

THOUGHTS TOWARD A MIDDLE EAST NET ASSESSMENT

LONG TERM STRATEGY GROUP

(b) (7)(C)



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CONTENTS

EXECUTIVE SUMMARY	1
THE ISSUE.....	1
KEY FINDINGS.....	1
CONCLUSION.....	2
INTRODUCTION.....	3
WHY DOES THE MIDDLE EAST MATTER?.....	5
WHO ARE THE ACTORS TODAY?.....	7
ISRAEL	7
IRAN.....	8
UNITED STATES.....	9
CHINA.....	10
WHAT ARE THE ACTORS' PREFERRED COURSES OF ACTION?	13
ISRAEL	13
HEZBOLLAH	15
IRAN.....	16
UNITED STATES.....	18
CHINA.....	19
TRENDS	21
CONCLUSION.....	45
THE BALANCE: KEY QUESTIONS AND FACTORS	45
THE FIRST HOURS.....	45
THE LONGER WAR	46
IMPLICATIONS FOR THE UNITED STATES.....	46
APPENDIX.....	49
DATA CHARTS	49
DATA SOURCES.....	55

EXECUTIVE SUMMARY

This monograph provides an initial net assessment of trends in warfare in the Middle East for the purpose of identifying potential strengths and weaknesses of the United States in its global posture.

THE ISSUE

The Middle East, understood as the area from the eastern Mediterranean to the eastern border of Iran, has been of strategic interest to major external powers as a geographically central region from which larger global competitions can be affected. The Middle East has been central to British imperial trade with India, European logistics during World Wars I and II, and planned American long range nuclear bombardment of the Soviet Union during the Cold War. In addition, the Middle East is important because oil resources give countries in the region the ability to influence the foreign policies of external great powers. Shifts in military capabilities in the Middle East matter insofar as they affect the ability of external powers to use positions in the Middle East to affect larger competitions, and as they affect the ability of regional powers to use oil resources to affect the foreign policies of the United States and other major external actors.

KEY FINDINGS

Based on diagnosis of imputed preferred courses of action for Israel, Hezbollah, Iran, the United States, and China, and long term trends in conventional, electronic, and irregular warfare capabilities, precision strike capabilities, and nuclear proliferation, the assessment generates three sets of key findings.

First, within the region a new mode of combined arms warfare appears to be emerging that incorporates the use of irregular forces, cyber warfare, precision strike technologies, and the shadow of nuclear warfare. This new form of warfare could be implemented because conventional and irregular war between Israel and Hezbollah is likely to take place in a strategic context in which the Israel Defense Forces (IDF) will need to be concerned about possible Iranian nuclear weapons use. Characteristics of this new form of combined arms warfare may include:

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- (b) (5) [Redacted]
- (b) (5) [Redacted]
- (b) (5) [Redacted]
- (b) (5) [Redacted]

Second, if a war within the region is sustained, the advantages that accrue to Hezbollah and Iran from the new modes of warfare may decline over time because the superior organizational and economic capabilities of Israel and the United States can be sustained while the stockpiles of weapons available to Hezbollah and Iran are depleted.

Third, China appears to have the ability by means of low cost and low visibility technology transfers to significantly increase the ability of Iran to interfere with American military operations in the region against Iran. If China is willing to accept higher levels of risks, small scale Chinese military missions to Iran could greatly complicate American political calculations in a confrontation with Iran.

CONCLUSION

The ability of the United States to use positions within the Middle East as a part of a larger global competition and to influence the outcome of intra-regional conflict is affected by shifts in the military balance within the region. Other great powers may benefit from this temporarily, but they will also have difficulties developing and sustaining their positions of influence in the region if the United States shifts its force posture to operate from outside the region, and enables countries in the region to generate offensive strike capabilities.

