypt</td>
<td>September 18, 2007</td>
<td>125 M1A1 Abrams tank kits with equipment and services</td>
<td>$899 million</td>
</tr>
<tr>
<td>Egypt</td>
<td>September 28, 2007</td>
<td>139 RIM-116B Bk1A Rolling Air Frame with equipment and services</td>
<td>$125 million</td>
</tr>
<tr>
<td>Egypt</td>
<td>October 4, 2007</td>
<td>164 STINGER Bk1 missiles with equipment and services</td>
<td>$83 million</td>
</tr>
<tr>
<td>Egypt</td>
<td>October 19, 2007</td>
<td>2 E-2C AEW C2 aircraft with equipment and services</td>
<td>$75 million</td>
</tr>
<tr>
<td>Israel</td>
<td>October 29, 2007</td>
<td>TOW-IIA, AGM-114 MSLs, PATRIOT GEM+, HEDP, HE rounds, various munitions with equipment and services</td>
<td>$1.329 billion</td>
</tr>
<tr>
<td>Egypt</td>
<td>October 29, 2007</td>
<td>2,000 TOW-IIA ATGMs</td>
<td>$99 million</td>
</tr>
<tr>
<td>Country</td>
<td>Date</td>
<td>Description</td>
<td>Cost</td>
</tr>
<tr>
<td>---------</td>
<td>-------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td>Israel</td>
<td>June 9, 2008</td>
<td>25 T-6A Texan aircraft, equipment and services</td>
<td>$190 million</td>
</tr>
<tr>
<td>Israel</td>
<td>July 15, 2008</td>
<td>4 Littoral Combat Ships (LCS-1), weapons, systems, equipment and services</td>
<td>$1.9 billion</td>
</tr>
<tr>
<td>Israel</td>
<td>July 15, 2008</td>
<td>JP-8 aviation fuel</td>
<td>$1.3 billion</td>
</tr>
<tr>
<td>Israel</td>
<td>July 30, 2008</td>
<td>9 C-130J-30, engines, systems, equipment and services</td>
<td>$1.9 billion</td>
</tr>
<tr>
<td>Israel</td>
<td>September 9, 2008</td>
<td>1,000 GBU-39, mounting carriages, simulators, trainers, systems, equipment and services</td>
<td>$77 million</td>
</tr>
<tr>
<td>Israel</td>
<td>September 9, 2008</td>
<td>28,000 M72A&amp; LAAW, 68,000 training rockets, equipment and services</td>
<td>$89 million</td>
</tr>
<tr>
<td>Israel</td>
<td>September 9, 2008</td>
<td>3 PATRIOT System Configuration 3 fire unit upgrades, equipment and services</td>
<td>$164 million</td>
</tr>
<tr>
<td>Jordan</td>
<td>September 9, 2008</td>
<td>Increment 2 Requirements for Border Security Program, equipment and services</td>
<td>$390 million</td>
</tr>
<tr>
<td>Egypt</td>
<td>September 9, 2008</td>
<td>6,900 TOW-IIA ATGMs</td>
<td>$319 million</td>
</tr>
<tr>
<td>Egypt</td>
<td>September 9, 2008</td>
<td>15,500 120 mm HE-T rounds, other systems, equipment and services</td>
<td>$69 million</td>
</tr>
<tr>
<td>Egypt</td>
<td>September 9, 2008</td>
<td>4 UH-60M BLACK HAWK helicopters, engines, parts, systems, equipment and services</td>
<td>$176 million</td>
</tr>
<tr>
<td>Israel</td>
<td>September 29, 2008</td>
<td>25 F-35 CTOL JSF, 50 F-35 CTOL, engines, C4/CNI, other systems, equipment and services</td>
<td>$15.2 billion</td>
</tr>
<tr>
<td>Egypt</td>
<td>May 26, 2009</td>
<td>12 AH-64D Bk II APACHE Longbow helicopters, engines, systems, equipment and services</td>
<td>$820 million</td>
</tr>
<tr>
<td>Jordan</td>
<td>August 3, 2009</td>
<td>85 AIM-120C-7 AMRAAM air-to-air missiles, equipment and services</td>
<td>$131 million</td>
</tr>
<tr>
<td>Egypt</td>
<td>August 6, 2009</td>
<td>6 CH-47D CHINOOK helicopters, engines, systems, equipment and services</td>
<td>$308 million</td>
</tr>
<tr>
<td>Jordan</td>
<td>September 9, 2009</td>
<td>12 M142 High Mobility Artillery Rocket Systems, systems, equipment and services</td>
<td>$220 million</td>
</tr>
<tr>
<td>Jordan</td>
<td>November 30, 2009</td>
<td>1,808 JAVELIN ATGMs, systems, equipment and services</td>
<td>$388 million</td>
</tr>
<tr>
<td>Jordan</td>
<td>December 8, 2009</td>
<td>61 F100-PW-220E engines with equipment and services</td>
<td>$75 million</td>
</tr>
<tr>
<td>Country</td>
<td>Date</td>
<td>Description</td>
<td>Amount</td>
</tr>
<tr>
<td>-----------</td>
<td>-----------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td>Egypt</td>
<td>December 14, 2009</td>
<td>450 AGM-114K3A HELLFIRE II missiles with equipment and services</td>
<td>$51 million</td>
</tr>
<tr>
<td>Egypt</td>
<td>December 18, 2009</td>
<td>156 F-110-GE-100 engine modification and upgrade kits with equipment and services</td>
<td>$750 million</td>
</tr>
<tr>
<td>Egypt</td>
<td>December 18, 2009</td>
<td>4 Fast Missile Craft (FMC) with systems, equipment and services</td>
<td>$240 million</td>
</tr>
<tr>
<td>Egypt</td>
<td>December 18, 2009</td>
<td>20 RGM-84L/3 HARPOON Bk II SSMs with equipment and services</td>
<td>$145 million</td>
</tr>
<tr>
<td>Egypt</td>
<td>July 2, 2010</td>
<td>40 Skyguard AMOUN Solid-State Transmitters for upgrade of Skyguard-SPARROW Launcher/Illuminator with equipment, training and services</td>
<td>$77 million</td>
</tr>
<tr>
<td>Israel</td>
<td>August 5, 2010</td>
<td>60 million gallons of unleaded gasoline, 284 million gallons of JP-8 aviation jet fuel &amp; 100 million gallons of diesel fuel</td>
<td>$2 billion</td>
</tr>
<tr>
<td>Egypt</td>
<td>July 5, 2011</td>
<td>125 M1A1 Abrams Tank kits for co-production, 125 M256 Armament Systems and other military equipment, training and services</td>
<td>$1.3 billion</td>
</tr>
<tr>
<td>Lebanon</td>
<td>July 20, 2012</td>
<td>Six Huey II helicopters with equipment, parts, training and logistical support</td>
<td>$63 million</td>
</tr>
<tr>
<td>Israel</td>
<td>December 20, 2012</td>
<td>6,900 Joint Direct Attack Munitions (JDAM) tail kits, spare parts, equipment with services</td>
<td>$647 million</td>
</tr>
<tr>
<td>Israel</td>
<td>April 17, 2013</td>
<td>864 million gallons of JP-8 aviation fuel, diesel fuel and unleaded gasoline</td>
<td>$2.67 billion</td>
</tr>
<tr>
<td>Israel</td>
<td>January 14, 2014</td>
<td>Six V-22B Block C, engines, other systems, equipment with services</td>
<td>$1.13 billion</td>
</tr>
<tr>
<td>Egypt</td>
<td>July 3, 2014</td>
<td>Personnel support services to support 140 U.S Government and contractor representatives at nine locations</td>
<td>$69 million</td>
</tr>
<tr>
<td>Israel</td>
<td>July, 14, 2014</td>
<td>600 AIM-9X-2 Sidewinder Block II All-Up-Round Missiles, 50 CATM-9X-2 Captive Air Training Missiles, spare parts, equipment with services</td>
<td>$544 million</td>
</tr>
<tr>
<td>Lebanon</td>
<td>September 19, 2014</td>
<td>18 Huey II helicopters with equipment, parts, training and logistical support</td>
<td>$180 million</td>
</tr>
<tr>
<td>Jordan</td>
<td>March 5, 2015</td>
<td>72 M31 Unitary Guided Multiple Launch Rocket System (GMLRS) rocket pods with equipment, parts, training and logistical support</td>
<td>$192 million</td>
</tr>
<tr>
<td>Jordan</td>
<td>March 17, 2015</td>
<td>Two 35-meter Coastal Patrol Boats with two MSI SEAHAWK 30-mm gun systems, various types of ammunition,</td>
<td>$80 million</td>
</tr>
</tbody>
</table>
### The Shattered Levant Military Balance

#### Costs are letter of offer and acceptance (LOA) estimates that are subject to change and re-costing. 36(b) notifications do not include proposed sales with a value under $50 million & actual proposed sales in any fiscal cycle exceed totals.

**Source:** Adapted by Aram Nerguizian from DSCA data on 36(b) Congressional arms sales notifications.

<table>
<thead>
<tr>
<th>Country</th>
<th>Date</th>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Egypt</td>
<td>April 8, 2015</td>
<td>356 AGM-114K/R3 Hellfire II air-to-ground missiles with containers, spare and repair parts, equipment, training and logistical support</td>
<td>$57 million</td>
</tr>
<tr>
<td>Jordan</td>
<td>May 5, 2015</td>
<td>One UH-60M Black Hawk helicopter with equipment, parts, training and logistical support</td>
<td>$21 million</td>
</tr>
<tr>
<td>Israel</td>
<td>May 19, 2015</td>
<td>14,500 KMU-556C/B Joint Direct Attack Munitions (JDAM) tail kits for Mk-84, Mk-83 and Mk-82 bombs,</td>
<td>$1.87 billion</td>
</tr>
<tr>
<td>Lebanon</td>
<td>June 10, 2015</td>
<td>Six A-29 Super Tucano Aircraft, 8 ALE-47 Countermeasure Dispensing Systems, 2,000 Advanced Precision Kill Weapon Systems, other equipment, spare and repair parts, training and logistical support</td>
<td>$462 million</td>
</tr>
</tbody>
</table>
Figure 17, Part I: Number of Select U.S. Foreign Military Sales Congressional Notifications to the Levant by Country 2005-2015

<table>
<thead>
<tr>
<th>Country</th>
<th>Major 36b Notifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Israel</td>
<td>20</td>
</tr>
<tr>
<td>Egypt</td>
<td>21</td>
</tr>
<tr>
<td>Jordan</td>
<td>11</td>
</tr>
<tr>
<td>Lebanon</td>
<td>3</td>
</tr>
</tbody>
</table>

Note: Costs are letter of offer and acceptance (LOA) estimates that are subject to change and re-costing. 36(b) notifications do not include proposed sales with a value under $50 million & actual proposed sales in any fiscal cycle exceed totals.

Source: Adapted by Aram Nerguizian from DSCA data on 36(b) Congressional arms sales notifications.
Figure 17, Part II: Value of Select U.S. Foreign Military Sales Congressional Notifications to the Levant by Country 2005-2015
(In current US millions)

<table>
<thead>
<tr>
<th>Country</th>
<th>Value of 36b Notifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Israel</td>
<td>$32,049</td>
</tr>
<tr>
<td>Egypt</td>
<td>$6,042</td>
</tr>
<tr>
<td>Jordan</td>
<td>$2,163</td>
</tr>
<tr>
<td>Lebanon</td>
<td>$705</td>
</tr>
</tbody>
</table>

Note: Costs are letter of offer and acceptance (LOA) estimates that are subject to change and re-costing. 36(b) notifications do not include proposed sales with a value under $50 million & actual proposed sales in any fiscal cycle exceed totals.

Source: Adapted by Aram Nerguizian from DSCA data on 36(b) Congressional arms sales notifications.
III. THE ASYMMETRIC BALANCE IN THE LEVANT

The political dynamics and conflicts in Egypt and Syria during 2011 to 2015 produced an environment wherein the Arab-Israeli conventional balance increasingly looked like a shattered balance with only Israel standing largely unharmed by regional events. It also led to a steady rise in the role of non-state actors, largely driven by sectarian differences and violent religious extremism.

At the same time, Iran came to play a growing role in the Levant. Despite limits to Iranian resources, the Islamic Republic continued to find new ways to compete with the US and its regional allies in the region. In contrast to the US – which depended on a mix of arms transfers and financial aid programs which at times proved to be less than decisive – Iran excelled in shaping a favorable asymmetric balance in the Levant in ways that the US is still struggling to compete with.

Iran exploited the fact that the asymmetric balance is far cheaper to influence than the conventional balance. Tehran was able to use limited resources to transform Hezbollah over time into a far more capable military force. It was also able to help Syria make the transition to a force with added counterinsurgency capability, and to provide aid that increased the threat from Hamas and militant Palestinian groups in Gaza.

However, in a twist of irony, the new-found strength of sub-national groups like Hezbollah in Lebanon and Hamas in Gaza may have helped stimulate the emergence of even more idiosyncratic – and arguably far more intolerant and anti-Western – groups in increasingly under-governed spaces.

These included Salafi-Jihadi groups like Jabhat al-Nusra (JAN) in Syria and Lebanon, the Islamic State of Iraq and al-Sham (ISIS) operating in Syria and Iraq, and Ansar Bait al-Maqdis (ABM) in Egypt’s Sinai Peninsula. However, as of 2015, Iran’s efforts to shape the regional asymmetric balance remained broadly successful, despite the loss of popular support in the mainly Sunni Arab street.

Asymmetric Forces & Irregular Warfare

These key changes in the regional asymmetric balance were largely shaped by changes in the Israeli-Syrian-Iranian-Hezbollah balance. However, any discussion of these changes would be incomplete without recognizing that Syria’s struggle with Israel hinged on asymmetric and proxy warfare and analyzing the role that Iran’s ties to Syria played in this aspect of US and Iranian competition.

The Growing Importance of the Asymmetric Balance

It became painfully clear to Syria’s political and military leadership during the June 6, 1982 Israeli invasion of Lebanon that their conventional forces could not compete successfully with Israel in conventional warfare. While offering stiff resistance, maintaining unit morale and force cohesion, they were outmatched by IDF military tactics and capabilities. Syria lost 400 tanks, 90 combat aircraft, 100 artillery/missile batteries, 70 armored vehicles and some 1,900 troops in the first three days of the invasion alone.140

Iran promptly took advantage of this situation. On June 17, 1982, an Iranian delegation to Damascus headed by Iran’s foreign and defense ministers offered to send 40,000 regular
troops supported by heavy armor and an additional 10,000 lightly-armed Revolutionary Guards and volunteers to fight in Lebanon under Syrian command. While Iranian and Syrian military and political objectives presented one major obstacle to an Iranian force commitment to Lebanon, the principal reasons Assad refused the offer was the expectation that Iranian forces could do little to tip the scales in Syria’s favor.\(^{141}\)

As the previous section showed, neither Iran nor Syria had the means to impact the regional conventional military balance. A new approach was needed and it came in the form of Assad’s “sword and shield” strategy. The former would require the use Syria’s allies in Lebanon, including Shi’a groups like Amal and Hezbollah loyal to Syria and Iran, as part of an asymmetric warfare campaign of terrorism and guerilla warfare against Israel and its allies in Lebanon. The latter required the Soviet Union to replenish Syria, its sole major ally in the region, in order to achieve “strategic parity” with Israel and build up meaningful long term deterrence.\(^{142}\)

Even before the breakup of the Soviet Union, this “sword and shield” approach collapsed because of the loss of the Soviet Union as a reliable source of advanced defensive military equipment. Syria has since tried to compensate by strengthening its linkages and coordination with Iran, increasing its support for (and arms transfers to) Hezbollah, and by relying on Palestinian groups in Lebanon, Syria, and Occupied Territories.

Hezbollah in particular became synonymous with the perceived success of Iran’s strategic focused on qualitatively superior asymmetric forces. In 2000, Hezbollah numbered some 300-400 fulltime fighters with 5,000 reservists equipped with no more than the short range Katyusha rockets, aging Strela-1 MANPADS and AT-4 Spigot ATGMS transformed.

Some 14 years of on-again-off-again confrontation with Israel followed. This led to the creation of effective recruitment and reserve structures, increasing transfers of ever-more capable combat systems from Iran. More recently combat experience in Syria’s civil war transformed Hezbollah into a force with a low estimate of well-trained battle-tested 5,000 fulltime fighters. These were backed by an equally conservative estimate of 15,000 reservists – equipped with at least 60,000 to 80,000 rockets, including some short-range ballistic missiles, anti-ship missiles and increasingly lethal anti-air missile systems supported by radar.\(^ {143}\)

Iran and Syria continued to develop ballistic missile capabilities in an effort to counter Israel’s broad military superiority. Despite some technical advancements, however, both Syria and Iran’s missile strike capabilities remained limited in lethality without nuclear warheads, and Syria’s use of Scuds against civilian target during its civil war showed conventional warheads had little lethality without chemical weapons. As of 2014, it was also still unclear what Syrian military capabilities would survive the country’s increasingly brutal civil war.
Low-Level and Irregular Warfare

Israel may have dominated the regional balance in terms of modern conventional systems, recapitalization and foreign military support. However, asymmetric and unconventional forces did give Syria and Iran the means to harass – if not undermine – Israeli security and strategic interests in the region.

Hezbollah would never have emerged as a major force in Lebanon and the region without decades of unfettered Syrian and Iranian arms transfers, training, and financial support. While the Shi’a group’s unrivaled autonomy in Lebanon relied upon its links to its patron states, there was little indication in 2015 that Hezbollah has acted, or will act, as a Syrian or Iranian proxy unless its leaders felt this was to the group’s and its constituency’s direct advantage. In practice, all three seem to have used each other for their own goals and interests.

The 2006 Israeli-Hezbollah war showed that Syria and Iran could use the transfer of ever-more advanced weapon systems to put pressure on Israel. The quest to build up such capabilities in the Levant had since led both countries to rearm Hezbollah and increase the range and quality of its weapons. It also led them to provide components and some long-range rockets to both Hamas and the Palestinian Islamic Jihad.

As a result, Syria and Iran’s relationships with armed sub-national organizations with an anti-Israel agenda became key pillars of the asymmetric balance. Ties to such actors were scarcely new to the region. However, the development of increasingly sophisticated non-state conventional military capacity represented a major step in Iran’s role in the Levant and in Syria’s “passive” confrontation with Israel. “Active” non-state allies confronted Israel in South Lebanon and the occupied Palestinian territories, rather than on the Golan Heights.144

The support of Hezbollah also allowed Syria and Iran to project power in ways that the US and Israel could not easily counter and without conditions that would prompt Israel to use decisive force against Hezbollah’s sponsors. This form of power projection allowed Syria to push Israel into a low-level war of attrition without involving Syria, while transforming Hezbollah into a serious threat over time.