INTRODUCTION

The Middle East is often treated by American analysts as an area in which there are problems to be solved: the Israeli-Arab problem, the Iranian revolution problem, the Saddam Hussein problem, the Iranian nuclear problem, and so on. Focusing on a pre-designated problem has the disadvantage of leading immediately to a debate about alternative solutions to the problem before trying to diagnose the character and status of the military or strategic balance. It may be helpful first to think about the Middle East as a theater in which the United States is engaged in a long-term competition with enduring adversaries, some located within the region and others outside it. This diagnostic approach defers debates about problems and policies by first asking us to try to understand the persistent and changing characteristics of the interactions in the region. The diagnostic approach also helps us identify long-term trends that affect the character and importance of the Middle East for the United States. Finally, the diagnostic approach, by helping us understand ongoing or emerging competitions in the Middle East, may help us understand what liabilities and advantages the United States might bring to these competitions, and identify ways to deal with these liabilities and advantages to shift the balance in ways favorable for American interests.

This alternative framework for thinking about the Middle East is clearly influenced by earlier work on net assessment – in which the dominant but asymmetric propensities and strengths and weaknesses of actors are identified – and by the competitive strategies approach – in which measures are adopted in order to shift competitions into areas in which the United States has a comparative advantage.

Following this framework, this monograph will first look at the Middle East in terms of its enduring strategic characteristics. Why has the Middle East mattered to the United States? Why might it continue to matter?

Second, the question of the characteristics of the major actors will be addressed. In this section, the monograph will draw on the work done by (b) (7)(C) over the last three years on Iran, Hezbollah, China, the United States, and Israel. The objective is to outline the dominant patterns of behavior of the actors most important in shaping outcomes in the Middle East that affect American interests, and to describe the relevant characteristics of these actors in terms of their approach to strategy.

Third, having identified and characterized the major actors, the monograph will ask what may be the dominant characteristics of the hostile interactions of the major players in the Middle East. It will do so by asking how each actor would prefer to achieve its goals through the use of military instruments, and what assumptions each would make about how a war would proceed. Given the natural predispositions and goals of these actors, what are the military courses of actions they will tend to adopt? How would they like to see the competition develop? What are the asymmetries in the ways in which the different actors approach the region?

Fourth, the monograph will turn to trends in military capabilities and ask which interactions are most and least likely, and which actors will do better or worse in the likely worlds. This will

allow for the concluding analysis of the strengths and weaknesses of the United States and for the identification of policy issues that might be worth additional consideration.

WHY DOES THE MIDDLE EAST MATTER?

First, for at least two centuries the Middle East has mattered because it is located in an area central to larger global power competitions, warfare, and commerce.

The Middle East mattered as a key location along the trade route between Great Britain and India in the eighteenth and nineteenth century. The French developed military and financial strategies to undermine British strength globally by threatening control of Egypt, first by means of military expeditions under Napoleon, then by French development of the Suez Canal, and then again by means of expeditions to Fashoda in the Sudan at the end of the 19th century. With the rise of the Anglo-German competition, Turkey became an area of German influence from which the British position in Egypt and Palestine could be threatened. The increases in German naval strength in the Baltic and North Sea made the alternative sea route from Great Britain to Russia through the Mediterranean and Black Sea a crucial matter for sustaining the Russian economy in World War I, and led to the failed British expedition to Gallipoli. The military competition resumed in World War II when the Italian alliance gave Germany a military position in North Africa, and when the German ground force advances in North Africa and southern Russia threatened both the British position in Egypt and the production and export of oil from Iran.

The rise of warfare by means of aerial bombardment and the range of the initial manned and unmanned delivery systems (1,000-2,000 miles) increased the importance of the eastern Mediterranean for Great Britain and the United States as a location from which the Soviet Union could be attacked. These systems included nuclear armed B-29 and then B-47 manned bombers operating from British bases in the Suez Canal area and from Wheelus AFB in Libya; *Jupiter*, *Thor*, and *Polaris* ballistic missiles in Italy, Turkey and the eastern Mediterranean, and *Regulus* cruise missiles on board the cruiser *USS Macon* in the Mediterranean.¹ From the Middle East, these systems could reach the central regions of the Soviet Union. American war plans of the 1940s and early 1950 (PINCHER, OFFTACKLE, HALFMOON, DROPSHOT) emphasized Soviet attacks on the Middle East in order to neutralize these bases.² The rise of intercontinental range attack forces decreased the importance of this region, yet during the 1962 Cuban missile crisis, B-52 bombers from the 306th Bombardment Wing based at McCoy AFB near Orlando, Florida, deployed under plan “Chrome Dome” to “fail-safe” points over the eastern Mediterranean.³ The American ballistic missile carrying submarine *Sam Houston* operated from Turkish bases after the Nixon administration objected to the deployment of Soviet SSBNs to

¹ David K. Stumpf, *Regulus: The Forgotten Weapon* (Paducah, Kentucky: Turner Publishing, 1996), p. 104.