At the same time, Hezbollah demonstrated that there were real limits to its war-fighting capabilities in 2006 – limits that Hamas exhibited in different ways during its fighting with Israel in 2012 and again in 2014. All three conflicts showed that asymmetric forces, rocket and missile attacks could play a limited, largely defensive role in conventional warfare and wage spoiler attacks and wars of defensive attrition. They also showed, however, that none of these groups presented a serious direct threat to Israel’s ability to maneuver, defend its territory, or exercise air and missile supremacy.

It was Iran and Syria’s ability to supply rockets and missiles that did the most to help non-state actors such as Hamas and Hezbollah develop capabilities that allowed them to strike Israel from increasing distances. In 2015, Iran remained a critical supplier of rocket and missile systems and technological know-how to these groups.

As was stated earlier, the IDF’s Teffen 2012 plan was conceived largely as a result of these realities and the perceived shortfalls of the 2006 war. One of the core lessons was Israel’s
need to address manpower quality and training to confront the shifting realities of asymmetric urban warfighting.

The IDF has since taken steps to drastically expand the number of urban warfare training centers in Israel. The IDF’s Combat Engineering Corps, which plays an increasingly relevant counter-IED and armored demolition role, has also been adapting to the realities of future asymmetric warfighting. *Teffen 2012* also further emphasized the development of a comprehensive multilayered Israeli anti-rocket and anti-ballistic missile defense umbrella.145

**Transfers of Anti-Tank Weapons**

Hezbollah significantly expanded its holdings of guided and unguided anti-tank systems in the wake of the IDF’s withdrawal from South Lebanon in 2000, and did so with Iranian and Syrian support. As was the case of reported rocket and ballistic missile transfers, it remained difficult to determine what systems had actually been transferred. However, a number of reports raised important questions about the level of increased sophistication in Hezbollah holdings:

- Iran is reported to have provided Hezbollah with the *Nader* and the *Toophan*, Iranian versions of the Russian RPG-7 and possibly the American TOW missile. The Shi’a group is also reported to be in possession of the *Towsan* and the *Raad*, which are based on the AT-5 “*Spandrel*” and the AT-3 *Sagger* ATGM systems. The improved *Raad-T* is reported to be armed with tandem warheads designed to defeat reactive armor systems.

- According to some reports, the bulk of Hezbollah’s ATGM capabilities expansion in the post-2000 period was provided by Damascus. This is noteworthy given that prior to the presidency of Bashar al-Assad, Syria had allowed arms transfers but was not a direct supplier. Systems reported to have been provided include the AT-13 “*Metis-M*” equipped with a tandem warhead and able to hit targets at 1.5 km and the AT-14 *Kornet-E*. The *Kornet-E*, which has a range of 5.5 km and utilizes a semi-automatic command-to-line of sight laser beam-riding targeting system, is one of the most sophisticated anti-armor systems currently available. It could significantly raise the level of threat to Israeli forces in any future conflict. Unguided RPG systems provided by Syria are reported to include the RPG-29 (a tandem warhead variant of the RPG-7) and the disposable single-shot RPG-18.

As of 2015, there were no immediate reports of additional ATGM transfers to Hezbollah. However, not every “new” system had to be linked to transfers of increasingly capable systems. For example, reports emerged in 2013 that the Palestinian Izz-al-Din al-Qassam Brigades – the armed wing of Hamas – may have modified standard high explosive antitank (HEAT) RPG-7 rounds into tandem warheads able to defeat the explosive reactive armor (ERA) on Israeli M-60 main battle tanks, but were unlikely to be effective against the IDF’s more modern *Merkava* MBTs. Aside from local ingenuity, it was notable that both Jordan and Iran could produce tandem-warheads for the RPG-32 and RPG-29 respectively.

ATGM threats in Gaza and Lebanon existed alongside new and emerging threats in Syria. Multiple anti-Assad militant groups across a very wide ideological spectrum have benefited not only from ATGM proliferation in Syria, but also from third party transfers supported by government sponsors that supported efforts to remove Assad.

**Transfers of Air Defense Weapons**

As was stated earlier, Israel was able to strike multiple targets in Syria on multiple occasions throughout 2015, including some that appeared to be tied to the potential transfer of sophisticated anti-air, anti-ship and surface-to-surface missiles from the Assad regime.
to Hezbollah. Nevertheless, Iran could alter the balance of any proxy or asymmetric conflict in other ways. In addition to Hezbollah’s expansion of its surface-to-surface missile and rocket holdings, which will be discussed later, SAM capabilities could become another dimension of the asymmetric balance.

The Shi’a group was widely reported to be in possession of the more sophisticated SA-8 Osa mobile radar anti-aircraft system, the SA-14 Gremlin, SA-16 Igl-1, SA-18 Igl and SA-24 Igl-5 MANPADS in addition to its holdings of older SA-7 Grail.149 There were also reports that Hezbollah personnel may have trained on the SA-2 and SA-3 major SAM systems. After 2006 era, Israel operated under the assumption that any system in Iran or Syria’s arsenal could be made available to Hezbollah, with logistics posing the main challenge to inventory development and consolidation.150

Jane’s also reported in 2013 that Hezbollah may have sought to secure more medium range SAM systems. It was difficult to confirm whether or not Hezbollah had received transfers of the Buk M2 (SA-17 Grizzly) medium range SAM from Syria. However, Israeli and US sources told Jane’s in early 2013 that Iran and Syria were actively trying to transfer ever more capable SAM systems to the Shi’a militant group to bolster its anti-air deterrent. Syria had initially acquired three Buk M2 batteries from Russia as a response to gaps in its IADS in the wake of the 2007 IAF strike against a nuclear facility under construction in Deir el-Zor.151

If confirmed, SA-8s could potentially pose a serious threat to Israeli helicopters. Neither the SA-8 nor the Igl present a major threat to Israeli F-15Is and F-16Is.152 Beyond smaller or older SAM systems, some analysts question whether groups like Hezbollah could effectively integrate let alone use sophisticated medium SAMs like the Buk M2.153 However, if Hezbollah was in fact able to acquire, integrate and field the Buk M2, the system may pose a serious threat both to Israeli military and civilian aircraft flying from low to high altitude.154

Unlike Hezbollah which presented an ever-increasing threat to Israeli rotary and fixed wing aircraft in 2015, Palestinian militant and sub-national groups like Hamas and Palestinian Islamic Jihad were far less successful at acquiring even basic SAMs such as MANPADS. However, there were reports that Palestinian militant groups had increased their efforts to secure even token anti-air systems. In September 2013, Jane’s reported that the Izz-al-Din al-Qassam Brigades – the armed wing of Palestinian Islamist group Hamas – had revealed publicly for the first time that the group had Strela-2 (SA-7 Grail) MANPADS.155

The challenge of MANPADS posed to both Israel and Egypt went well beyond Gaza and Hamas, and were affected by regime change and instability in both Libya and Egypt in 2011. Reporting in 2014 showed that Libyan MANPADS and other systems were part of smuggling activity in Sinai throughout 2012 and 2013. In 2012, the Egyptian Ministry of Interior released photos of MANPADS components, including three missiles and some nine batteries found in the port city of Marsa Matrouh. Later in 2013, the Egyptian 3rd Army found at least 10 SA-7s hidden in a mosque and the homes of suspected militants in the north Sinai town of Sheikh Zuweid.156

It is probable that limited numbers of Strela-2s were smuggled into Gaza via tunnels linking the territory to Egypt’s Sinai Peninsula. Egyptian security along the Rafah border crossing had softened under the tenure of President Mohamed Morsi’s Muslim
Brotherhood-affiliated Freedom and Justice Party. In the wake of Morsi’s military-backed ouster from office in July 2013, the new Egyptian government led by President Abdel Fattah al-Sisi worked to destroy as much as 98% of tunnels used to smuggle arms into the Gaza Strip. Egyptian military forces also deployed Apache helicopter gunships over Gaza’s airspace on at least 12 separate occasions since July 2013.\textsuperscript{157}

The Strela-2 posed only a limited threat to highly capable Israeli flight crews operating modern rotary and fixed-wing aircraft. The delivery of more sophisticated systems would have to be contingent upon a mix of luck in evasion and continued improvement in ties to Tehran in the wake of Hamas’ break with Syria. However, the aging system still posed a measured threat to less experienced Egyptian military forces. On January 25, 2014, and Egyptian military Mi-17 helicopter crashed after being targeted and hit by a MANPAD was fired by Sunni radical group Kamaat Bayt al-Maqdis. Jane’s imagery analysis narrowed the system to either an Iгла-type or a Chinese QW-2 MANPADS.\textsuperscript{158}

Interdicting the tunnel activity linking militants in Sinai and the Gaza Strip in 2014 may have served to prevent future efforts to smuggle additional SAMs to Gaza, but Hamas may have still acquired as many as 100 of the ageing MANPAD systems.\textsuperscript{159} Egypt was also likely in 2014 to focus far more on its own domestic militant and terror threats – giving Israeli security forces a wide berth in their campaign against Palestinians militants in July and August of 2014. Meanwhile, MANPADS threats exist in Egypt, Gaza and Lebanon alongside new and emerging one in Syria.

\textit{Transfers of Surface-to-Surface Rockets and Missiles}

Hamas and Hezbollah actively sought to acquire, expand and modernize their holdings of surface-to-surface rocket and missile holdings. Surface-to-surface systems – especially when equipped with even limited guidance systems – served to bolster each group’s domestic credentials within the Palestinian territories and Lebanon, enhanced each group’s relative deterrence vis-à-vis Israel and increased the costs to Israel and its allies in their quest to either eliminate threats both before launch and in-flight.

Hamas steadily developed its holdings of short-range rockets over time, aided in part by smuggling from Sinai via an underground network of tunnels, with some open source estimates placing the Palestinian militant group’s 2014 holdings at some 10,000 rockets.\textsuperscript{160} However, Israeli security measures – including the separation barrier between Israel and the West Bank – have limited supplies to Hamas and other Palestinian groups.

\textbf{Figure 18} shows a rough estimate of rocket strike ranges for Hamas’s rocket and missile holdings. \textbf{Figure 18} also shows the range of Fajr-5 missiles Iran was reported to have supplied Hamas. On November 18, 2012, Hamas claimed to have fired a Fajr-5 against Tel Aviv.\textsuperscript{161} With a range of some 80 km, a rocket strike reaching so far north was unprecedented in the history of the Israeli-Palestinian conflict and while the attack had no real world military impact, it was nonetheless an achievement in the eyes of Hamas’ supporters.

Israel’s 2012 attacks on Hamas and other militant targets during “Operation Pillar of Defense” reduced the group’s rocket holding as a result of targeted strikes by the IAF and the launching of some 1,500 rockets by Palestinian militants in attack against Israel. Despite effort to set back Palestinian rocket and missile capabilities, Hamas’s holdings
immediately after the 2012 conflict of longer range rockets may still have included dozens of 122-mm Grad or similar rockets, 230-mm Oghabs, and as many as 50 modified 240-mm Fajr-3 rockets that had the potential to strike Tel Aviv or Israeli nuclear facilities in the Negev.\textsuperscript{162}

Beyond the state of Hamas’ post-2012 rocket and missile holdings, the Palestinian militant group also appeared to have made effective use of its tunnel network linking the Gaza Strip to smugglers in Sinai, and Hamas’ relatively favorable ties with the Muslim Brotherhood linked government of Mohamed Morsi, to rebuild some of its holdings over the 2012 to 2014 period.\textsuperscript{163} As of August 5, 2014, Israeli defense sources reported that Palestinian militants had fired more than 3,700 rockets and missiles.\textsuperscript{164}

One other way that Hamas could have built up its holdings was through limited local production. While Iran had publically stated that it supplied the militant group with the 333 mm Fajr-5 and the 240 mm Fajr-3 in the past, it may also have transferred some assembly or production capabilities. There is some preliminary reporting that Hamas and other Palestinian factions may now have the capability and the resources to build their own Fajr-5 rockets.\textsuperscript{165}

This may have partly reflected the impact of degrading security in Sinai and the impact of a less secure Egyptian-Gaza frontier on Iran’s ability to send aid to its allies in Gaza. Some of these trends may have reversed in light of both a relative decline in relations between Hamas and Iran over the Syria conflict and the fact that the Sisi government was far less tolerant of both Hamas and Iran’s efforts to support its regional allies.

Beyond Fajr-type rockets, Hamas may have also bolstered its ability to produce some of its own rockets – which could have become a necessity if ties to Iran were strained. In 2013, the IDF asserted that Hamas was producing many of its own longer-range rocket systems. This was reported to include the M-75 rocket.

A locally built and designed system named after Ahmad Ibrahim al-Muqadimah – a Hamas leader killed by the IDF in 2003 – the M-75 was a 200 mm rocket with a nominal range of 75 km. However, a great deal of skepticism surrounded claims the group could produce its own rockets, especially given the improvised nature of many of the rockets used by Hamas with nominal ranges not exceeding 15 km.\textsuperscript{166}

While Hamas did much to expand its holdings of surface-to-surface systems with Iranian support, no regional sub-national group – let alone most regional states – could compete with the scope and scale of Hezbollah’s rocket and missile holdings. Prior to Israel’s withdrawal from South Lebanon in 2000, Hezbollah’s longest range rocket system was the tried and testing 122 mm Katyusha with an operation range of some 20 km. By the time of the 2006 Israel-Hezbollah conflict, Israeli estimates placed Hezbollah rocket holdings at some 13,000 to 14,000 rockets – most of which were short range and unguided with limited numbers of rockets with ranges up to 200 km. By mid-2013, Hezbollah’s holdings grew to include at least 60,000 to 80,000 rockets, including increasingly capable short-range ballistic missile systems that afforded Hezbollah the ability to launch from well north of its traditional South Lebanon AOR.\textsuperscript{167}
The Impact of Range

Figure 19 shows an estimate of Hezbollah rocket ranges. Various reports indicate that Iranian and Syrian transfers that build the Hezbollah’s growing holdings of guided and unguided short range and tactical missiles became a steadily more important aspect of the asymmetric balance, and one where Iranian competition with the US and Israel had an important impact.

- Some reports indicated that Hezbollah’s one of largest rocket system was the 610 mm Zelzal-2. Weighing some 3,400 kg and capable of delivering a 500 kg warhead in excess of 200 km, the system’s lethality and utility were limited by its lack of electronic guidance systems. While the Shi’a militant group did not use its Zelzal rockets during the 2006 war, it was widely believed to have vastly expanded its holdings of both short and medium range unguided rockets to deter future conflict or to inflict psychological costs on the Israeli population in any future war.

- Hezbollah also expanded its holdings of guided rocket systems. The “Fatah” A-110, a guided version of the Zelzal-2, or the Syrian made M600, a Fatah A-110 clone, presented more of a threat to Israel’s interior. Equipped with inertial guidance systems and able to deliver a 500 kg payload to a range of 250 km within a circular error probability (CEP) of 100 m, these systems could allow Hezbollah to threaten as far south as Tel Aviv from the Northern Bekaa. While there were competing and unconfirmed reports surrounding whether or not Hezbollah had them in inventory, the group was generally believed to have limited holdings of both systems by 2014.

- Reports surfaced in early 2010 that Syria may have transferred Russian R-17 Scud-B ballistic missiles to Hezbollah. 11.25 m long and weighting some 5,900 kg, the guided liquid fuel rocket is able to deliver a 985 kg warhead over a range of 300 km.

While the Scud-B had superior range to Hezbollah other holdings of unguided medium range rockets, its much larger CEP of 450 m was significantly inferior to the Fatah A-110’s CEP of 100 m. In July 2011, reports surfaced that Syria transferred some ten Scud-D to Hezbollah. Scud-type missiles were unwieldy systems for an organization that emphasized stealth, mobility and rapid deployments for multiple fires. They could not be taken apart for easy or inconspicuous transportation. Furthermore, the complexity and volatility of the missile’s propulsion system would require dedicated facilities in addition to highly trained personnel.

There was continued skepticism surrounding the transfer of Scud-B or Scud-D to Hezbollah and as of 2014, there were no releases of aerial observation of any Scud transfers across the Lebanese-Syrian border. Unlike solid-propellant rockets like the Zelzal-2, even a modified/stealthy Scud transporter/erector/launcher (TEL) would present a clear target for overhead reconnaissance. US defense sources also indicated that while a transfer was not ruled out, there were increasing indications that Hezbollah personnel trained on Scud type systems in Syria rather than in the wake of a transfer to Lebanon.

Ultimately, Scud-type liquid fueled rockets could present more of a liability than an asset to Hezbollah’s overall missile capability. Furthermore, given Hezbollah’s existing inventory of guided and unguided systems, the potential acquisition of Scud-B or Scud-D had a popular psychological impact in Israel, rather than actually impacting the overall regional balance.

- While Hezbollah continued to consolidate its arsenal of short range 107 mm and 122 mm rockets meant to harass IDF ground forces in any future war, it may also have developed a use for systems otherwise considered irrelevant in the asymmetric balance. These included relying on multiple teams using large numbers of 106 mm recoilless rifle rounds to swarm and overwhelm the IDF’s Trophy active protection system currently equipped on Israeli Merkava MBTs. Jane’s went on to report that if assisted by sighting guns, this low-tech anti-tank (AT) solution could successfully hit Israeli armor out to a range of 1,000 m. Such tactics could have been part of Hezbollah’s own lessons learned as it tried to build an edge in the asymmetric balance with Israel.
While counter-terror, counter-insurgency and counter-intelligence threats from groups like ISIS in ungoverned and under-governed spaces in Levant persisted in 2014, the threat that any sub-national armed group could make effective use of longer-range surface to surface missiles remained limited.

**Major Missile and Rocket Holdings**

Figure 20 shows the major missile and rocket holdings in the region. Apart from states like Egypt and Syria, only Lebanese Hezbollah presented a credible threat in terms of a limited ability to use short range ballistic missiles. Meanwhile, beyond the training of Hezbollah personnel on Scud-type and other SSMs and the potential acquisition of some guidance capability for better targeting, questions remained about how effective such systems could be as other regional states – including Egypt, Jordan and Turkey – relied upon US-designed anti-air and anti-missile systems.

This growing mix of short-range and longer-range rockets – and ATGMs/MANPADs – did not threaten Israel’s “edge” in military technology in 2015. The systems involved were too lacking in accuracy and lethality. Hamas’s holding in particular appeared to lack real-world lethality and included far too large a mix of improvised and locally built or modified systems to be effective against Israel.