² Steven T. Ross and David Alan Rosenberg, editors, *America’s Plans for War with the Soviet Union 1945-1950* (New York: Garland Publishing, 1989).

³ Norman Polmar and John D. Gresham, *DEFCON-2: Standing on the Brink of Nuclear War during the Cuban Missile Crisis* (New York: Wiley, 2006), p. 246, citing the 306th Bomb Wing-McCoy AFB History at www.306thbw.org/306thhistory_306BW.htm).

Cienfuego, Cuba. In addition, the presence of missile testing ranges in the southwestern regions of the Soviet Union increased the importance of electronic intelligence listening posts in northern Iran until the revolution in that country in 1978.

Today, and over the next two decades, the increase in the importance of the sea routes from the Middle East, to China as well as to India and the global economy, has renewed the importance of the region to external powers. The increase in the strategic competition for influence in Central Asia has increased the importance of the land routes from ports in Pakistan and Iran into Central Asia. The development of independent missile forces based in the region, with ranges comparable to those of American systems in the 1940s and 1950s, combined with the proliferation of nuclear weapons and precision guided non-nuclear weapons, is now reviving the importance of the region as an area from which strategic bombardment of central Europe, eastern Europe and southwest Asia, central Asia, and south Asia could be launched.

From the perspective of the United States, therefore, the Middle East is first a geographically central area which could become part of a strategy that affects American allies, friends, and adversaries in Europe and Asia. It is a sector of the global chessboard the control of which is important for larger contests.

Second, the Middle East has mattered at least since 1973 because the oil resources in the region have given indigenous Middle Eastern actors a natural resource and money which they can and have used to develop offensive military and economic capabilities. With these capabilities, Middle Eastern actors have been able to affect the Soviet Union and American allies and interests in the region and globally. The United States suffered economically from deliberate interruptions in the supply of oil from the Middle East in 1973, 1979, and 1984-1988 that were initiated by Saudi Arabia, Iran, and Iraq, respectively, in efforts to defeat or change American foreign policies. The United States successfully induced increases in Saudi Arabian oil production in the early 1980s in order to lower global oil prices and reduce Soviet oil export revenues. The prospect of Iraqi control over Kuwaiti and even Saudi Arabian oil, and the military capabilities that the resulting revenue could finance, was a major element in the decision to wage the first Gulf War. The restrictions on the export of oil imposed on Iraq after that war were designed to reduce Iraqi oil revenues that could support hostile programs, and the decline in the effectiveness of those restrictions increased concerns about the resurgence of Iraqi unconventional military capabilities, and contributed to the decision to launch the second Gulf War.

The United States, therefore, has been interested in the Middle East for two reasons. For over 70 years the Middle East has been important to the United States as a (b) (5)

[REDACTED]. Second, the United States has been interested in preventing or neutralizing the capabilities of hostile actors indigenous to the Middle East who could utilize the flow of oil and oil revenues to shift American policies in directions undesired by the United States.

WHO ARE THE ACTORS TODAY?

The major indigenous actors now relevant for our understanding of competitive strategies for the Middle East are Israel, Hezbollah, and Iran. This list is not inclusive. Saudi Arabia is clearly important, but will be treated in this paper as seeking to preserve its existing position by accommodating both friendly and threatening actors. The external powers competing for influence in the region are the United States and China. India and Russia are important powers, but their behavior today appears to be secondary to and conditioned by the actions of the United States and China. This choice of actors for study is imperfect but hopefully sufficient to begin the analytical process.