However, Hamas and Hezbollah rocket holdings posed enough of a future risk for Israel to make major efforts to field newer defensive counter-fire systems. These included a wide range of new systems to defend against different types of threats: the Trophy active protection system (APS) for Israeli armor, the Iron Dome defensive systems for shorter range rockets mortars, the David’s Sling for longer-range rockets, the Arrow II high altitude anti-missile system, and the Arrow III wide area theater counter-ballistic missile defense system. It also prompted the IDF to further decentralize its supply and logistics infrastructure to protect ammunition and equipment in the event of a future wars.

The combination of systems that included Iron Dome, David’s Sling, and Arrow II and Arrow III probably did much to limit Iranian, Syrian, and any non-state actor’s capability to leverage the asymmetric balance in their favor. However, only a lasting peace, supported by both Israelis and Palestinians and backed by the US and other regional players could be a truly effective security option in the long term, or halt Iran’s efforts to constantly gain advantage in the Levant, leverage its ties to Palestinian militants and foil US interests. Furthermore – and as the next sections will show – there were always going to be unexpected limits in terms of just how much any anti-missile system could shape the optics of Israeli asymmetric victory.
Figure 18: Approximate Rocket & Missile Ranges from Gaza

Note: All data presented is approximate.

Figure 19: Approximate Rocket & Missile Ranges from Lebanon

Note: ranges based on launch sites in southern Lebanon.

Figure 20: Arab-Israeli National Surface-to-Surface Missiles in 2014

<table>
<thead>
<tr>
<th>Country</th>
<th>Med/Long Range SSM</th>
<th>Short Range SSMs</th>
<th>MRLs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Egypt</td>
<td>9 Scud-B</td>
<td>9 FROG-7, 24 Sakr-80</td>
<td>96 BM-11, 60 BM-21, 50 Sakr-10, 122 mm, 122 mm, 122 mm, 100 Sakr-36, 122 mm, 36 Koongong, 130 mm, 32 BM-14, 26 MLRS, 277 mm, 48 BM-24, 240 mm, (in store)</td>
</tr>
<tr>
<td>Israel</td>
<td>+/- 100 Jericho 1 SRBM/ Jericho 2 IRBM, 7 MGM-52 Lance (in store)</td>
<td>None</td>
<td>58 BM-21, 122 mm, 50 LAR-160, 160 mm, 60 MLRS, 227 mm, 36 BM-24, 240 mm, 20 LAR-290, 290 mm</td>
</tr>
<tr>
<td>Jordan</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Lebanon</td>
<td>None</td>
<td>None</td>
<td>11 BM-21, 122 mm</td>
</tr>
<tr>
<td>Syria</td>
<td>84+ SSM, 18 Scud- B/Scud-C/Scud-D, 30 look-a-like</td>
<td>18 FROG-7, 18+ SS-21 Tochka (Scarab) SS-C-3 Styx, +/- 200 Type 63, 107 mm, +/- 300 BM-21, 120 mm</td>
<td></td>
</tr>
</tbody>
</table>

Note: Medium range SSMs have a range in excess of 70km and includes SRBMs and IRBMs. Syrian holdings uncertain in the wake of three years of civil war.

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.
The Israeli Reaction: Longer Range Defense Systems

As was discussed in the section on regional air defense systems, in addition to emerging threats from militant rocket and missile holding, Israel was also reacting to the threat of longer-range missile systems in Iranian and Syrian forces. The Iranian missile threat to Israel is discussed in a separate analysis.\(^{171}\) While there were real limited to Iran’s ability to effectively target and subsequently hit Israel, Iranian cooperation with Syria could have had a significant impact were Syria to become involved in a missile conflict.

Syria’s larger systems, such as its regular and extended range Scud holdings, lacked accuracy and ease of deployment, but could have potentially played a role in the asymmetric balance were they to be used as chemical or biological delivery systems. Egypt maintains older SSMs and some Scud-B. Not counting Hezbollah, Lebanon had some MRL holdings and Jordan had no SSM holdings of any kind. However, such an Iranian scenario became increasingly uncertain in the wake of protests and three years of civil war in Syria over the 2011 to 2014 period. As of 2014, Syria no longer possessed its declared holding of chemical weapons. Meanwhile, Assad forces remained bogged down in a bloody civil war and were keen to avoid intervention or a direct military engagement with Israel.

Irrespective of the Syria conflict, Israel could not ignore the mix of national and sub-national rocket and missile threats in the Levant and chose long ago to build up its defenses against longer-range missile threats. Purchases of major weapons systems from the US were one prong of a two-pronged Israeli strategy for missile defense. In that vein, Israel’s 17 batteries of improved HAWK MIM-23B and six MIM-104 Patriot surface-to-air missiles provided a point defense capability against ballistic missiles.\(^{172}\)

The second prong was the development of newer tiered missile defense systems developed both by the Israeli defense sector and via co-development with the US. After years of domestic development and testing, Israel took delivery of its first Arrow II battery in 2000 and in 2002 the Arrow II system’s radar was reported to have successfully detected the test-launch of a new Syrian test missile – believed to be a North Korean-designed Scud-D.\(^{173}\)

Thanks to US technical expertise and funding, the newer and more capable Enhanced Arrow II was tested. In April 2009, it successfully acquired, tracked, and intercepted a separating target. This was the first test that integrated the US AN/TPY-2 X-Band radar based in Israel. Since that time other integration tests have been performed using elements of other US systems, including the AN/TPY-2, THAAD, and Aegis.\(^{174}\)

According to the IISS, as of 2014, Israel fielded three Arrow II/Enhanced Arrow II theater ballistic missile systems and 20-24 active launchers, supported by a Green Pine radar system, and Citrus Tree command and control system.\(^{175}\) However, questions remained surrounding the Arrow II’s reliability and effectiveness in a hypothetical or real-world live fire engagement. On September 9, 2014, an Arrow II missile acquired and tracked its intended target, however it failed to destroy it. An initial assessment pointed to correctable issues tied to software, rather than any lasting flaw tied to the Arrow II missile system.\(^{176}\)

As of 2015, Israel and the US were continuing to cooperate in developing the Arrow III wide area theater missile defense system with improved countermeasures and capability to deal with high-speed reentries. The Arrow III was designed to be able to provide exo-
atmospheric interception of Iranian Shahab and Sejil missiles, directly striking and destroying incoming warheads.\textsuperscript{177} Boeing described the \textit{Arrow III} as follows:\textsuperscript{178}

“Arrow 3, the newest addition to the Arrow Weapon System, is the upper tier in the Arrow family of weapons that incorporates the latest technology to combat a continually advancing threat. Short- and medium-range ballistic missile threats require prompt and effective self-defense capabilities. The threat of more sophisticated missiles, including the threat of weapons of mass destruction, requires a multi-tier approach to achieve a zero leakage rate. As the world’s first operational national missile defense system, the Arrow Weapon System successfully destroys targets using the latest technology to achieve a higher probability of a successful engagement. The Arrow Weapon System is affordable and has low total ownership costs.

The Arrow Weapon System is Israel’s national missile defense system. The Arrow system uses the two-stage Arrow II interceptor to destroy an incoming target with a fragmentation warhead… The … Arrow 2 interceptor was delivered by IAI to the MOD in the spring of 2005. Israel’s MOD, in cooperation with the U.S. Missile Defense Agency, has completed four successful flight tests of the coproduced Arrow II interceptor since 2007. In three of those tests, conducted February 2011, April 2009 and February 2007, the interceptor destroyed a target missile. In the other test, which occurred in March 2007, the objective was an interceptor fly-out to collect flight test engineering data of an enhanced capability interceptor and did not involve a target intercept. Boeing-IAI co-development of the next-generation Arrow III interceptor began in late 2008 and will be followed by coproduction.

…Arrow 3, also a two-stage interceptor, will destroy an incoming target with an exo-atmospheric kill vehicle and provide additional defense capability for evolving threats. Other system elements are a launch control center, fire-control radar and battle management center. Arrow provides Israel with flexible and cost-effective protection from ballistic missile threats. Boeing and Israel Aerospace Industries (IAI) co-produce the Arrow II interceptor and are developing the Arrow 3 interceptor for the Israel Ministry of Defense (MoD).”

\textit{Defense Update} described \textit{Arrow III}’s technical advances as follows:\textsuperscript{179}

“The IAI team proposed a kill vehicle offering exceptionally large divert capability, meaning the kill vehicle will have exceptional capability to maneuver in space, close-in on a target with high probability of kill, at realistic (very high) closing speeds. Unlike common KVs utilizing space propulsion systems (such as liquid propellant or gas generators), the proposed KV will be propelled by an ordinary rocket motor, equipped with flexible nozzle (vector-thrust).

Furthermore, this unique KV will also be fitted with a gimbaled seeker, obtaining hemispheric coverage for the seeker. By measuring the seeker’s line of sight relative to the vehicle’s motion, the kill vehicle would employ ‘proportional navigation’ deflecting the kill vehicle to divert its course and align exactly at target’s flight path, hence achieving an accurate kill even at very high closing speeds and over long distances….the new concept is relatively simple, reliable and inexpensive and is based on mature technologies. Furthermore, its large divert capability and high agility are contributing to easing the requirements for detection and tracking systems, generally associated with remote-sensor assisted exoatmospheric kills.

… a combined sensor utilizing visible and infrared elements would be suitable for ballistic missile intercept under all lighting conditions, furthermore, when provided with high density matrixes available today, such sensors could provide both target detection, discrimination and tracking as well as assisting line-of-sight measurement utilizing stars tracking.

The new component will also require the integration of longer range detection, tracking and discrimination capability, beyond what the Green Pine and Advanced Green Pine radars, employed with the Arrow 2 are providing. Among the advanced sensors considered for Israel’s future multi-tier system, are airborne electro-optical sensors deployed on high flying UAVs and future enhanced Green Pine radars, as well as the AN/TPY-2 radar already deployed in Israel, and operated by U.S. forces.
The US and Israel are also cooperating in developing and now deploying a system to deal with medium range rockets and missiles called David’s Sling – sometimes called Magic Wand or DSWS (David Sling Weapon System), to intercept medium- to long-range rockets and cruise missiles, such as those possessed by Hezbollah. Depending on the source it can cover attacks at ranges of fired at missile ranges from 40-70 Km to 250-300 km. It is being developed by Rafael and Raytheon is reported to use a two-stage interceptor, with dual targeting and guidance systems installed in its nose-tip (a radar and an electro-optical sensor). The system is said to have had its first successful intercept on November 27, 2012, and some reports indicate it will be rushed into deployment no later than 2013.”

As was discussed earlier in this report, while the Arrow III system was slated for entry into operational service in 2015, it too may fall prey to unexpected developmental or budgetary hurdles. However, the overall trend in Israeli missile defense development in 2014 and the gap between discreet US and Israeli foreign policy priorities in the longer term remained such that even with ongoing US-Iranian nuclear negotiations, it was highly unlikely that Israel would suspend the development of its planned multi-tier missile defense infrastructure.

**Israeli-Palestinian Rocket Wars: From “Pillar of Defense” to “Protective Edge”**

The November 2012 and the July-August 2014 conflicts between US ally Israel and Iranian ally Hamas stimulated efforts to develop new capabilities on both sides, and was an important test for determining the future direction and evolution of the regional asymmetric balance. Many of the lessons from fighting in 2012 had direct implications for how both Hamas and Israel would adapt their tactics and resources prior to the breakout of hostilities in 2014. However, while both conflicts contributed to military innovation and adaptability, they also showed that both Israelis and Palestinians continued “escalating to nowhere” in both military and political terms.180

**Trial by Fire: “Operation Pillar of Defense”**

2012’s “Operation Pillar of Defense” appeared to have been triggered by a gradual degradation of the already unstable Israeli-Hamas ceasefire in the wake of the last major round of conflict in 2008-2009. Another factor was the increasing number of rockets fired when Hamas took responsibility for the launches and a concomitant need on the part of the Israeli defense establishment to consolidate the country’s deterrence against such attacks.181

On November 14, 2012, the Israel Defense Forces launched a major military operation in the Gaza Strip. Ahmed Al-Jabari, the operational commander of Hamas, was targeted and killed in a missile strike. As part of “Operation Pillar of Defense,” the IDF also conducted aerial bombings and artillery strikes targeting Hamas and other militant Palestinian groups in the Strip supported by drone over-flights for targeting.182 In retaliation for IDF strikes and the death of Al-Jabari, Hamas and other Palestinian factions in Gaza fired some 1,500 short to medium range rockets against Israel with a very limited number managing to reach as far as Tel Aviv.

- The first chart in Figure 21 shows the breakdown of Hamas rocket fire over the course of the conflict. Palestinian militants fired an average of 188 rockets per day with daily low of 75, a daily high of 316 and sustained daily fires throughout the conflict in excess of 130 fires per day.
The second chart in Figure 21 shows an estimate based on public reporting of, on the one hand, the breakdown in Palestinian fires based on whether fires were or were not projected to target and land in Israeli populated or vulnerable areas. On the other, it shows the total number of Tamir interceptors fired against incoming fire, the number of reported intercepts and the number of projected rockets that were not intercepted.

The Role of Iron Dome

Palestinian rocket fire also triggered the first combat use of the Israeli Iron Dome missile defense system, which was being rushed into service.

Of the 1,506 rockets fired by Hamas, 875 were projected to land outside vulnerable areas, and were not targeted by Iron Dome with an additional 631 projected to possibly hit Israeli populated areas. The IDF launched a total of 573 Tamir interceptors, of which 421 were successful at intercepting incoming rocket fire. Of the total number of Iron Dome fires, 152 did not hit a target or were reported by the IDF as “failed launching attempts.”

Israel claimed that the Iron Dome system had an operational success rate in the conflict anywhere between 80 and 90 percent. If ratios were based on 573 intercept attempts and 421 successful intercepts, that would have given the system a success rate of 73.4 percent in the conflict. If the ratios were based on the number of rockets not projected to hit open areas – namely 631 – and 421 successful intercepts, that in turn gave the system a success rate of 66.6 percent.

While the IDF reported that only 58 Palestinian rockets launched towards Israel reached urban areas, what is unclear is how many of the 631 rockets fired that were not classified as launched towards open areas actually posed a threat to Israeli populated areas. It also remains unclear whether Tamir fires listed as “failed launch attempts” failed to launch, missed their targets, or a mix of both.

In any case, Iron Dome proved to be an important development in shaping the regional asymmetric balance. The 2006 Israeli-Hezbollah war showed the ability of prolonged rocket fire to shape the optics of war, public opinion in the Arab world and morale in Israel. Iron Dome seemingly eroded the ability of groups opposed to Israel to inflict attacks that could qualify as successes. It also forced these groups in the Palestinian Territories and Hezbollah in Lebanon to reevaluate their tactics and strategies in their battle with Israel.

The threat Iron Dome dealt with does have to be kept in perspective. Neither the Palestinians nor Hezbollah had the firepower, resources, planning, logistics, and general wherewithal to come close to scoring a tactical win, to say nothing of a strategic victory against Israel. Unguided mass rocket fires have never produced mass casualties and their impact remained principally psychological: Palestinians felt they could stand up to the IDF on the one hand and Israelis felt a sense of insecurity despite their overwhelming military edge.

Iron Dome enhanced that edge and deprived Iran’s regional allies of the ability to terrorize the Israeli public. It also gave Israeli decision-makers more time to craft policy responses away from pressure from below to take more drastic measures against their opponents – in the case of “Operation Pillar of Defense,” forestalling a large scale and potentially very bloody ground offensive in Gaza.
At the same time, such defenses were far more expensive than the rockets and missiles in inventory with Hamas, PIJ, and Hezbollah forces. Each Tamir interceptor cost some $40,000 to $50,000 in 2012. It was estimated that it would cost Israel and the IDF some $23 to $29 million dollars to replenish its then-depleted stocks. Economies of scale and ramping up production could cut costs, and Iron Dome had minimized other costs tied to Israeli loss of property and infrastructure damage.

The Challenge to Israeli Defenses

Israeli defenses faced important challenges. The first was that Hezbollah, Hamas, and other groups were watching, learning, and adapting, just as Israel had adapted to their shifting tactics from conflict to conflict. For example, it was unclear how the Iron Dome system or other missile defense systems would perform over longer periods of sustained fire, larger volumes of daily rocket salvos, the deployment of potentially more capable rocket and missile systems, and the prospects of rocket fires from multiple vectors.

Saturating new and costly Israeli systems was not a new concept: as was described early in this section, Hezbollah was reported to have developed a doctrine of mass fires of recoilless rifles at Israeli Merkava MBTs as one tactic to overpower the Trophy APS anti-missile system in order to then score a direct hit with a conventional ATGM such as the AT-14 Kornet.185

Furthermore, neither Iron Dome nor Israeli air strikes were able to significantly or decisively curtail the Palestinians’ ability to launch relatively large salvos of rockets in the 2012 conflict. As the first chart of Figure 21 showed, with the exception of the first day of hostilities, daily rocket fires never fall below 130 per day with sustained fires on most days between 150 and 250 rockets per day. After a week of targeted air strikes, there were still enough active launchers to fire 221 rockets.

The Palestinians maintained relatively large stockpiles of relatively inexpensive rocket systems. Meanwhile, Israel’s solution remained relatively high cost with only a limited number of interceptors in inventory. This did not mean the IDF would eventually “run out” of Tamir interceptors. Israel has the production and industrial base and access to US grant aid to rapidly replenish its holdings. However, the 2012 round of fighting underscored Israel’s future need to have enough missiles in inventory and enough productive capacity to keep holdings above the number of future fires.

None of this could be without cost. Beyond the cost of the Tamir from a production standpoint, it was also costly to store large holdings of missiles with unstable compounds and propellant that must be carefully monitored and regulated to account for changes in environmental conditions.

Challenge, Response and the Other Side of the Iron Dome: “Operation Protective Edge”

When Israel and Hamas last fought in 2012, the confrontation remained broadly on Israel’s terms. The IDF held Iron Dome to be a game changer, dramatically diminishing Hamas and PIJ’s asymmetric military capabilities by slashing both the psychological and limited military effects of Palestinian rocket fire. As of August 17, 2014, it was still too early to draw final or conclusive lessons from a round of conflict that began on July 8, 2014, and that had not reached a decisive conclusion at the time of writing. However, some initial
trends could be discerned, including both Palestinian and Israeli tactical shifts to dull each other’s perceived edge in the asymmetric balance.