ISRAEL

The dominant propensity of Israel is to seek and maintain a qualitative military advantage over its local enemies, and to use that qualitative advantage to execute short duration wars that focus on near term (one year or less) effects, by destroying enemy forces in being, rather than neutralizing long term enemy demographic, economic, and military potential. This propensity may be related to a more general Israeli national character that is monochronic (one thing at one time), analytical (problem focused, not context focused), and individualistic. These cultural traits, analyzed by Dima Adamsky,⁴ lead Israelis to see issues in terms of discrete, narrow problems, to be handled on a decentralized basis with existing means. In the areas of conventional military conflict, this propensity has led Israel to acquire buffers (Sinai, Golan, southern Lebanon) behind which it can engage in offensive, pre-emptive military action. In the area of unconventional warfare against insurgents, guerrillas, and terrorists, this propensity has led to the use of physical barriers to the movement of potentially hostile irregular forces and civilian populations, combined with the extra-judicial targeted killing of enemy leaders, and occasional military raids on selected enemy strategic targets.

Israel's major weaknesses include its relative demographic and geographic inferiority, which lead to sensitivity to casualties and to the loss of territory. Israel's strengths include its regional intelligence capabilities and its autonomous military-technological base. The strength (b) (5)

[REDACTED]

[REDACTED] will remain strong.

⁴ Dima Adamsky, The Culture of Military Innovation: The Impact of Cultural Factors on the Revolution in Military Affairs in Russia, The US, and Israel (Stanford, CA: Stanford University Press, 2010).

IRAN

The dominant propensity of Iran is to utilize indirect, deniable instruments of military power and equivocal courses of action, toward the aim of maintaining multiple options for as long as possible. This propensity, on the argument of Homa Katouzian,⁵ may derive from the historically fluid nature of Iranian society, in which social position has tended to be rapidly acquired and lost, which is in turn the result of the historical absence of a stable landed property class – all of which is conducive to very low levels of social trust and opportunistic cooperation within Iran. (b) (7)

[REDACTED] suggests that Iran is accordingly prone to high levels of internal organizational conflict and ambiguous specification of organizational responsibilities.⁶ The use of Hezbollah in Lebanon, Hamas in Gaza, and Shi'ites in Iraq as proxies for Iran is consistent with these propensities, as is the Iranian drive toward nuclear weapons under the cover of a civilian nuclear power program. These cultural tendencies also produce a high degree of conflict internal to the Iranian national security establishment – regular army (Artesh) versus Revolutionary Guard (IRGC), and conflicts internal to the IRGC itself – with multiple groups responsible for nuclear weapons intelligence, weapons development, and non-nuclear weapons of mass destruction (WMD).

The Iranian cultural predisposition toward indirection has led to efforts to develop unconventional naval instruments, and to make extensive use of camouflage, concealment, and deception (CCD) programs, as well passive defense programs to hide and protect military assets underground, in order to defeat enemy intelligence, surveillance, and reconnaissance (ISR) capabilities as well as the enemy's kinetic strike capabilities. This tendency has been reinforced by the demonstration of American capabilities for offensive air strikes.

The extent of Iranian capabilities in the field of cyber warfare is unknown, but the general Iranian predisposition toward indirect attacks, preference for difficult-to-attribute action, and emphasis on confusing enemies suggest that there will be major Iranian initiatives in this area. According to media reports, the "Iranian Cyber Army" did attack Twitter in Iran in 2009, and claimed responsibility for an attack on the Chinese government owned search engine Baidu in 2010.

The major weaknesses of Iran lie in the character of its political regime, which is internally fractured in ways that interfere with economic development, and which is engaged in endemic

⁵ Homa Katouzian, State and Society in Iran: The Eclipse of the Qajars and the Rise of the Pahlavis (London: I. B. Tauris, 2000).

⁶ (b) (7)(C) [REDACTED]
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warfare with itself and with the larger Iranian society. Iran's strengths lie in its oil wealth, current population base (though longer term demographic trends are negative, as the graying of the population is expected due to a drop in birth rates over the past decade), and access to capable proxy actors, most notably Hezbollah and Hamas. Iran also benefits from its opacity, which limits the ability of other actors accurately to gauge its intentions and capabilities. This, in turn, better allows Iran to manipulate perceptions of these factors in ways that support Iranian strategy.