Escalating clashes in 2014 took place at a time when Hamas had to contend on the one hand with Israeli security operations in the West Bank – including the re-arrest of more than 60 Hamas leaders in mid-June 2014 initially freed in a prisoner swap in 2011. On the other, it also had to deal with an uncertain geopolitical reality where the Palestinian militant group could no longer reliably count on the support of Iran, Hezbollah, Syria or a friendly government in Cairo. Hamas also saw few tangible benefits from its unity deal with Fatah in terms of financial relief to allow the group to pay some 50,000 government employees in Gaza. It was in this context that the abduction and killing of a Palestinian youth by Jewish settlers on July 2, 2014 – in retaliation for the death of three Israeli teenagers in the West Bank – provided Hamas with the premise it needed to resume rocket and missile attacks on Israel on July 8, 2014.186

Israel’s reaction to Hamas and other militant rocket fire was to launch “Operation Protective Edge,” a military response that premised the use of overwhelming force through air power to degrade the ability of Palestinian militants in the Gaza Strip from firing their rockets against Israel, while simultaneously countering rockets bound for Israel once more with the Iron Dome system.187 In addition to bringing more anti-rocket batteries online to protect urban centers and settlements, Israel had also continued to upgrade and improve the Iron Dome between 2012 and 2014 in a bid to increase the system’s overall effectiveness and predictive accuracy.188

Figure 22 Part I shows some preliminary metrics on Palestinian rocket fires and Israeli intercepts in 2014, in addition to some initial comparisons with 2012 metrics on rocket fires and the performance of the Iron Dome system. According to the data provided to Jane’s by the IDF, Palestinian militants fired some 3,712 rockets over a period of 17 days. What the charts do not show is both the civilian and military toll of fighting between July 8 and August 5, 2014.

According to the United Nations Office for the Co-ordination of Humanitarian Affairs (UN-OCHA), some 1,814 Palestinians were killed in the fighting – 1,312 of which were civilians – along with 64 IDF soldiers killed with an additional 463 wounded. Three Israeli civilians were also killed as a direct and indirect result of rocket fire from Gaza.189

The charts in Figure 22 Part II present more recent estimates collected by The New York Times based on a mix of data from UN-OCHA, the Israel Defense Forces and the Palestinian Health Ministry. Estimates presented in the first chart of Figure 22 Part II indicate that Palestinian militants fired some 3,096 rockets and missiles between July 8th and August 5th, 2014, or an average of more than 106 fires per day. The second chart shows the scale of Israeli military strikes against targets in Gaza, which included some 4,080 air and artillery strikes – an average of some 140 strikes per day.

The first chart in Figure 22 Part I shows that while daily Palestinian rocket fires had not reached the highest volume of daily fires from 2012, the fires appeared to be more stable and consistent across time such that the fire rates over. This in turn appeared to produce fire rates in 2014 that were broadly comparable to fire rates in 2012 at some 1,500 rockets over a one week period. This pattern appears to be reflected in the first chart of Figure 22 Part II.
The charts in **Figure 22** also imply that Hamas and PIJ appeared to have done much to replenish their stocks of rockets since the last round of fighting in 2012 either through smuggling or through local production.

At the same time, the first charts in **Figure 22 Part I** and **Figure 22 Part II** seem to point to was that irrespective of *Iron Dome*, the effectiveness of intercepts, or the inaccuracy of Palestinian rocket fire, Israeli targeted air strikes alone could not dramatically reduce Palestinian militants’ ability to fire on average of some 146 rockets per day between July 8 and July 16, 2014.

However, there is some preliminary evidence that Hamas’s initial holdings of some 10,000 rockets may have been reduced by as much as a third both through mass fires and as a result of being hit by ground and air strikes. Israeli defense sources noted meanwhile that Israeli forces had conducted strikes on some 4,800 on targets in Gaza, adding that some 3,300 Palestinian rockets were destroyed in addition to the more than 3,300 that were launched up to August 5, 2014.\(^{190}\) However, open source estimates are still unclear as to whether air and artillery strikes played a decisive role in degrading Palestinian rocket fires.

**Response and Counter-Response**

As is mentioned time and time again throughout this analysis, every player within the regional asymmetric balance had little choice other than to adapt to the changing tactics of their opponents both militarily and politically.

Hamas and other Palestinian militant groups did so by investing in a labyrinth of tunnels under Gaza with hidden exit points in Israel. They then integrated this tunnel network into Palestinian militants’ strategies for sustained rocket fires, incursions by ground forces into Israel, the circumvention of Israel’s technical edge in terms of modern ISR and RECCE, the ability to bring down target fires from air and ground units, and the psychological effects of *Iron Dome* on the Israeli homefront. Hamas also made use of specialized units – including naval commandos – to harass Israeli military targets and personnel.\(^{191}\)

After two weeks of fighting, Israel’s stand-off approach to Gaza and a focus on countering and degrading Palestinian rocket fires through targeted fires and the use of *Iron Dome* had seemingly failed to cow the Palestinians or produce even the image of ab Israeli victory. Furthermore, after 11 days of fighting, the IDF had seemingly failed to find all of the tunnels Hamas and its allies in Gaza were using to strike out against Israel.

This prompted a shift in Israel’s end-state during “Protective Edge” from degrading Palestinian rocket holdings to degrading and destroying Hamas’s network of underground tunnels.\(^{192}\) On July 17, 2014, Israeli ground forces moved into Gaza with the aim of destroying much if not all of the tunnels that Palestinian militants were using to blunt Israel’s military and technical edge. The land incursion ended after 20 days with Israeli forces withdrawing to a buffer zone on August 5, 2014, after declaring that they had accomplished their mission objectives.

As the first chart of **Figure 22 Part I** shows, Hamas rocket fires only began to decline in any measurable way after the ground invasion. Meanwhile, the second chart of **Figure 22 Part II** shows that Israel’s ground incursion prompted Palestinian militants to use their rocket holdings at least in part against Israeli military targets that were then deployed in Gaza.
Meanwhile, the first chart of Figure 22 Part II shows that despite the July 16th, 2014, IDF ground incursion into Gaza, Hamas and other Palestinian militants continued to fire rockets and missiles and rockets at Israel at a daily average of 89 fires between July 17th and August 5th, 2014.

Hamas and other militant groups did suffer casualties of their own during fighting in 2014. However, what seemed clear was that Israel’s ground incursion may also have played a part in Hamas and PIJ’s efforts to degrade the IDF’s edge in combat through new tactics in attrition warfare. While Israeli ground forces moved into Gaza, Hamas and PIJ militants carried out hit and run attacks against Israeli forces in Israel – sometimes as deep as 3 km within Israeli territory.

Unlike 2012, when Israel suffered few military losses, the IDF lost 64 soldiers in combat as of August 5th, 2014 – a far higher attrition rate than Israel had expected. Palestinian successes in close-quarter combat (CQC) against IDF troops were thanks to the adoption of Hezbollah-style military tactics, superior training and combat readiness relative to fighting in 2012, and the ability to conduct stealth attacks using tunnels that Israel had yet to identify or destroy. However, there were some aspects of Palestinian rocket tactics that no amount of time and investment in systems like Iron Dome or any technical solution could degrade or counter. The most pertinent example was on July 22, 2014 with the firing of longer range rockets from Gaza against Tel Aviv’s Ben Gurion Airport.

While the attack did not cause any damage against Israeli civil aviation infrastructure, the perceived threat was significant enough to trigger a US Federal Aviation Authority (FAA) temporary ban on US flights to Israel. This served to underscore the point that while Israel could degrade and deny Hamas’s ability to hit Israel, the Palestinian militant group could always look for and find new way to harm Israel from economic, reputational and public relations standpoints.

As Israelis and Palestinians went through failed cease-fire after failed cease-fire in August 2014, the outcome of “Operation Protective Edge” remained anything but certain. However, what was clear was that as important as Palestinian rockets and the Iron Dome system were to the regional asymmetric balance, neither rocket fires nor Israeli intercepts proved decisive on their own.

Differences in the Impact of Iron Dome

As the second chart of Figure 22 Part I shows, Israeli defense sources reported that Iron Dome once more played an effective role in detecting, targeting and defeating incoming Palestinian rocket fire. Much as in 2012, close to 60% of Palestinian rockets hit unpopulated areas. Furthermore, the number of rockets intercepted by Tamir interceptors also went up significantly. What was not immediately clear at the time of writing was how best to evaluate the effectiveness of the Iron Dome during “Operation Protective Edge.”

Preliminary reporting by Jane’s seemed to indicate at least some overall reduction in the performance of the Iron Dome system despite the deployment of additional batteries. Jane’s did caveat, however, that the use of the system in 2012 and 2014 may be difficult to compare if how and why the Iron Dome intercepted one rocket versus another had shifted as result of technical upgrades, configuration changes or shifts in Israeli tactics.

However, there were some aspects of Palestinian rocket tactics that no amount of time and investment in systems like Iron Dome or any technical solution could degrade or counter. The most pertinent example was on July 22, 2014 with the firing of longer range rockets from Gaza against Tel Aviv’s Ben Gurion Airport.
Palestinian militants – through the use of tunnels, hidden launch sites and qualitative improvements in the training and readings of their ground forces – chipped away at some of Israel’s military edge through attrition warfare. In that regard, fighting in July and August of 2014 may ultimately have played out in ways that benefited Hamas militarily and politically.

These developments push Israel to shift its tactics and resourcing in preparation of the next round of fighting, much as it did after the 2006 Israel-Hezbollah conflict. But as both sides prepare, adapt and resource for another war, both Israelis and Palestinians were doing little more than further diminishing the prospects for a lasting hope of de-escalation or peace. In short, both Israelis and Palestinians seem locked in an endless military road to nowhere.
Figure 21: Operation “Pillar of Defense”: Iron Dome’s Trial by Fire in 2012

Hamas Rocket Fires by Date:

Breakdown of Palestinian Rocket Fires & “Iron Dome” Intercepts:

Note: “Tamir” refers to the “Iron Dome” system’s radar guided interceptor missiles. Some variation in final numbers across sources is to be expected.

Source: Adapted by Aram Nerguizian from data provided by the Israel Defense Forces, Jane’s and the BBC.
Figure 22 Part I: An Initial Assessment of “Operation Protective Edge”: Going beyond Air Power & Iron Dome’s in 2014

Hamas & PIJ Rocket Fires during “Protective Edge” July 8 to July 24:

An Initial Comparison of Rocket Fire in 2012 and 2014:

Note: “PIJ” stands for Palestinian Islamic Jihad. All data for 2014 was preliminary in light of ongoing conflict as of August 16, 2014. Some variation in final numbers across sources is to be expected.

Source: Adapted by Aram Nerguizian from data provided to IHS Jane’s; see Jeremy Binnie, “IDF detail the damage inflicted on Gaza militants,” Jane’s Defense Weekly, August 7, 2014.
Figure 22 Part II: An Initial Assessment of “Operation Protective Edge”: Palestinian Rocket Fire and IDF Strike Rates in 2014

Palestinian Rocket Fires against Israel July 8 to August 5:

[Bar chart showing Palestinian rocket fires against Israel from July 8 to August 5 with data for each day of the month]

Israeli Military Air and Artillery Strikes in Gaza July 8 to August 5:

[Bar chart showing Israeli military air and artillery strikes in Gaza from July 8 to August 5 with data for each day of the month]

Note: data presented reflects Israel Defense Forces estimates.

Regional Military Responses to Asymmetric Threats

The previous section has highlighted how Israel responds to asymmetric military threats, principally in Gaza and in Lebanon. However, every country in the Levant now has to contend with a current or future threat from predominantly Sunni Islamist militants and non-state armed groups employing varying degrees of irregular warfare. In addition Egypt, Lebanon and to a lesser extent Jordan shared common challenges ties to areas that were either historically ungoverned or seriously under-governed as a result of instability in the wake of the 2011 Arab uprisings.

Egypt

In the years that followed regime change in Egypt in 2011, the Sinai Peninsula increasingly became under or un-governed -- with a sharp rise in both illicit and militant Islamist activity. Small arms and rocket attacks against both Egyptian security forces and Israel increased steadily over the 2011 to 2013 timeframe. In the wake of President Morsi’s ouster in July 2013, the Egyptian armed forces stepped up counter-insurgency operations in the Sinai.

The Egyptian military came under suicide attack twice in September 2013. The first attack on September 5, 2013, was a failed suicide attack against Egypt’s interior minister Mohammad Ibrahim. The second attack on September 11, 2013 came in retaliation to the largest deployment to that date by Egyptian security forces in to Sinai. Two suicide bombers blew up explosives-laden trucks in Rafah outside a local military intelligence branch, killing six military personnel and injuring 17 – including 7 civilians. Jamaat Ansar Bayt al-Maqdis (ABM) – designated a Foreign Terrorist Organization (FTO) by the US Department of State on April 9, 2014 and one of the principal Al-Qa’eda inspired groups in Sinai – claimed responsibility for both attacks.

In March 2013, Egypt announced that it had begun construction of a fence around the north Sinai city of El-Arish to curtail the free movement of regional militant groups. Meanwhile, on May 23, 2014, Egypt announced that its security forces had killed Shadi al-Meneir, the leader of ABM along with three senior members of the Jihadi militant group.

Meanwhile, Israel took its own steps to curtail risks it faced from militant groups operating in Sinai, including the erecting of its own border fence with Egypt along with a communications network along the length of the Israeli-Egyptian border. Despite such successes, as of August 2014, the Egyptian military and other security forces remained locked in efforts to eliminate or cripple groups like ABM.

Lebanon

Lebanon had to step up its response to the threat posed by Sunni Islamist militant groups, including both so-called “home grown” Sunni militant groups and factions from the neighboring civil war in Syria that had established a presence in ungoverned or under-governed parts of north and north-east Lebanon.

Furthermore, groups like the Abdallah Azzam Brigades – designated an FTO by the US Department of State on May 24, 2012 – and the Free Sunnis of Baalbek Brigade, along with groups from Syria and Iraq like Jabhat al-Nusra (JAN) and the Islamic State in Iraq and al-Sham (ISIS) leveraged Hezbollah’s war alongside Assad forces to build up their
credibility in some parts of Lebanon’s Sunni community and to justify a string of IED and suicide IED attacks in 2013 and 2014.

The Lebanese security forces dramatically increased their intelligence gathering and counter-terrorism operations in 2014 and 2015, along with efforts to create greater ISR and command and control along Lebanon’s porous border with Syria. The Lebanese Armed Forces (LAF) also engaged in live combat operations against alleged JAN and ISIS militants for the first time in north-eastern town or Arsal in August 2014 – long-considered a hub of supported for anti-Assad militant but fraying in 2014 and 2015 under the weight of close to a hundred thousand displaced Syrians and the negative effects of cross-border militant activity.

Jordan

Jordan had yet to be targeted directly by regional non-state armed groups that gained momentum in the wake of Syria’s civil war and the expansion of ISIS from Syria to Iraq in mid-2014. However, the country could not ignore the longer-term threat, especially if ISIS were to consolidate its hold in Iraqi and Syrian territory straddling the Hashemite Kingdom’s north-eastern borders with Syria and Iraq.

In June 2014, reports emerged that Jordanian SOF units repelled ISIS by crossing into Iraq and attacking the advancing force. Meanwhile, there continued to be reports of sleeper cells of ISIS in northern Syria in Zarqa and in the south in Ma’an in the South. As of 2014, the primary Jordanian response was to continue with existing intelligence gathering operations by one of the region’s most effective state intelligence networks.201

Egypt, Jordan and Lebanon joined the GCC states, Iraq and the US in the September 11, 2014 “Jeddah Communique” and declared their shared commitment to combating the regional threat posed by ISIS.202 However, it is difficult to estimate how and for how long each country in the Levant will have to contend with the growing threat from ISIS and other asymmetric forces across a theater spanning from North Africa to Iran.

The usual assumptions that solving the Arab-Israeli conflict, the Syrian civil war and power sharing arrangements in Iraq certainly could play a role in removing some of the momentum behind recruitment when it came to why potential fighters did or did not join groups like JAN or ISIS. However, how and why regional states use sectarianism as tools of foreign policy, and the underlying weak socio-economic fundamentals in countries across the Levant may prove far more long-lasting and problems that both the US and Iran may not have the luxury to ignore.

Weapons of Mass Destruction and the Nuclear Arms Race

While outside attention has focused on Iran’s efforts to develop its nuclear program, the Middle East and the Levant faced their own challenges with weapons of mass destruction. They already were involved in a de facto nuclear and missile arms race, had at least some stocks of chemical weapons in inventory with regional states, and may also have been involved in a race for biological weapons as well. While the most important component remained the Iranian-Israeli nuclear and missile arm race, Iran’s ties to Syria – and Syria’s efforts – played an important role as well.
Israel’s Ballistic Missile and Missile Defense Forces

Israel developed missile booster technology, systems that could deliver modern nuclear weapons, and weapon systems that could strike at any target in the region. Israel also had at least two types of a series long-range ballistic missiles – called the Jericho – and had almost certainly deployed either an improved version of the second or a third type of system altogether. There are no reliable unclassified reports on Israel’s ballistic missile holdings, but unclassified sources speculated that Israel has the following capabilities:

- **Jericho-I**: 13.4 meters (44 ft) long, 0.8 m (2 ft 7 in) in diameter, weighing 6.5 tons (14,000 lb). It had a range of 500 km (310 mi) and a nominal CEP of 1,000 m (3,300 ft.), with a payload of 400 kilograms (880 lb). It was intended to carry a nuclear warhead. It seems to be close or identical to the Dassault MD-620, which was test fired in 1965. According to a report in Wikipedia, IAI produced such missiles at its Beit Zachariah facility. It also reports that that around 100 missiles of this type were produced, although there were some problems with its guidance systems. It also reports that The Jericho-I is now considered obsolete and was taken out of service during the 1990s.

- **Jericho-II**: a solid fuel, two-stage medium-range ballistic missile system tested in launches into the Mediterranean from 1987 to 1992. Wikipedia reported that the longest was around 1,300 km, and fired from the facility at Palmachim, south of Tel Aviv. Jane's reported that a test launch of 1,400 km was believed to have taken place from South Africa's Overberg Test Range in June 1989, but other sources indicated that this was part of a series of launches of a system using a larger booster. It was reported to be 14.0 m long and 1.56 m wide, with a reported launch weight of 26,000 kg (although an alternative launch weight of 21,935 kg had been suggested). Wikipedia reported that it had a 1,000 kg payload, capable of carrying a considerable amount of high explosives or a 1 MT yield nuclear warhead. It used a two-stage solid propellant engine with a separating warhead. It also reported that the missile could be launched from a silo, a railroad flat truck, or a mobile vehicle. This gives it the ability to be hidden, moved quickly, or kept in a hardened silo, ensuring survival against any attack. It may have maximum range of about 7,800 km with a 500 kg payload.