UNITED STATES

The dominant propensity of the United States is, like Israel, to focus on immediate problems as separate, discrete issues, and to seek incremental solutions to problems or crises that minimize short term costs. This approach has often come at the expense of the pursuit of a consistent strategy focused on the longer term.⁷ When attacked, the United States responds with the massive development and deployment of military force. The general tendency toward incremental-ism is given specific content with regard to military capabilities and concepts of operations by existing service roles and missions for the Navy and Air Force that have not changed in their broad outlines in several decades. This means that the military response of the United States, when it occurs, largely takes the form of offensive strikes by tactical range manned aviation. While the accuracy of weapons has increased greatly, the dominance of US carrier based tactical aviation as the primary strike force in the Navy and land based tactical aviation as the primary strike instrument of the Air Force has stayed constant or increased relative to the importance of long range manned aviation and long range cruise missiles launched from sea based, ground, or air breathing platforms. The use of ballistic missiles for anything other than strategic nuclear strike missions has been abjured by the United States. With regard to defense, the United States has focused almost exclusively on active air defenses, with less emphasis in dollar terms on passive defenses in the form of dispersal, concealment, decoys, obscurants, or underground basing.

In the area of cyber warfare, the United States military has led the world in the use of networked information processing technologies. Offensively, the United States has been reported to have had operational cyber warfare capabilities to attack enemy power grids, financial networks, and air defense systems since the 1990 Gulf War and the 1999 Kosovo War. The Air Force has recently formally constituted at least one operational command for the conduct of cyber warfare.

Episodically, the United States has tried to make use of a variety of regional partners/allies to stabilize the region, including Iran, Israel, and Saudi Arabia. Arms transfers to those countries and access to their bases in time of need has substituted for a long term American presence on the ground.

⁷ An exception was the prosecution of a strategy to defeat the Soviet Union over the course of the Cold War. Perhaps this exception owes something to the evident level of threat posed by the Soviet Union, which facilitated the pursuit of a more consistent long term strategy by the United States.

Major American vulnerabilities include a poor understanding of the characteristic behavior of local actors in the Middle East. The American alliance with Israel is an intelligence strength but a diplomatic problem, insofar as it complicates relations with Islamic countries. American strengths include technological and organizational military superiority, and relations with Israel, Kuwait, and other local actors that provide the United States with military partners and access to the region.

CHINA

The biggest question mark about actors relevant to the competition in the Middle East has to do with China. While China has been a significant factor in the Middle East since the 1980s, its future courses of action are uncertain. This uncertainty exists because China invests heavily in concealing its strategic shape and possibly also because Chinese strategy is more than usually flexible and likely to respond to the evolution of events in the region, according to LTSG research by Jacqueline Newmyer. What can be said is that observable Chinese actions up to this point position Beijing to adopt a range of postures in the Middle East in the future. These actions include increased consumption of oil from the region since the surge of Chinese industrial economic growth in the 1990s and the fact that beginning in the 1980s, China has engaged in the sale of long range ballistic missiles to Saudi Arabia, the sale of dual use communications technology to Iraq, the sale of anti-ship cruise missiles to Iran, the transfer of ballistic missile and nuclear weapons material and technology to Pakistan, and collaboration with Turkey on precision guided missile technology, not to mention complicity in proliferation to the region by China's ally North Korea.⁸

How should we understand this behavior and the options that it has created? Notwithstanding debates about our basic picture of China, there is consensus around the following points:

The first major aspect of Chinese strategic culture emphasizes deception and the management of adversary perceptions and decision-making to a degree that is greater than is typically found in the United States. Deceiving and manipulating adversaries is possible if close attention is paid to acquiring intelligence about them. The distinction in Chinese thought between the states of war and peace, to the extent that it exists at all, is much less sharp than is found in the United States. The Chinese see a close connection between internal and external threats, to the extent that they make distinctions between the two. These aspects of China's strategic culture appear to derive from formative historical interactions in the Warring States period (c. 480-221 BC) – a context in which there was both relative homogeneity among populations and in which the central rulers of rival states fundamentally lacked legitimacy. This resulted in a permanent state of internal

⁸ (b) (7)(C) [REDACTED]
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political struggle among elites who were able to spy on, understand, deceive, and manipulate, but never trust, each other.

This facet of Chinese strategic thought leads to an emphasis on specific modes of behavior, such as the use of long term quiet preparations to isolate or otherwise render helpless an adversary who has been lulled into a state of complacency; if and when such modes fail, the use of surprise and deception to conduct paralyzing attacks that immobilize the opposition; and an unwillingness to trust Chinese allies or coalitions combined with a focus on destroying adversary coalitions. This aspect of Chinese strategic culture, derived from interactions among Han Chinese, may also explain why Chinese strategies have often performed poorly when used against non-Han populations whose reactions and patterns of behavior were less familiar to and less well understood by Han Chinese.

The second major aspect of Chinese strategic culture, which may be associated with a different point of origin, focuses on the importance of aligning a strategy with *shih*, the general propensity or tendency of things, or what we might call external trends. Like the first aspect, this aspect of Chinese culture requires superior intelligence relative to adversaries, but it places less emphasis on the ability of individuals to shape the course of events, and so more emphasis on success that comes from taking actions that are consistent with the general direction of social behavior that external trends are creating. A correct understanding of trends, and alignment with them, is the key to this aspect of Chinese strategy. So, for example, if there is a global trend in favor of market driven growth, one should align oneself with that. If there is a trend that empowers anti-colonialism, it makes sense to support anti-colonial policies. If there is a general tendency for smaller powers to acquire weapons and technology that reduce the influence of the United States, it makes sense to supply the weapons and technology that are desired. This aspect of Chinese strategic culture appears to derive from broader patterns of cognition that place more importance on group behavior, context, and pattern recognition than on individual decisions and behavior. This aspect of Chinese culture, combined with collective decision-making practices, can induce delays into Chinese decision-making, because of the time needed to ascertain the tendency of things in the aftermath of unexpected events or enemy reactions. These delays are not necessarily optimal in terms of achieving Chinese objectives.

In terms of recent and expected behavior, these two aspects of China's strategic culture combine to produce the element of uncertainty referenced earlier. The general tendency to engage in lengthy intelligence collection, trend analysis, and preparation of the environment, and the inclination to align actions steadily with large scale trends seem to be consistent with the "24 character strategy" of Deng Xiaoping to observe calmly, bide one's time, and hide capabilities. But this general steadiness can be punctuated by sudden action at times that the Chinese consider to be critical in terms of their regime survival, or the rise and fall of empires. This impulse has sometimes been described as a Warring States mentality, again referring to a several hundred year span of antiquity in which Chinese hegemony rose and fell, in part due to diplomacy and the manipulation of alliances but also in part thanks to decisive actions by one state to destroy or

subordinate its rivals.⁹ Whether the Chinese perceive any particular environment as a Warring States context, and when they may diagnose the moment for action to be ripe can be difficult to determine.

Because of this uncertainty, two models of China will be advanced and utilized. China may be cautious, risk averse, self-aware, and adaptive, in which case it will continue the courses of action we currently observe. This China has been sensitive to global trends, and has gone along with trends favorable to it, as in the case of nuclear proliferation; support to regimes that are opposed to the United States; limited, low visibility arms and dual-use technology transfers; and gradual extensions of the capabilities and reach of its armed forces. Alternatively, China may see itself as being at a critical juncture, internally and externally, poised to take a decisive stroke that will either confer predominance over the United States in Eurasia or lead to its own downfall. If history and strategic culture can be used as guides, China may be both anxious and aggressive, inclined to misunderstand the reactions of foreigners to its actions, and willing to behave in ways that are startlingly bold. The section on Chinese actions will therefore discuss two possible Chinese approaches to future developments in the Middle East.

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WHAT ARE THE ACTORS' PREFERRED COURSES OF ACTION?

Given the predispositions and the problems currently confronting the major actors, what might be their preferred courses of action? Another way to put this question is, if the major actors have to fight, what kind of fights would they choose?