- **Jericho-III**: Estimates of the Jericho III differ sharply. It may have entered service in the late 1990s, but some put it in the late 2006-2008 period. It is reported to be a three-stage solid propellant and a payload of 1,000 to 1,300 kg. Wikipedia reports it may have a single 750 kg nuclear warhead or two or three low yield MIRV warheads, an estimated launch weight of 30,000 kg, and a length of 15.5 m and a width of 1.56 m. Some reports indicate that Jericho-III has a radar guided, terminal homing warhead in addition to inertial guidance, and is silo-based with road and rail mobility. No reliable estimate of its range exists. It may be able to hit any target in the Middle East and targets as far away as Pakistan and Russia. Aviation Weekly reported that after further test in 2012, the Jericho-III’s range and throw weight was capable of carrying a 1,000 kg warhead more than 5,000 km.
Jane’s provided additional reporting on Israel’s ballistic missile capabilities, which included the following breakdown of possible weapon systems in 2014:

<table>
<thead>
<tr>
<th>Type</th>
<th>Role</th>
<th>Range</th>
<th>Maximum Payload</th>
<th>Original Total</th>
<th>In Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jericho-I (YA-1)</td>
<td>Ballistic Missile</td>
<td>500 km</td>
<td>500 kg</td>
<td>150</td>
<td>150</td>
</tr>
<tr>
<td>Jericho-II (YA-2)</td>
<td>Ballistic Missile</td>
<td>1,500 km</td>
<td>1,000 kg</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>Jericho-III (reported)</td>
<td>Ballistic Missile</td>
<td>4,800 km</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>MGM-55C Lance</td>
<td>Ballistic Missile</td>
<td>130 km</td>
<td>450 kg</td>
<td>160</td>
<td>-</td>
</tr>
</tbody>
</table>


“Israel's precise capabilities are unknown. However, it is believed to have manufactured enough fissile material for between 100 and 300 warheads, around the same quantity as the United Kingdom. Its Jericho 2 and Jericho 3 ballistic missile systems are capable of carrying nuclear warheads. Israel is also believed to have warheads available for aerial drop bombs, artillery shells and submarine-launched cruise missiles.

In November 2011 Israel test fired a ballistic missile widely believed to be a version of the Jericho-3 intermediate-range ballistic missile (IRBM). The MoD refused to provide details on the test but said that the launch was planned months ahead of time and was not connected to the recent increase in rhetoric regarding a potential Israeli strike against Iran's nuclear facilities. The MoD said that the test was successful. In 2008, Israel held a similar test of a missile that was also believed to have been a version of the Jericho-3 IRBM”

Israel had long practiced air strikes that fit nuclear bomb delivery profiles, may well have nuclear-armed air-to-surface missiles that could strike from outside the range of most surface-to-air missile defenses, and may have been developing nuclear armed cruise missiles for surface ship and submarine launch. Israel also may have missile warheads with terminal guidance, but this was unclear. If it did not, it would have to use its ballistic missiles to strike at large area targets like cities, although it could use its strike fighters to launch nuclear strikes on point targets as well. Commercial satellite photos have been published of earlier Israeli missile sites, including missile silos. Current sites are unknown.

**Egyptian and Syrian Ballistic Missile Forces**

Both Egypt and Syria have aircraft, long-range missiles and a potential capability to create drones or UCAVs for delivering chemical or biological weapons.

- Syria had extensive pre-civil war holdings of Scud-B missiles with a nominal range of 300 km, a 985 kilogram payload, and operational accuracies of 1,500-2,000 meters. Reports of CEPs as low as 450 meters seemed more theoretical than real. Syria also had up to 150 Scud-C missiles with 18-26 launchers. These were North Korean modifications of Russian designs – probably variants of the Hwasong 5 although some elements of Rodong 1 technology were also possible – and had accuracies that ranged from 1,500 to 4,000 meters – although theoretical CEPs as low as 500 meters were reported in some sources. Reports that Syria had a more accurate Scud-D, with a CEP of only 50
meters, did not seem accurate. The *Scud-C* had a nominal range of 500 kilometers, but a smaller warhead could extend the range.

- Egypt had an unknown number of *Scud-B*, and at least 9-12 mobile TEL launchers. There were a number of reports that it had operational *Scud-Cs* that it produced using technology it obtained from North Korea. Reports indicate that the CIA detected Egyptian imports of *Scud-C* production technology in 1996.

### Chemical and Biological Weapons

Egypt, Israel, and Syria all have the technology base for manufacturing chemical weapons. Iran is a self-declared chemical weapons power, but has never declared its inventory. Syria was known to have large stocks of a variety of chemical weapons in 2013, including bombs and chemical warheads for its missiles. Israeli experts believed that pre-civil war Syria had modern cluster munitions warheads for its missiles and rockets, including ones armed with nerve gas. As the next section will show, however, Syria no longer had declared stockpiles of chemical or biological weapons as of 2015.

Both Egypt and Israel have been caught smuggling key components for chemical weapons in the past, including components for the manufacture of nerve gas. Egypt used chemical weapons in Yemen in the 1960s, and there are strong indications that Israel and Egypt believed the other side had chemical weapons during the 1973 conflict. However, no data exist on either Egyptian or Israeli inventories of such weapons.

Egypt, Israel, Jordan and Syria each had the technology base to manufacture first and second generation biological weapons, but no reliable data existed to prove any were doing so. If they had made such efforts, they probably would already be able to replicate Soviet-era biological weapons designs, and possibly enhanced or genetically modified versions.

They have or could create Level 3 and Level 4 containment facilities and had small reactors suitable for biological weapons production as part of their commercial industries. Given advances in civil biotechnology, they would also have the technology base to manufacture Chimera weapons and use advances like 3D printers in the near to mid-term.

It is not known if any country in the Levant had developed advanced designs for the covert use of chemical and biological weapons, advanced systems for line source dissemination, or the use of delivery systems like UCAVs. Their progress in developing and deploying advanced cluster munitions and non-destructive sub-munitions delivery was equally unclear.

There have been reports of Syrian missile warheads with cluster munitions carrying nerve gas. Egypt, Iran, Israel, and possibly Syria all have the technology and manufacturing base to create such weapons, have developed or produced some other form of cluster munitions, and have the capability to manufacture systems munitions and warheads covertly.

Prior to plans in 2013 to eliminate Syria’s holdings of chemical weapons (CW), the Syrian civil war presented the risk that the country’s CW holdings could fall into the hands of extremists and non-state actors. Even older and less capable CBW systems would be extremely dangerous in the wrong hands. Syria’s CBW infrastructure was dispersed across the country to preclude or minimize effective Israeli or NATO targeting in any future war and hold out the possibility of retaliatory strikes using airpower or short range ballistic
missiles. What was a sound strategy during times of internal stability has become a liability in Syria’s civil war.

**Eliminating the Syrian Chemical Weapons Wildcard**

On September 9th 2013, Russian Foreign Minister Sergey Lavrov proposed that Syria’s chemical weapons (CW) stockpile be put under international control. The Russian proposal was intended to avert a U.S.-led military strike on Syria in the wake of the reported mass use of CW by the regime of Syrian President Bashar al-Assad on August 21, 2013. While continuing to deny that it used chemical weapons against opposition targets in densely populated areas in and around Damascus, the Assad regime signed on to the plan. The proposal also enjoyed the support of China, the United Nations and Syria’s main regional ally Iran.

The Obama Administration decided to throw its support behind the plan and backed a UN Security Council resolution presented by France to put the Russian plan into action. It went without saying that there was extreme skepticism in the West about the plan’s sincerity, let alone its chances for success.

Critics of the Russian proposal described the move as a stalling tactic by Moscow in a bid to buy breathing room and time for its Syrian allies. Others doubted a plan that would be time and resource intensive in a Syria wracked by civil war with very real risks when it came to the safety of any potential international observers, let alone whether CW accounting and disposal could take place in areas that were in or near an active warzone.

Reports indicated that Moscow had conveyed a four part plan to the US on how to bring Syria’s chemical weapons under international safeguards prior to their disposal, there are no verifiable and complete accounts of the plan in the public domain so far. *Agence France Press* – citing Russia’s *Kommersant* daily – reported that the proposed plan included four stages:

- **Stage one:** Syria joins the Organization for the Prohibition of Chemical Weapons (OPCW).
- **Stage two:** The Syrian government must declare the location of Syria’s CW arsenal and CW production sites.
- **Stage three:** The Syrian government allows OPCW inspectors access to examine Syria’s CW arsenal and production sites.
- **Stage four:** In cooperation with OPCW inspectors, a decision will be taken on how to destroy Syria’s CW arsenal.

Russia made it clear that it opposed any enforcement provisions that could authorize the use of force. It is unclear how quickly the Syrian government intended to move on full compliance with the OPCW. It was also unclear whether or not the Syrian government would offer an exhaustive accounting of its CW inventory and production sites, let alone whether it would grant OPCW or other inspectors full and unfettered access. Lastly there were hard questions about how Syria’s CW disposal would be conducted and by whom. The OPCW was likely to encounter great difficulty in pursuing such a mission in Syria in the middle of a civil war. Key UN Security Council P5 states such as the US and Russia also expected to be heavily engaged in the inspection and disposal of Syria’s CW arsenal.
The Shattered Levant Military Balance

The end result illustrated the uncertainties that surround any program to deal with Syria’s chemical weapons and their spillover effect on the Syrian civil war. Russian involvement in any effort to dispose of Syria’s stockpiles was reassuring to the government of Bashar al-Assad. By contrast, the move also frustrated Syrian opposition factions that either distrusted Moscow or stood against Russian interests in Syria. A preeminent US role was always unlikely to be opposed by supporters of the Assad regime – if not the regime itself. Syrian and regional dividing lines all but ensured that both the US and Russia had to play an important role in the disposal of Syria’s chemical weapons stockpiles, were the plan to enjoy the full support of a UN Security Council resolution.

At the technical level, there was a great deal of data in the open source on the general guidelines for chemical weapons (CW) disposal. Incineration and neutralization – often through chemical decomposition – were the main methods used. Incineration is a process wherein chemical agents are destroyed, often at temperatures in excess of 2,100 degrees Fahrenheit. There were other steps to factor in when an agent was enclosed in a delivery system (mortar, bomb etc.) but the process remained largely straightforward. The other normal means of dealing with CW disposal was through neutralization. Neutralization – in most cases – was used for bulk disposal. One way this worked was through the mixing of agents with sodium hydroxide and hot water.207

Syria was not suspected of having CW or chemical precursors anywhere near the scale of Russian or US Cold War stockpiles. Unclassified Western reporting gave some sense of the size and composition of Syria’s CW stockpiles, but with uncertain degrees of certainty. According to declassified French intelligence reports, Syria was allegedly in possession of more than 1,000 tons of chemical agents and precursors. This was reported to include several hundred tons of sulfur mustard, several tens of tons of VX – one of chemical warfare’s most toxic agents – and several hundred tons of Sarin gas – which is reported to represent the bulk of Syria’s CW arsenal. A translation of key portions of the French report – which is the most detailed report by any actual intelligence agency – states that:

The Syrian Chemical Program

Syria had long been equipped with a massive chemical arsenal, together with many related delivery systems. The Syrian regime acknowledged as much on July 23, 2012 through its Foreign Affairs spokesperson, who confirmed that: “these different weapons [chemical and non-conventional] are stockpiled and secured under the supervision of the armed forces.”

Prior to the OPCW effort, Syria was not party to the 1993 Convention on Chemical Weapons Ban, which 189 Nations have signed and ratified. The Syrian chemical program started in the 1970’s by the import of chemical munitions. In the 1980’s, Damascus started acquiring the materials, products and knowledge necessary to set up an autonomous and massive production capacity in that field.

With above 1,000 tons of chemical agents and precursor chemicals, Damascus had one of the most important operational stockpiles in the world, without any perspective of programmed destruction in the absence of a Syrian willingness to join the CCWB.

The Syrian arsenal was particularly massive and diversified. It includes:

- Several hundreds of tons of sulfur mustard, stockpiled in its final form.
- Several tens of tons of VX. VX is the most toxic among the known chemical warfare agents.
Several hundreds of tons of sarin, representing the bulk of the arsenal. Sarin and VX are neurotoxic organophosphorous compounds that are partly stocked in a binary manner, i.e. kept as two distinct chemical products, called precursor chemicals, which are mixed just before use. Such a technique and related processes revealed a high level of know-how in the chemical weapons technology by the Syrian regime. Syrian scientists had also worked on nitrogen mustard, a first generation vesicant agent, as well as neurotoxic organophosphorous compounds with toxicity levels higher than sarin.

**Delivery of Syria’s Chemical Weapons**

In 2013, Damascus was in a position to deliver its chemical weapons through the use of several thousand launchers:

- **Scud C** missiles, with a range of 500 km, capable of delivering sulfur mustard, sarin or VX.
- **Scud B** missiles, capable of delivering sarin or VX at a 300 km range.
- **M600** missiles, with a range between 250 and 300 km. They too can deliver the three already mentioned toxic agents.
- **SS21** missiles, adapted to carry the three mentioned chemical warfare agents, at a limited range (70 km).
- Air launched bombs with a payload of sarin. Depending on the model, they can deliver between 100 and 300 liters of toxic agent.
- **Artillery rockets**, particularly 302 and 320 mm, aimed at delivering sulfur mustard, sarin or VX at a shorter range (50 km and under).

Some missiles were able to deliver several hundred liters of toxic agents and activities monitored for several years on Syrian test sites indicated that new dispersal mechanisms are being studied. Since the beginning of the conflict, our intelligence confirms the use by the regime of ammunitions carrying a lesser volume of chemical agents, adapted to more focused and local tactical use.

Syrian capability to deliver chemical agents included the following options:

- **SCUD C**: VX – Sarin – Yperite – Range: 500 km
- **SCUD B**: VX – Sarin – Range: 300 km
- **M600**: VX – Sarin – Yperite – Range: 250-300 km
- **SS21**: VX – Sarin – Yperite – Range: 70 km
- **Bombs**: Sarin
- **Rockets**: VX – Sarin – Yperite – Range: 50 km
- **Other tactical munitions**: Sarin – Range: below 50 km.

Tests conducted with other categories of chemicals diverted from their civilian use and used at lethal doses cannot be excluded.

**Chain of Command**

Syria’s chemical weapons program was centered on the Centre d’Etudes et de Recherches Scientifiques (CERS), which was tasked with supervising and implementing the production chemical warfare agents. CERS’ Branch 450 was responsible for filling munitions with chemical weapons. Branch 450 was also tasked with maintaining
safeguards, securing chemical weapons installations and protecting Syria’s overall inventory. Fiercely loyal to the Assad regime, Branch 450 drew 100% of its manpower from the ruling Alawite community.

Only President Bashar al-Assad and a few of the most influential members of the Assad clan were capable of issuing a direct order for the use of chemical weapons. The order would then be passed on to the relevant branches of the CERS. In parallel to any such order, the Syrian Armed Forces command would also receive orders and take steps to put together a target list and determine which chemical weapons should be brought online for use in combat.

US open sources reporting and analysis by the Congressional Research Service offer some additional detail on the scale and scope of Syria’s chemical weapons. Some reports list four suspected CW production sites north of Damascus, in Hama, near Homs and in Cerin. While some satellite imagery had emerged of alleged CW storage facilities, there was no complete or reliable account of Syria’s CW infrastructure in the public domain. In addition, no reliable public account existed in terms of storage sites, facilities where CW are mixed or transferred to delivery systems.

The Political Ramifications of Disposing of Syria’s CW Capability

After multiple delays, the last of Syria’s declared stockpiles of CW were shipped out of the country June 23, 2014. The OPCW’s timeline was several months behind schedule, and it missed a 30 June 2014 deadline to completely destroy Syria’s holdings.208

The most lethal agents within Syria’s stockpile were to be neutralized at sea aboard the MV Cape Ray, a converted container ship outfitted by the US military with Field Deployable Hydrolysis Systems (FDHS) for CW neutralization.209 The remaining toxic agents we planned for destruction in Finland, the US and Britain.210 As of August 13, 2014, some 581 metric tons of Syria’s declared holdings of methylphosphonyl difluoride – a Sarin gas precursor - were neutralized.211

Regardless of any such timing issues, Russia’s proposal to put Syrian CW stockpiles under international control offered the US Administration a ladder to climb down from a reluctant and unpopular US call for a military response in Syria. Regardless of the intent of US Secretary of State John Kerry’s statement in London on September 9, 2013, the Russian proposal would not have been possible without the tacit backing of both the Assad regime and – more critically – Syria’s chief regional ally Iran.

Despite initial hopes that the Russian proposal may lead to a political opening on Syria at the level of forces backing either the regime or opposition factions, was little to no movement as all of the factions resumed their own tactics and strategies for success on the battlefield. This – as with much in Syria’s civil conflict – was a case of competing to the point of self-defeat. Playing geopolitical chicken in Syria is dangerous; dangerous for the United States, for Russia, for Iran, for the Assad regime and its opponents in the Gulf. Meanwhile, the dangers of escalation in Syria cannot be divorced from Iran’s own security concerns and the need to stand by Assad or respond to a major military strike in Syria.
**Iranian and Israeli Nuclear Weapons**

As a separate study on *Iran and the Gulf Military Balance* analyzes in detail, Iran’s nuclear and missile programs could radically alter Iran’s future ability to target Israel and other major powers in the Middle East.\(^\text{212}\) This, however, is only one of the threats that weapons of mass destruction pose in the region.

Israel is widely reported to have nuclear weapons and advanced ballistic missiles. Israel obtained substantial amounts of nuclear weapons design and test data from France before 1968, and seems to be able to manufacture fission, boosted and thermonuclear weapons. There are no reliable unclassified figures on Israel’s holdings of nuclear weapons or the mix of delivery systems it has available, but most unclassified reports indicate Israeli nuclear weapons have been manufactured at the Negev Nuclear Research Center, outside the town of Dimona.

Outside experts have made estimates of the plutonium production capacity of the Dimona reactor that indicate Israel could have 70-300 such nuclear weapons. Global Security estimates that the total could be as high as 375 to 500 weapons. However, such estimates are based on nominal production figures and very uncertain estimates of the material required for a given number of nuclear weapons. These estimates do not attempt to give any details as to yield, design, or the mix of fission, boosted, and thermonuclear weapons.

In 2014, *Jane’s* reported that Israel was believed to have enough fissile material for between 100 and 300 warheads – a level comparable to the United Kingdom. As was discussed earlier, the *Jericho-II* and *Jericho-III* ballistic missile systems were capable of carrying nuclear warheads and Israel continue to test ever-more capable ballistic missile and other delivery systems that could be armed with such warheads.\(^\text{213}\)

At the same time, Israel has seen nuclear weapons in the hands of any potential enemy as an “existential threat.” It carried out preventive strikes on nuclear facilities in Iraq and Syria. Israel destroyed the Iraq’s reactor at Osirak on June 7, 1981. On September 6, 2007, the Israeli Air Force targeted and destroyed the Al Kibar facility in Deir el-Zor on grounds the remote installation may have housed a nuclear reactor.\(^\text{214}\) While weapons of mass destruct (WMD) are not often associated with US-Iran strategic competition in the Levant, they could not be discounted as a source of potential instability and a means of shifting the regional balance of power in Iran’s favor.
IV. THE MILITARY IMPACT OF SYRIAN INSTABILITY

Iran is not the only state to provide military aid and support to non-state actors in the Levant. Saudi Arabia, Kuwait, Qatar, and the UAE have provided money and arms rebels in Syria ever since the demonstrations in Syria that began in 2011 became violent. The US has used limited covert or overt arms sales and military aid to Syria to compete with Iran since at least July of 2013.

Covert aid presents the problem, however, that it could fall into extremist hands. Overt aid could only occur if Assad fell and a suitably favorable new regime emerged in Syria. In the meantime, both the Assad regime and its opponents are evolving and devising new strategies and tactics in the hope of shaping relative success in Syria’s civil war.

The State and Non-State War of Attrition in Syria

Figure 23 shows an-ever shifting and uncertain representation of areas controlled either by the Assad regime or its opponents over the mid-2014 to mid-2015 period. The amount of territory controlled says little about who may or may not be winning. Assad forces may have lost much of eastern Syria, but they do still control an area of Syria that contains the bulk of the country population and major cities – including Damascus, much of Aleppo and the coastline.

The Uncertain Future of the Assad Regime

However, Figure 23 shows that the Assad Regime had largely failed to reverse its territorial losses over the 2011-2015 period. Figure 23 shows that Assad forces suffered additional losses in terms of estimated area of control over this period with significant losses in and around Aleppo, Idlib, Quneitra, Der’a and al-Suwayda provinces.

It would be easy to make the causal leap that Assad forces are certain to buckle, fail, or abandon the regime as a result of these pressures. The Syrian military can do little more than compensate for losses in the field, and has no real-world recourse to mass mobilization. There are also significant fiscal challenges, especially in the wake of the regime’s losses of rent-earning resources that include oil fields now under the control of ISIS, the Nusra Front and other militant groups. Such conclusions remained largely premature in mid-2015.

While Assad forces were whittled down after four years of fighting, they were now increasingly focused on frontier defense missions in what some increasingly described as Assad’s “vital Syria.” This in turn was reinforced by the fact that loyal Alawites largely had nowhere to go, and were more inclined to fight for their towns and villages than to engage in fruitless military adventures in eastern and northeastern Syria – far both from reliable supply lines and a strong enough reason to fight on.

The Assad regime may have lost some if not much of its ability to raise central government funds or amass foreign currency reserves. However, it could still depend on strategic rent-seeking from Russia and Iran in mid-2015. There is little doubt that both Russian and Iranian aid levels to Syria were driven by each country’s discreet set of national interests. Russia continued to see Syria as bulwark both against perceived interventionist policies in the West, and the loss of what remains of Russian influence in the Levant. Meanwhile,
Iran’s priorities tied to Syria were largely dictated by the need to secure its long-term investment in Hezbollah – something it may not be able to do without a pliant Syria.

So long as both countries feel obliged to pursue their current foreign policy priorities, and so long as no realistic political alternative is found, Assad will have the opportunity to pursue a duel strategy that has remained largely unchanged since Syria confronted the West and its allies in Lebanon over the 2004 to 2008 period: continue to extract rents from your allies and buy enough time to take advantage of changes in international and regional policy.
Figure 23: The Uncertain Struggle for Syria 2014-2015

Estimated Areas of Control May 2014:

Estimated Areas of Control May 2015:

Source: Adapted by Aram Nerguizian from “Scenarios: Syria Needs Analysis Project (SNAP),” ACAPS, May 2014 and “Estimated Areas of Control Map,” ACAPS, April 30, 2015 based on data collected by ACAPS, the Syrian Observatory for Human Rights and the US State Department’s Humanitarian Information Unit.
Key Arms Transfers: Iran and the Uncertain Role of Russia

Figure 24 shows Syrian arms agreements over the 1995 to 2010 period and more detailed analysis of Syria’s efforts to recapitalize its conventional forces can be found in the previous section of this study. What these data do not show is the full volume of Iranian and Russian transfers that have helped keep the Assad regime alive in fighting the rebels and non-state actors like ISIS.

The Role of Iran

Iran has played a role in helping Syria build some aspects of its conventional forces as well. While Iran has not generally played a major role in supporting Syria’s efforts to re-equip its conventional forces, it was reported by Jane’s in 2009 that Iran was partially financing Syria’s acquisition of 50 96k6 Pantsir S1 self-propelled short range gun/surface-to-air missile air defense systems. It was also reported that Iran would acquire 10 of the 50 systems. The deal, which was reached in 2007, was worth some $730 million and deliveries were reported to be underway in 2009.215

While the exact capabilities of this system are uncertain, unclassified sources report that it is a short to medium range ground based air defense system, with automatic anti-aircraft guns and surface-to-air-missiles which have radar or optical target-tracking and radio-command guidance. It is used to provide protection for civil and military point and area targets, for motorized or mechanized troops up to regimental size, and as part of a layered air defense systems providing close in defense for longer range systems like the S-300PMU-2/ SA-10 Grumble or the S-400/SA-21 Growler.216

The Pantsyr-S1E is claimed to be able to hit targets with at least a radar cross-section of 2 cm² to 3 cm² and with speeds up to a maximum of 1300 meters/second within a maximum range of 20,000 meters and heights up to 15,000 meters. The system is claimed to able to defend against stealth aircraft, cruise missiles, and precision guided weapons, although some of these claims seem more hype than real.

Iran provides such transfers and much broader support to Syria in meeting its needs for resupply in fighting its rebel opponents because it had a vested interest in ensuring that its core regional ally has at least some modern systems to offset the substantial qualitative edge of the IDF and to ensure that the bulk of the burden of confronting or defending against Israel is not solely on the shoulders of Hezbollah. Syria for its part benefited from its alliance with Iran as a means of allocating external resources to bolster its balancing approach in the region.

The Role of Russia

Syria’s relations with Russia were the key to Syrian progress in conventional arms. Syria had relied on substantial levels of Soviet assistance during the Cold War, but saw such aid and arms deliveries decrease from $2.6 billion in 1987 to $52 million in 1994 as a result of the collapse of the Soviet Union. By 2005 Syria also owed some $13.4 billion in debt to the Russian Federation, compounding efforts to continue force recapitalization.

Syria responded by attempting to cement its relationship with Iran while continuing efforts to obtain Russian assistance at or near Cold War levels. In 2005, Russia agreed to write off
73% of Syria’s debt, opening the prospect of renewed arms sales. Russia has been keen to reassert its influence in the region, committing to provide Syria with some $300 million in aid over a three year period starting in 2008.

However, it was increasingly unclear, whether Moscow would emerge as a future source of funds, equipment, and training for a politically unstable and cash-strapped Damascus. Russia had yet to disrupt the regional balance by providing either Syria or its ally Iran with the sophisticated long range SAM systems, such as the S-300PMU-2/ SA-10 Grumble or the S-400/SA-21 Growler that would make a major difference in the air balance, and seriously erode Israel’s “edge” and US capability to intervene.

Given the fact that the bulk of agreements with Russia were made in 2007, it remains to be seen whether Syria has found a reliable supplier of conventional arms for the future. Even with renewed Russian support, it is doubtful that external support for Syrian expenditures will reach pre-1992-levels.

Meanwhile, as the analysis in the section on the conventional balance has shown, events in Russia may have evolved in ways in 2014 that did not favor Syria’s bid to augment its long range air defense holdings. An August 11, 2014 report by Russian news agency Ria Novosti seemed to indicate that Moscow was ready scrap the sale and delivery of S-300P complexes to Syria altogether. In any case, the question will become moot or enter true uncertainty if the Assad regime was to collapse and new forces manage to consolidate their authority in a post-Assad Damascus.

Unrest in Syria prompted much debate and discussion of a military option to end the Assad regime’s security crackdown against an increasingly militarized protest movement. At the international level, Russia had signaled that intervention in Syria was a foreign policy red line and in December 2011, reports emerged that Russia had provided Syria with its sophisticated and lethal long range SSC-5 Bastion radar guided anti-ship cruise missile (ASCM) coastal defense system based on the SS-N-26 Yakhont supersonic ASCM.

These two systems were not suited to giving Syria new capabilities to deal with its internal opponents. Instead they impacted the prospects and costs of outside US or European intervention if it came by sea. Delivery of the Bastion signaled Russia’s support for its regional ally and constituted a significant statement from Moscow with ramifications for the regional military balance. If Russia were to provide Syria with much-delayed major SAM systems – such as export variants of the S-300 or the S-400 strategic SAM systems – that would constitute yet another signal that further intervention in Syria was a red line.

Multiple sources report that Russia delivered unspecified numbers of Yakhont ASCMs to Syria in December 2011 to fulfill the $300 million deal. The Yakhont was capable of reaching a maximum speed of Mach 2-2.5, and could deliver a 200 kg warhead out to a range of 300 km with a “hi-lo” high altitude trajectory and a range of 120 km on a “lo-lo” sea-skimming trajectory. Unlike most other anti-ship missiles, the Yakhont relied on passive homing for the majority of its flightpath and only resorted to active tracking in the final stages of flight. Coupled with its speed and low altitude approach, the Yakhont would have significantly reduced warning time, thereby increasing the vulnerability of ships offshore to attack.
Figure 24: Syrian-Israeli Arms Agreements and Deliveries: 1995-2010
($U.S. Current Millions)

New Agreements: 1995-2010:

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<th>Syria</th>
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<td>2007-2010</td>
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New Deliveries: 1995-2010:

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<td>800</td>
</tr>
<tr>
<td>2007-2010</td>
<td>4,900</td>
<td>1,700</td>
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The Shattered Levant Military Balance

The Transformation of Pro-Assad Syrian Forces

As was discussed earlier, defections, desertions and attrition after four years of civil war saw Syria’s total manpower decline from a high of 325,000 in 2011 to 295,000 in 2012, and to an estimated 178,000 since 2013. It should be mentioned, however, that some government estimates further downgrade Syrian troop strength to as little as 70-80,000 active combat troops in 2015.\textsuperscript{221}

By early 2013, it was unclear whether the Syrian military could learn or re-learn how to fight an insurgency in the urban battlefield. However, what was clear was that the 2011-2015 uprising and insurgency forced Syrian ground forces, and manpower in general, to either adapt or die.

Transforming Syrian Counterinsurgency Capabilities

Ground operations and artillery mass fires were used in rotation, large units were divided up into smaller nimble units, ineffective and ageing leadership were sidelined, and new or emerging junior officers began to take on greater operational responsibility. Meanwhile, the once-critical issues of attrition by defection or desertion had not slowed to a trickle as Syrian military personnel were forced to reassess any future role in an armed uprising increasingly dominated by Salafi-Jihadi groups.\textsuperscript{222}

The Syrian Army was no longer made up largely of unwitting conscripts with potentially questionable loyalties. By late 2013, manpower seemed to have stabilized at roughly 50% of its pre-war fighting strength with casualties being replaced by loyalist recruits, volunteers, and manning from otherwise low-strength units on the path to being disbanded or merged with larger and more capable units. Army personnel continued to receive their full salaries and even were allowed to rotate out on leave.\textsuperscript{223} In short, a minimum of 70,000 to 80,000 loyal troops tested in battle over more than four years of fighting proved more lethal than the 300,000-strong Syrian military of 2010, complacent after some 30 years of sitting idle along the Golan Heights.

In addition to the restructuring of existing units, new forces were also brought online, or created from existing militia or paramilitary forces. Supporting by funding from Iran, the Assad regime deployed a new unit branded the National Defense Force (NDF). An amalgam of different locally sourced pro-regime militias, NDF recruits were drawn all but exclusively from the Alawite community and other minority sects that had tied their fates to Assad. Many of the so-called Shabiha organizations – most of which were composed of Alawites – were gradually absorbed into the NDF while other units – like the Popular Front for the Liberation of Iskenderun – were reported to maintain their relative autonomy.\textsuperscript{224}

Unlike conventional and elite units in the standing Syrian Army, units under the NDF were less costly to bring online and send into action, were principally intended to conduct rear guard maneuvers, and proved useful to localized intelligence collection operations and the contribution of localized fighting groups. Together with now-transformed and battled hardened elite units, the regime was able to push back rebel forces built up in eastern and southern Damascus, participate in operations to re-establish control of the sensitive Qusayr region linking Lebanon and Syria, retake much of Homs, and consolidate efforts in partnership with Hezbollah to close the Lebanese-Syrian frontier – a key thoroughfare for fighters, money and weapons for forces battling Assad.\textsuperscript{225}
As was discussed in earlier, former IRGC General Hussein Hamedani in May, 2014, commented publically on Iranian and Syrian plans to establish a new organization in Syria based on the model of Lebanese Hezbollah. Hamedani also noted that the Syrian government was integrating new manpower strategies against their asymmetric opponents, including the formation of 42 separate groups, 128 battalions, and some 70,000 Alawite, Sunni and Shi’a fighters to bolster the Assad regime.  

Despite these changes, the Syrian army had to contend with severe losses. Even with time away from the frontlines, Syrian army personnel suffer from decreasing morale, the growing effects of battle fatigue after some four years of urban and rural combat operations. Furthermore, the declining ability of the Assad regime to replenish losses through attrition are compounded by the effects of fighting on multiple frontlines, often amid dramatic losses in territory to disparate Syrian insurgent groups.

**The Armed Opposition & Syria’s Escalating Civil War**

The ways in which the armed opposition in Syria evolved between 2011 and 2014 played a critical role in shaping the eventual emergence and consolidation of more radical Salafi Jihadist organizations, like the Jabhat al-Nusra (JAN) and the Islamic State in Iraq and al-Sham (ISIS). These patterns also had implications that went well beyond Syria, impacting Iraq and instability and violence in neighboring Lebanon and Egypt.

More than three years after the start of a largely peaceful protest movement calling for the exit of President Assad, local and external Syrian groups largely failed to create a unified opposition group, refute accusations of overrepresentation by Sunni and Muslim Brotherhood factions, attract meaningful Alawite representation, or allay the fears of Christians and other minority groups.

Meanwhile, Assad’s unrelenting and brutal security response, the mobilization of sectarian dividing lines, and growing competition over Syria by regional and international states supporting either Assad or his opponents served to harden and metastasized the opposition. By mid-2013, traditional and more moderate political opposition groups were all but completely marginalized in the wake of the near-complete militarization of the battle for Syria, and by mid-2014, even more hardline Islamist factions were struggling between the Assad regime and its allies on the one hand, and the ISIS in eastern Syria and Iraq on the other.

**Characterizing the Syrian Armed Opposition**

The majority of the armed Syrian opposition consisted of rural Sunnis who did not benefit from the economic windfalls of Bashar Al-Assad’s reform initiatives. Even in major urban centers like Aleppo and Damascus – recent frontlines in the battle between the regime and its opponents – the insurgency gained footholds in predominantly poorer peripheral neighborhoods that saw a steady influx from the rural periphery to city over several decades.

There were no clear or reliable metrics on the size and scale of the armed Syrian opposition. In August 2012, Colonel Riad al-Asaad, then a leading figure in the leadership structure of the FSA, claimed that the organization stood at more than 100,000 men, including some 1,500 defected Syrian Army officers. There was little to qualify this overall number –
The Shattered Levant Military Balance

which is disputed by other figures – and there were other estimates of individual groups within the broader insurgency. What is all but certain is that there are more than 200 individual armed groups fighting against the Assad regime now with total men under arms numbering in the mid-to-high tens of thousands.\(^{229}\)

In September 2013, an IHS Jane’s estimate presented an updated estimate on manpower of major factions aligned against the Assad regime and its regional allies from Iran, Iraq and Lebanon totaling an estimated 100,000 to 120,000 fighters:\(^{230}\)

**The Uncertain Impact of the Free Syrian Army**

There was no single insurgency in Syria, let alone a unified and cohesive Free Syrian Army. It is also important to distinguish between the “Free Syrian Army” – a primarily exiled organization constituted in Turkey and in Jordan and based on defected Syrian Army officers, NCOs and enlisted men – and the “Free Syrian Army franchise” – a moniker and identifier taken on by many if not most of the insurgent groups in Syria. All but the most extreme and ideologically driven Islamist units subscribe to the FSA title in one form or another, and while that can be a vehicle to bolster external attention and possibly support for the insurgency, it does little to clearly articulate in definitive ways current command structures or clarify who the insurgents are and where they want to take Syria.

In addition to adhering to the FSA franchise, insurgent elements regularly referred to themselves as brigades, regiments and battalions. However, here too there is no uniformity of structure, no standard for chain of command, and a very broad spectrum of organizations and leaders. In addition, given that increasing numbers of fighters were civilians with limited military let alone political experience only months ago, these groups also vary wildly in terms of ideology and political orientation, if and when either do exist.

While some of these groups did prove themselves operationally and tactically in action against Assad forces, one cannot easily ignore their origins and socio-economic or communal makeup. Once again, the demographics are predominantly Sunni, and most fighting units are local forces hailing from specific provinces, let alone towns and villages. In this regard, many if not most insurgent groups in Syria started out – and in many cases still were – local militias in what has become a national struggle; a feature of Syria’s civil war that draws stark parallels with previous and ongoing struggles in neighboring Lebanon and Iraq.

Given the speed with which Syria’s civil war is evolving and questionable metrics in the open source, trying to prescribe a clear ideological color to specific fighting groups is at best an educated “guesstimate.” As the previous sections have shown, what cannot be denied are the successes of – and the dangers posed by – the increasingly influential fighting units that are either linked to or support the ideology of Al-Qa’eda. Even if external support to moderate or less ideological factions were more forthcoming earlier in the crisis, porous borders and a brutal minority-dominated regime crackdown on a Sunni majority all made Syria fertile ground for radical and jihadi activity by groups like ISIS and the Nusra Front.

**The Emergence of the Jabhat al-Nusra Front**
While the US is opposed to Iranian and Hezbollah efforts to shape outcomes in Syria, it has as much reason to oppose and confront the spread of Sunni jihadist elements as well. On December 10, 2012, the US State Department designated the Jabhat al-Nusra or the Nusra Front – a 6,000 to 10,000 strong Al-Qaeda in Iraq affiliate in Syria – a foreign terrorist organization. In late 2012, the Nusra Front was one of the most operationally successful armed groups fighting Assad forces.

The US government’s National Counterterrorism Center describes the Nusra Front as follows:231

“Al-Nusrah Font is one of the most capable al-Qaeda-affiliated groups operating in Syria during the ongoing conflict. The group in January 2012 announced its intention to overthrow Syrian President Bashar al-Assad’s regime, and since has mounted hundreds of insurgent-style and suicide attacks against regime and security service targets across the country. The group is committed not only to ousting the regime, but also seeks to expand its reach regionally and globally. Initially, al-Nusrah Front did not publicize its links to al-Qaeda in Iraq or Pakistan.

Al-Qaeda in Iraq (AQI)—also known as the Islamic State of Iraq (ISI)—played a significant role in founding the group. AQI since 2003 has used Syria as a facilitation hub and transformed this facilitation and logistics network into an organization capable of conducting sophisticated explosives and firearms attacks. AQI leaders since the beginning of al-Nusrah Front’s participation in the conflict had provided the group with personnel and resources, including money and weapons.

For most of early 2013, however, al-Nusrah Front and AQI were consumed by a public rift stemming from AQI leader Abu Bakr al-Baghdadi’s April announcement of the “Islamic State of Iraq and the Levant” (ISIL), which constituted a de facto public merger of both groups. Al-Nusrah Front and AQI have differing agendas in and strategies for Syria, and a public merger between them probably would have undermined al-Nusrah Front’s autonomy in Syria. In April 2013, al-Nusrah Front’s leader, Abu Muhammad al-Jawlani, pledged allegiance to al-Qaeda leader Ayman al-Zawahiri.

Al-Nusrah Front’s leaders probably have learned lessons from AQI’s experiences in Iraq and have sought to win the hearts and minds of the Syrian populace, providing parts of the country with humanitarian assistance and basic civil services. Several Syria-based armed opposition groups cooperate and fight alongside Sunni extremists, including al-Nusrah Front, and are dependent upon the groups for expertise, training, and weapons. Al-Nusrah Front has managed to seize territory, including military bases and hydroelectric dams in northern Syria.

The group’s cadre is predominately composed of Syrian nationals, many of whom are veterans of previous conflicts, including in Iraq. Thousands of fighters from around the world have traveled to Syria since early 2012 to support secular oppositionist groups, although some fighters aspire to connect with al-Nusrah Front and other extremist groups. Several Westerners have joined al-Nusrah Front, including a few who have died in suicide operations. Western government officials have raised concerns that capable individuals with extremist contacts and battlefield experience could return to their home countries to commit violent acts.”

The group’s ideology, affiliation to AQI, and the growing presence of Iraqi, Afghan, Libyan and other foreign fighters have all been a source of growing concern in the US that forces such as these might gain an upper hand either in opposition controlled areas or in any post-Assad Syria. 232

It is to be expected that elements in the Syrian opposition may not approve, oppose, or even resent the Nusra Front’s designation as a terrorist group. Other hardline insurgent groups, including elements under the umbrella of the FSA, have gone so far as to publically support the Nusra Front in the face of the US terror group designation.233

Efforts to isolate radical elements have also coincided with announcements that the US plans to formally recognize the National Coalition of Syrian Revolutionary and Opposition
Forces, a recently formed Syrian opposition umbrella organization. These steps by the US illustrate the overlapping challenges and complexities that Washington is facing in crafting policy towards Syria. The designation in particular is a clear signal to other elements of the opposition – as well as to potential financial and military backers in the region – that the US cannot and will not idly ignore a far deeper radicalization of an already uncertain future in Syria.

While the designation of the Nusra Front is intended to bolster the perception that the West wants to isolate radical forces and bolster moderates, none of this does anything to address key challenges. These include the fact that Nusra is already very active in northern Syria, and that putting pressure on it does little address the reality that many of the so-called mainstream elements within the FSA franchise that the West, Turkey, and Arab Gulf states hope to support also subscribe – sometimes in form but also in real substance – to similar Islamist and hardline ideologies.

All of these issues illustrate how Syria’s internal battle for power sits ever more squarely on a regional Sunni-Shi’a fault lines that neither the Sunni Gulf states, Iran, nor the US can easily ignore. The longer Syria lingers in civil war and political uncertainty, the more likely it seems that the country will emerge as a continuing arena for proxy competition. The US would then face increasing difficulty in both staying out of and competing with Iran in Syria.

The Rise of the Islamic State of Iraq and al-Sham (ISIL)

While the Nusra Front was the dominant Salafi-Jihadi group to emerge in Syria in 2012-2013, the emergence of the group known as the Islamic State of Iraq and al-Sham (ISIS) – also referred to as the Islamic State of Iraq and the Levant (ISIL) – has arguably been more critical to the trajectory of the Syria conflict and the stability of the broader Levant and beyond.

Al Qaeda Antecedents

ISIS is a Sunni transnational Salafi-Jihadi organization and terrorist group that has operated across much of northeastern Syrian since 2013. ISIS’ ideological and institutional origins can be traced back to forces built up and organized by the late Abu Musab al-Zarqawi in Iraq between 2002 and 2006. Originally known as Tawhid wal’Jihad (Monotheism and Jihad), the organization was also known as Al-Qa’eda in the Land of the Two Rivers – more commonly known simply as Al-Qa’eda in Iraq or AQI. The US National Counterterrorism Center describes ISIS as follows:

“Al-Qa’ida in Iraq (AQI), also known as the Islamic State of Iraq (ISI) and more recently the Islamic State of Iraq and the Levant (ISIL), was established in April 2004 by long-time Sunni extremist Abu Mus‘ab al-Zarqawi, who the same year pledged his group’s allegiance to Usama Bin Ladin. AQI targeted Coalition forces and civilians using tactics such as vehicle-borne improvised explosive devices (VBIEDs), suicide bombers, and executions of hostages by beheading and other means, attempting to pressure countries and foreign companies to leave Iraq, push Iraqis to stop supporting the United States and the Iraqi Government, and attract additional cadre to its ranks.

Al-Zarqawi was killed in a US airstrike on 7 June 2006. The new leader of AQI, Abu Ayyub al-Masri, announced in October 2006 the formation of the Islamic State of Iraq, led by Iraqi national Abu Umar al-Baghdadi, in an attempt to politicize AQI’s terrorist activities and place an “Iraqi face” on their efforts.
In 2007 AQI’s continued targeting and repression of Sunni civilians caused a widespread backlash—known as the Sunni Awakening—against the group. The development of the Awakening Councils—composed primarily of Sunni tribal and local community leaders—coincided with a surge in Coalition forces and Iraqi Government operations that denied AQI its safehavens, restricting the organization’s freedom of movement and resulting in a decreased attack tempo beginning in mid-2007.

High-profile attacks in 2009 and 2010 demonstrated not just the group’s relevance in the wake of the Coalition withdrawal from Iraqi cities in 2009, but also its efforts to posture itself to take advantage of the changing security environment. Abu Ayub al-Masri and Abu Umar al-Baghdadi were killed in April 2010, marking a significant loss for the organization.

Abu Bakr al-Baghdadi became AQI’s next leader, and the group has continued conducting high-profile attacks in Iraq and has made efforts to expand within the region. Suicide bombers and car bombs during the first half of 2013 caused about 1,000 Iraqi deaths, the highest monthly violent death tolls since 2008. Abu Bakr al-Baghdadi in April 2013 declared the group was operating in Syria and changed its public name to the Islamic State of Iraq and the Levant. When al-Baghdadi announced the creation of the ISIL, he claimed AQI had founded the al-Nusrah Front in Syria and that the groups were merging. Al-Nusrah Front, however, denied the merger and publicly pledged allegiance to al-Qa’ida leader Ayman al-Zawahiri.

AQI expanded its targeting outside of Iraq in August 2005 by attempting a rocket attack on a US Navy ship in the Port of Aqaba, Jordan, and in November 2005 with the bombing of three hotels in Amman that left 67 dead and more than 150 injured. The group’s official spokesperson and its leader in 2012 made vague threats against Americans everywhere. The arrests in May 2011 of two AQI-affiliated Iraqi refugees in Kentucky highlight the potential threat inside the United States from people associated with AQI.

Creating the Islamic State of Iraq (ISI)

Following Zarqawi’s killing in 2006 by US forces, AQI leaders regrouped and reorganized the movement as the so-called Islamic State of Iraq (ISI). ISI was confronted by the so-called “al-Anbar Awakening” of 2006 which pitted tribal groups in Iraq’s Anbar province – backed politically and militarily by the US – against the Jihadi group. By the time US forces withdrew from Iraq in December 2011, ISI was a severely weakened shadow of its former self. Meanwhile, in the wake of Zarqawi’s demise, a close colleague and fellow militant Jihadi fighter in Afghanistan known as Abu Bakr al-Baghdadi took over leadership of ISI.

Under new leadership, ISI began to rebuild its capabilities and by early 2013, the group had resumed conducting dozens of attacks per month inside Iraq. At the same time, questions began to emerge surrounding the rigidity command and control tying Al-Qa’eda leadership in South Asia to its so-called affiliate in Iraq.

Abu Musab al-Zarqawi was notorious for not sharing many of the priorities of Al-Qa’eda’s leadership, especially with regard to the treatment of non-Sunni Muslims – critically the Shi’a. ISI – and later ISIS – under Baghdadi was no different, and flaunted Al-Qa’eda orders to limit the targeting of Shi’a, or attempts to limit the use of excessive and extreme violence. In February of 2014, Al-Qa’eda went even so far as to completely disavow the group, severing official ties with Baghdadi’s organization.

Creating the Islamic State of Iraq and al-Sham (ISIS)

In April 2013, Baghdadi announced his group’s – by now rebranded as ISIS – intention to merge its forces in Syria and Iraq with those of the Nusra Front – Al-Qa’eda’s official
operational offshoot in Syria. The Nusra Front and its international Al-Qa’eda leadership refused to have their forces be absorbed by ISIS under Baghdadi’s leadership. The move underscores a larger challenge across the armed opposition fighting Assad, including Islamist factions: in addition to fighting the regime, by 2013 many fighting groups and factions found themselves increasingly caught within a Darwinian civil war within a civil war.

In July 2013, ISIS attacked Abu Ghraib and Taji prisons in Iraq, freeing hundreds of detained ISI/ISIS members. ISIS continued to focus its military efforts across northern, western and central Iraq, all while consolidating the group’s control over the city and province of Raqqa in Syria. ISIS alienated many of the Syrian factions that had initially welcomed the group’s entry into the Syria conflict, hoping ISIS may tip the balance against Assad. The group’s brutality and methods were such that by early 2014, many of ISIS’ rebel counterparts banded together in an anti-ISIS military campaign – an effort that drew away precious and limited resources away from the war effort against Assad.

While ISIS was expelled from some areas in Syria it had initially controlled, the group nonetheless managed to maintain its hold on Raqqa, Deir el-Zor, and Hasakah provinces. The group also showed little to no sign that its operational capabilities and manpower had been undermined or downgraded as a result of fighting with other militant groups inside Syria. Quite the contrary: in June 2014, ISIS launched a lighting offensive deep into Iraq’s Al-Anbar province – underscoring the militant group’s deadly force, its ability to conduct complex combat operations, and its adeptness at managing and exploiting partnerships with local tribes spread across massive geographic space straddling Syria and Iraq.

### ISIS’ Uncertain Strength and areas of Control

Figure 25 shows an estimate of areas where ISIS is operational as well as areas under the direct or indirect control of ISIS as of April 2015. Figure 21 does not illustrate ISIS’ limited presence in north-east Lebanon where the jihadi group has aligned itself with Jabhat al-Nusra in growing clashes with the Lebanese Armed Forces starting in early August 2014.

At the time of its expanded operations in Iraq in late June 2014, ISIS was estimated to have some 10,000 fighters – including 3,000 to 5,000 foreign fighters. A more recent September 12, 2014 CIA assessment, meanwhile put the number of ISIS or ISIS-affiliated fighters far higher at between 20,000 and 31,500 fighters across Iraq and Syria – more than three times higher than previous US government estimates. The new CIA estimate also includes more than 15,000 foreign (non-Iraqi and non-Syrian) fighters, including some 2,000 fighters from Western countries.

Beyond fighting strength, ISIS’s careful and deliberate operations were a boon to the group when it came to acquiring weapons and securing rents. ISIS seized banks in Mosul, allowing the group to mass liquid currency in the millions of dollars. ISIS was also active in illicit revenue-generating activities, including kidnapping, extortion and income from the sale of oil from the fields it controls in Syria to none other than the Assad regime.

ISIS poses a significant challenge to the US and its allies in the region. More than two years after the withdrawal of US military forces in December 2011, the Iraqi military all but lost Anbar Province and post-US Iraq is all but on the verge of being dissected into
three separate territories: one predominantly Sunni and controlled by ISIS and its local
Iraqi allies, a second under the purview of the Kurdistan Regional Government to the north-
east, and a third to the east made up mainly of Shi’a and under the control of a government
in Baghdad led by Prime Minister Haider al-Abadi that may or may not survive past 2014.
The Obama Administration has struggled for years to come up with a coherent policy on
Syria, and while ISIS adds to the sense of urgency, it does little to clarify the path ahead.

An Uncertain Future for All Concerned

ISIS does at least as much to complicate the fortunes of Iran as it does to complicate the
US position in the Levant. ISIS shows more clearly than any other event or pattern in the
last decade just how theoretical the notion of a “Shi’a Crescent” or any ethno-religious
structure really is. The vast territory that stretches from Iran’s western border to Lebanon
and the eastern Mediterranean that Iran has relied upon to support and resupply its allies in
Syria, Lebanon and the Palestinian territories is now an increasingly ungoverned mess and
a potential source of future threats against the Iranian homeland itself.

It is also dangerous to assume that the evolution of ISIS and the threat it poses to Iran’s
regional allies is a geopolitical godsend. As previous sections of this report have shown,
the scale of Saudi-Iranian geopolitical competition is at least – if not at times more –
important that US-Iran competition when it comes to key battlegrounds in the Levant like
Syria and Iraq beyond it. However, competing in this way and at this level exposes other
key countries to risk as well. ISIS – an organization that threatens the stability and existence
of every major state bordering Iraq and Syria – is now on the doorstep not only of the
government in Baghdad, but also Jordan and Saudi Arabia.

Jordan is the definition of a buffer state, separating on the one hand Iraq and Saudi Arabia,
and on the other Israel from the broader Arab world. Jordan is also a critical US ally and a
core component of what the US sees as a favorable Levant security architecture. Saudi
Arabia, meanwhile, is one of Washington’s most important regional partners and a source
of favorable stability in global energy markets.
Figure 25: ISIS Areas of Operation and Control, April 10, 2015

The Shattered Levant Military Balance

The Challenges of Military Intervention in Syria

Outside intervention in Syria’s evolving civil war is a critical wildcard in the region. The sheer scale of the fighting, the risk it poses of spreading, and its horrifying humanitarian impact have led a number of countries – including NATO allies such as France and Turkey – to consider options like 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 Assad regime. Outside calls for such options were echoed by multiple and successive groupings of Syrian opposition forces both in and outside Syria, including the so-called Free Syrian Army (FSA) and the Istanbul and Cairo based National Coalition for Syrian Revolutionary and Opposition Forces (NCSROF).

These calls did 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, and 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 did 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-Assad Syria.

As has been discussed earlier, any Western or regional 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 indispensible 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 ever come to pass.

Syria is not Libya

The fact remains, however, that Libya has scarcely been a success and Syria is not Libya. 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 have yet to consolidate their control over strategic territory and they do not currently have sufficient military resources at their disposal to mount a decisive death blow against the regime’s military and security apparatus. The Assad regime enjoys a far greater degree of control over the country than did the Gadhafi regime, although that control has been significantly eroded, especially in the northern provinces of Aleppo and Idlib. 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 Assad 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. Critical segments 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 armed opposition forces were divided, Syria’s are far more so, with little unity or agreement on ideology, the growing role of Islamist and Jihadi forces, 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. 242

The Risk of Becoming Part of Syria’s Destabilizing Civil War

External military intervention, especially options involving ground forces, could complicate what has already become an escalating 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 Assad regime hoped it could get its local, regional and international opponents to back down.

Ultimately, the law of unintended consequences is such that the Assad 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 Assad 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.

If international or regional forces were to commit troops or other forms of military power to Syria, there would have to be extreme care to avoid mission creep. The lessons are not only from US and coalition forces in Afghanistan and Iraq, but also the missteps of US intervention and a failed multilateral peacekeeping force to a divided Lebanon in the early 1980s.

Given the many factors listed above, including internal communal divisions, the praetorian nature of elite units, and the risk of internal displacement, direct military intervention is far more likely to complicate the struggle for Syria than lead to ways to solving it. Almost two years into the Syria the crisis, the US and its allies still face a critical question: what are their vital interests in Syria, and do those interests lead to intervention? So far, the answer seems to be no.
Iran

With the exception of Syria’s fighting political forces, Iran has the most to lose if Syria – its key regional ally – should suffer further destabilization. Military intervention even on the most limited scale would be particularly troubling to Iran and it might react accordingly. 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 help secure and stabilize Syria’s regional position.\(^{243}\)

Iran has already signaled its Palestinian allies, including Hamas and Palestinian Islamic Jihad, to escalate instability in Israel, while Hezbollah remains largely held in reserve and focused on supporting the Assad regime (though the group is also constrained by growing Sunni-Shi’a tension in Lebanon). Iran also appears to have provided support to the Assad 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 Assad 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 bolstering clandestine operations and asymmetric competition with the US, the EU, and their key (mainly Sunni) regional allies including Saudi Arabia and Turkey.

Not unlike its ally Hezbollah, keeping Assad in power appears to be only the first option for Iran. Tehran’s secondary strategy centers on regime failure and a recalibration of Iranian strategy in Syria geared towards preventing the emergence of a stable Sunni-dominated government in Damascus.\(^{244}\) Should the Assad 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

Syria has been a key lifeline of support of Hezbollah from its patron Iran, and its loss could prove critical to the group’s long term local and regional posture. For a time, Hezbollah avoided taking a strong public stand in favor of Assad, partly because of the growing anti-Shi’a sentiment across the region.

Since late 2012, however, Hezbollah played a more direct role in trying to shape the conflict by conducting “train and equip” missions with Assad conventional and irregular forces, supporting if not leading military operations in Qusayr in 2013 and the Qalamoun mountain range in 2013, and by supporting efforts to eliminate opponents of the Assad regime operating in North-east Lebanon in 2014.

Aside from its evolving role in Syria, Hezbollah managed to minimize its broader regional footprint, especially with regard to the UN Blue Line and potential escalation with Israel. This could be put to a serious test, however, should Iran and Syria require Hezbollah to escalate along the UN Blue Line or the Golan Heights 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.
The Southern Gulf States

As has been pointed out throughout this study, the Southern Gulf states – led by Saudi Arabia, Qatar, and the UAE – have become a steadily more important factor affecting US and Iranian responses to instability in Syria.

In the first half of 2011, most states in the Arab League feared spillover effects from instability and protests in Tunisia, Egypt, and Bahrain. The richer and more stable oil monarchies of the Gulf Cooperation Council (GCC) moved quickly to insulate themselves from the effects of regional unrest. This has included greater investment in job creation, more subsidization, and more energy focused on addressing some of their lingering socioeconomic grievances. In the latter half of 2011, the GCC states – led from the front by Qatar and, more critically, from the rear by Saudi Arabia – have grown increasingly critical of Syria as the cycle of violence went on unabated.

At the rhetorical level, the Arab Gulf states (with a majority Sunni population) grew increasingly critical of Assad’s crackdown on his mainly Sunni political opponents. This came at a time of growing negative public opinion toward Shi’a Iran, and Shi’a Arab forces across the wider Middle East.

At the geopolitical level, Iran underestimated just how concerned the Gulf states were about the implications of unchecked Iranian hegemonic aspirations in the wake of the US withdrawal from Iraq in 2011. Growing pressure on Syria from the Arab League, led by the GCC, was meant in part to influence the regional balance against Iran and to shape inter-Arab politics by seizing a rare opportunity to shape the internal balance of power in Syria.

Spillover Effects

In the event of Syria's further deterioration or some form of outside military intervention takes place, it is highly unlikely that the regional spillover effects could 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, could face a broadening of instability in the Levant. Jordan, though largely stable in 2014, also could have difficulty insulating itself and faces pressure from its own internal Islamist political forces.

While Lebanon saw escalation in Sunni-Alawite tension in northern Lebanon, Sunni-Shi’a tension in Beirut and the northern Bekaa and fighting between Lebanese security forces and Jihadi militants from Syria over the 2012 to 2015 period, Iraq’s Sunnis and Shi’ites were also divided in their response to Syria in ways that facilitated an ISIS resurgence in western Iraq. Furthermore, while Iraqi and Lebanese Sunnis showed a willingness to aid Syria’s mainly Sunni opposition forces, Shi’a factions in both countries sought tighter controls of both the Syria-Lebanon and the Syria-Iraq border and avoided real condemnation of the Assad regime.245

All four countries could also face difficulties in managing their large Palestinian and Syrian refugee populations should Syria deteriorate further. Turkey’s core focus remained the Kurdish question, which was likely to escalate both in Turkey and along the frontier with Syria both in the wake of the rise of ISIS as of June 2014 and should either Baghdad or Damascus destabilize further. While sensitive to US and Saudi foreign policy concerns,
and despite the seemingly sweeping gains of ISIS in its bid to create its “caliphate,” Iraq remained 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, although that could imply moves to appease local and regional Sunni forces at least as much as it could serve to confront them.
V. IMPLICATIONS FOR US POLICY

The United States faces an increasing level of instability across Syria and Iraq, which in turn affected every key aspect of US competition with Iran in the broader Middle East and North Africa. In 2015, no one could predict the outcome of the crisis or how it will further reshape an already shattered regional military balance.

Beyond the narrow military implications, even the short-term impact of changes in regimes remained unpredictable, as did how those changes would affect the underlying drivers of Syria’s civil war. It remains particularly dangerous to ignore the risk of replacing one form of failed governance with another one, and the prospect of years of further political instability or upheavals.

The Uncertain Future of Regional Conventional & Asymmetric Forces

It is clear that the US and its allies must be prepared to deal with the emergence of asymmetric warfare as a key aspect of the military balance in the Levant and with threats that range from low-level use of asymmetric warfare by non-state actors to the threat of long-range missiles and weapons of mass destruction. There was also the reality that as much of the asymmetric balance had to do with ingenuity in warfighting, training and tactics as it with having anything resembling a technical “edge”.

Accordingly, the US must also be as prepared to deal with threats from non-state actors as governments and help support its allies prepare for future threats. This requires the same kind of close military partnership between the US and allies like Israel, Egypt, and Jordan, and that the US needs to maintain partnerships outside the immediate Levant with the Southern Gulf allies. It also will require continuing US aid, and the US will constantly have to adapt to regional political upheavals it can neither predict nor prevent.

The Syria Crisis & the Quest for Regional Stability

With every year that passes, 20/20 hindsight grows increasingly alluring and troubling on Syria. It is easy to look back and say that the US only ever had two choices from the moment the first protest broke out in Der’a: the first option was to determine that Syria was different in some way from other protests – in part due to the geopolitical stakes there discussed throughout this report – and that contrary to the dominant wisdom at the time, the US should not have called for Assad to step aside.

The other choice, meanwhile, would be that US should force regime change, and should be ready to commit maximum force and national resources to achieve those ends to avoid additional costs in terms of lives, loss of economy activity, blood and treasure.

However, 20/20 hindsight is useless to either the US, Saudi Arabia or Iran in national security politics some three years after the start of Syria’s civil war. If the US, its allies or its opponents are unwilling to escalate beyond their commitment levels in Syria – as appears to be the case – then every country with influence there needs to realistically assess if they are perpetrating little more than a case of strategic competition and sectarian escalation on a road to nowhere.
Much like the Lebanese civil war, Syria has become a messy futile exercise that does little more than duplicate and reproduce new modes of militia economics – militia economics that create illusory opportunities for the young in the absence of opportunity in developing economies in the broader MENA region.

Countries like Iran, Saudi Arabia and the US have all poured vast resources into shaping outcomes in Syria. If they all with to avoid the costs of futile escalation, the quest for regional stability rather than the quest for geopolitical advantage needs to shape their policy choices in Syria.

While Syria has been a challenge for US policy-makers for decades, the current round of instability is unprecedented and the situation in Syria is not predictable enough for the US to be able to develop a sustainable strategy in the short term. The US and key regional allies have steadily sought to increase pressure on the Assad regime and provide different levels of support to anti-Assad political and insurgent forces, pursuing several aims, not the least of which is to weaken Iran’s role as Syria’s sole major state ally, while at the same time finding ways to halt the spread of military Jihadi grounds in Syria and beyond on favorable terms.

This makes Syria a key prize for both the US, Iran, and their respective allies.

- Despite the continued militarization of the opposition and initial tactical successes against Assad’s forces in an increasingly sectarian civil war, there is no clear US response to this increasingly dangerous phase of instability in Syria. Regime forces and allies have shown the ability to learn on the battlefield, and the forces buttressing the regime will continue to close ranks around Assad. The window for US or Western covert and overt assistance may have come and gone, and could also further deepen already negative with Russia, China and other members of the UN Security Council who do not want to see a repeat of steps taken in Libya.

- The US cannot ignore the regional spillover effects should Syria destabilize further and it needs to adopt a strategy based on containing Syrian instability. How events do and do not play out in Syria will have deep and unforeseen consequences on the precarious sectarian balance in Lebanon, the security of Israel along its northern and eastern flanks, the stability of Jordan at a time of increased internal unrest, and pressure along Turkey’s southern flank as Ankara tries to contain increasingly assertive Syrian and Iraqi Kurdish groups. A collapse in Syria – controlled or otherwise – may hold the promise of breaking Iran’s umbilical cord to Levant, but it also promises to expose both budding and strategic US allies to waves of uncertainty for years to come.

- While the US may have had reasons to support and grant recognition to some opposition forces that were more moderate or more representative of popular forces in Syria, that will not translate into a more stable Syria at peace with its neighbors in either the short or long term. Based on the current internal Syrian balance, there is no real world basis on which to make the argument that a post-Assad Syria was imminent as of mid-2015 – let alone that it will make peace with Israel, renounce claims to the Golan Heights, or stop providing assistance to Palestinian elements operating in and outside the Occupied Palestinian Territories.

- Despite growing pressure and rhetoric over the 2013-2015 period, there was still only very limited support in the US, Europe, and the Arab world for direct intervention in Syria. Syria is not Libya. If a window to strike Assad existed, it was before the consolidation of radical Salafi Jihadi groups in Syria with an eye on Egypt, Iraq, Jordan and Lebanon. Meanwhile, Assad’s Syria also enjoys strong political, financial and military support from Iran and Russia. 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.

- There still are reasons why the US might directly (or indirectly) take the lead in such efforts. The withdrawal of US troops from Iraq has left many unanswered questions about the future prospects
for a stable Iraq, let alone a stable Syria, and the US already finds itself conducting airstrikes against ISIS militants in Iraq that could just as easily be in Syria. Instability in Iraq Syria presents Washington with the opportunity to undermine Iran’s regional posture, weaken or change the leadership of one or both of its key regional allies, and potentially downgrade the Islamic Republic’s role in the Arab-Israeli conflict through Hezbollah.

- Some analysts have proposed trying to separate Syria’s security establishment and the Alawite community away from the Assad regime. While the approach is sound in principle, the US may need to accept that the chances of doing so are slim. The passage of time and the level of bloodshed have made it more difficult to conceive of a post-Assad Syria devoid of retaliatory measures against the Alawite community. While many Alawites may not like or support Assad, the potential loss of their political and economic autonomy is a key barrier to defections. Even in a scenario where a dominant opposition proved magnanimous in victory, there is little sign that Assad’s base – and the other minorities that support the regime – is betting on such a favorable outcome.

- While events in Syria are challenging to Iran, the strategic choices of the Islamic Republic and its chief ally in the region Hezbollah are evolving in an effort to deal with events in Syria and potential shifts in the regional balance of power. While “Plan A” is to try and maintain Assad in power and fend of his local and regional opponents, “Plan B” in the event Assad falls seems to be the prevention of the emergence of a stable Syria under Sunni rule in Damascus. There is continued evidence in 2014 that the IRGC’s Quds Forces, aided by Hezbollah are actively training and equipping mainly Alawite and Shi’a tens of thousands of irregular forces into what appears to be a deeply ideological Jaysh al-Shaab or “People’s Army” meant to take pressure off Syrian regular and special operations forces and fight for the interests of the Alawite community and other allied factions in Syria.

- As the corrosion and decay of Syria’s state and national security structures continues to grow, the militarization of the struggle for Syria all but ensures that militia economics and warlordism will a dominant feature in Syria for years to come. The Syrian military already underwent a process whereby it was stripped down to its most loyal – and predominantly Alawite – core. If the military does not survive institutionally in the long term, or if it does not regain some semblance of national legitimacy, the prospects for demobilizing Syria’s growing archipelago of militias and fighting groups will be extremely slim.

- Syria’s insurgent groups – which are far more likely to have influence in Syria than either external or local political opposition forces – are poor vehicles to socialize, advance, and consolidate external (principally Western) efforts to secure pluralism and stable politics in Syria. Again, while many insurgent groups include Army defectors, many if not most insurgent groups in Syria still remain local militias in what has become a national struggle. Neither they nor the many more civilians-turned-guerilla-fighters are anywhere near ready to internalize and implement any form of lasting transition plan in Syria. This in turn will also further complicate a lasting cessation of hostilities, the creation of a stable and credible government in Damascus, or a Syria that will actively protect it minority groups.

- The rise of jihadi and militant Islamist factions and fighting groups in Syria with ties to Al-Qaeda like ISIS and Jabhat al-Nusra present another key challenge. While the Syrian armed opposition remains deeply fragmented despite its growing size, Islamist and jihadi units have better access to weapons, are attracting recruits frustrated by the uneven pace of the conflict, and are moving far quicker to consolidate their forces. The presence of ideological and radical forces in Syria’s civil war was always going to be a challenge so long as more moderate factions were unable to overcome their internal divisions and gain access to more military resources.

- While groups like ISIS threaten regional opponents of the US and Saudi Arabia – like Assad’s Syria, Iran and Hezbollah – the adage that “the enemy of my enemy is my friend” does not apply to intolerant extremist groups with transnational aspirations. The presence of these groups in the Levant is instead a case of “the enemy of my enemy is also my enemy.” Neither the Assad regime nor Iran are party to the September 11, 2014 “Jeddah Communique” which brings together an array of regional and Levant states with the intent of combating the spread of ISIS. However, separately, together, or by agreeing to disagree, the US and Iran – but also Egypt, Israel, Jordan, Lebanon, the
GCC states and Turkey – will all have to fight the threat from the expansion of groups like ISIS into ungoverned spaces in the Levant.

- The impact of external actors will grow more critical as Syria’s civil war continues to evolve. Countries like Saudi Arabia, Qatar, and Turkey have been active supporters of the armed insurgency against Assad, including indirectly supporting some of the more hard line elements fighting Assad. Meanwhile, the US and European states have been important sources of external pressure and coalition-building against the regime in Damascus. Meanwhile, Russia, Iran, and China continue to wield influence with Assad in a bid to maintain what remains of the regional status quo. There is significant daylight between the competing nations supporting either side of Syria’s civil war. However, as with other similar conflicts – such as Lebanon’s 15-year civil war – external support by competing external actors will be critical to any effort to legitimize a new political order in Syria.

- At Present, the best Assad’s regional and international opponents could hope for would be more representative Sunni-led leadership that takes into account the foreign policy priorities of the United States, the Gulf states led by Saudi Arabia, and Iran. At worst, Syria would remain unstable and could deteriorate into a deeper regional sectarian conflict – a conflict which could in turn draw its neighbors – especially Lebanon and Iraq – into a cycle of regional proxy warfare. What is certain, however, is that in any scenario, Syria’s regional role has been severely weakened by a three years of unrest.

- Continued political upheaval and civil war mean that Syria’s economic outlook will only continue to decline. Even in a scenario where key players in the merchant class put their full weight against the Assad regime, there was still no clear sense of an end state in 2014 either on where Syria was going or which players could and would be at the helm. It is also difficult to measure the impact of external rents and aid provided to Assad from Russia, China, Iran and what other few allies the regime still had.

None of the dynamics shaping Syria’s future are simple, definitive or predictable. All illustrate how Syria’s internal battle for power is tied to broader regional Sunni-Shi’ite fault lines that neither the Sunni Gulf states, Iran, nor the US can take for granted. The longer Syria lingers caught in civil war and political uncertainty, the more likely it seems the country will emerge as a continuing arena for proxy competition.

However, even with Arab, Turkish or Iranian support, any US-led intervention – political, military or otherwise – would have to take stock of the scale of Sunni-Shi’ite regional polarization and the level of acrimony between the Southern Gulf states and Iran to determine the benefits and potentials costs of deeper US involvement in the Levant.

Both the armed opposition and the regime and its supporters are undergoing a rapid process of political Darwinism and it is not possible to clearly determine who the key players in Syria will be months from now, let alone in 2014 and beyond. What is certain, however, is that regardless of if or when Assad falls or is replaced, Syria will struggle with the militarization of society and the expansion of Islamist and radical forces for years to come. The US would then face increasing difficulty in both staying out of and competing with Iran in Syria.
The Southern Gulf states refers to the six member states of the Gulf Cooperation Council, Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates. References to the Southern Gulf states do not include Yemen.


4 The transnational Sunni militant organization once knows both as Al-Qaeda in Iraq (AQI) and the Islamic State in Iraq (ISI) is now referred to as either the Islamic State in Iraq and Syria (ISIS) or the Islamic State in Iraq and ash-Sham (ISIL). The literal transliteration is al-Dawlat al-Islamiyya fi l’-Irāq wa’l-Shām, wherein al-Shām translates both as “Syria” or area referred to as “Greater Syria” – which includes much of the modern Levant, minus Egypt and including Iraq.


7 Robert Fisk, “Iran to send 4,000 troops to aid President Assad forces in Syria,” The Independent, June 16, 2013.


9 Note that this section does not include analysis on Palestinian security forces because these were primarily internal security forces.


18 Author’s interview with senior Lebanese Armed Forces officer, name withheld, April 30, 2014; IISS figures on Lebanese manpower trends and systems in inventory remained largely dated and out of step with military developments over the 2009 to 2014 period.


22 Author’s interviews with Russian diplomats and military experts, names withheld, June 1, 2015.


Author’s discussion with US military personnel, names withheld, Beirut, Lebanon, April 30, 2014.


Iran warships enter Mediterranean as tensions with Israel grow


“Russia to Destroy S-300 Weapons Systems Meant for Export to Syria,” Ria Novosti, August 11, 2014.


“Iran to deploy warships to Mediterranean Sea,” The Jerusalem Post, January 17, 2013.

Oren Dorell, “Iran threatens payback on Syria; Russia sends warships,” USA Today, August 30, 2013.


See the Foreign Assistance Act of 1961 (FAA), the Arms Export Control Act (AECA) and the Foreign Operations Appropriations Act (SFOMA).

While Israel is the top recipient of aid in the region, Saudi Arabia remains the top cumulative purchaser of US military systems and equipment in the Middle East.


Author’s interview with US military experts, names withheld, Beirut Lebanon, April 2, 2015.


Author’s interview with US military assistance officer, name withheld, Beirut Lebanon, April 30, 2013.


Author’s interview with Nicholas Blanford, Beirut, Lebanon, July 14, 2014; Nicholas Blanford, “Battle Ready – Hizbullah expands its urban training facilities,” Jane’s Intelligence Review, October 29, 2013; Nicholas Blanford, “Enemy at the gates – Hizbullah remains focused on conflict with Israel,” Jane’s Intelligence Review, February 25, 2013.


Author’s interview with Nicholas Blanford, June 2010.
Author’s interview with Nicholas Blanford, June 2010.


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Yaakov Lappin, “First Test of Arrow 3 missile defense system ‘due soon’ “, Jerusalem Post, March 1, 2012;


Mohammed Najib, “Knife’s edge - The fallout from the crisis in Gaza,” Jane’s Intelligence Review, August 14, 2014.


“Last of Syria’s chemical weapons shipped out,” CNN, June 23, 2014.


This unclassified description is adapted from Wikipedia, “Pantsir S1,” http://en.wikipedia.org/wiki/Pantsir-S1. Syria took delivery on a later model of the system with upgraded radars and missiles.

“Russia to Destroy S-300 Weapons Systems Meant for Export to Syria,” Ria Novosti, August 11, 2014.


Author’s interviews with Russian diplomats and military experts, names withheld, June 1, 2015.


Author’s Interview with senior Shi’a policy-maker, Beirut Lebanon, October 15, 2012.