The following section is based on LTSG interviews with senior Israeli officials in August 2009 and January 2010, IDF guided staff rides of the battlefields in northern Israel/southern Lebanon in January 2010, a workshop conducted by LTSG with Israeli and American participants on Israeli responses to Iranian nuclear weapons in August 2010, and the general characterization of Israel provided above. It also makes use of LTSG research conducted for the National Intelligence Council in the period 2007-2009 and simulations of Iranian behavior conducted in conjunction with the Israeli Defense Forces in 2010 and with SOCOM in 2010. (b) (5)

ISRAEL

The assessment is that if the Iranian nuclear weapons program is not halted and dismantled, Israel would favor preventive or pre-emptive strikes against Iranian nuclear weapons related facilities, preferably together with the United States, even though the expected outcome would only be a short term setback in the Iranian program. Either if that course of action is blocked or if it occurs, a renewed Israeli war with Hezbollah in Lebanon is likely. Israel would prefer to launch a pre-emptive attack on Hezbollah positions in Lebanon if it detected signs that Hezbollah was preparing an attack. For the war to go the way Israel would want it to go, (b) (5)

Israel would want to achieve the d (b) (5)

and more

¹⁰ (b) (7)(C)

effective fire support for ground force operations. The desired result would be a rapid and near complete destruction of Hezbollah forces in southern Lebanon and an Israeli withdrawal. This would be accomplished before Iran gained nuclear weapons, and so before the possible deterrent effect of Iranian nuclear weapons on Israeli operations in Lebanon could be a factor.

More broadly, with or without a preventive war against Iran, Israel will want over time to (b) (5)

Given the predominance of Israeli tactical aviation within the Israeli air force, the complete absence of a long range bomber force, and the small size of the fleet that could serve as a platform for sea launched cruise missiles, the prediction would be that Israel would need to expand and augment its tactical strike force (b) (5)

. Given the possible improvements in air defenses in both those countries, Israel would either have to (b) (5)

It is useful to highlight what assumptions underlie the imputed preferred Israeli military operational world:

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- (b) (5)
- (b) (5)
- (b) (5)

- (b) (5) [REDACTED]

HEZBOLLAH

In contrast with Israel, Iran and Hezbollah would prefer that their ambiguous and indirect approach delayed Israeli or American military action while the Iranian nuclear weapons program and precision guided weapons programs continued. Improvements in Iranian and Hezbollah strike capabilities would continue. This would take place as increasing numbers of GPS guided operational and tactical ballistic missiles and artillery became available to Hezbollah, Syria, and Iran. These precision strike weapons would include the M-600 300 km range solid fueled rockets with GPS guidance and two-three kilometer range anti-tank precision guided munitions (PGMs). In addition, short range man portable air defense systems (MANPADS) would be incorporated into the forces of all three actors. (b) (5) [REDACTED]

[REDACTED]

[REDACTED] will create limited problems for Israeli forces.

In the preferred Hezbollah military operational world, any war between Israel and Iran takes place after these improvements in Iranian and Hezbollah capabilities have been made. If Israeli attacks on Iranian nuclear facilities did occur, they would, on this argument, create a wave of international political hostility to Israel led by China, Russia, Turkey, and much of the Arab world. This would create conditions which would improve the likelihood of increased Chinese and Russian military supplies to Hezbollah and Iran, and which would put diplomatic pressure on Israel to cease all military operations and to refrain from bombing other countries, such as Lebanon or Syria.

If war occurs, Hezbollah would initiate a war with units infiltrated into positions to conduct pre-planned precision anti-tank guided missiles attacks on Israeli military forces in northern Lebanon, IED attacks in areas along which Israeli forces are expected to move or to which they are expected to deploy. Longer range precision guided ballistic missiles would be stockpiled in tunnels and in civilian populated areas. These accurate ballistic missiles would be launched against Israeli army and air force operating bases, mixed in with attacks by very large numbers of less accurate ballistic missiles, to complicate the task of the defenders. These attacks might not concentrate on hardened shelters, or even on runways, but on soft targets such as fuel storage and maintenance facilities. IDF aviation support of Israeli ground forces in Lebanon would be severely constrained. Iranian nuclear forces, either real or implied, would divert significant elements of the Israeli air force (tankers, long range strike aircraft) and intelligence assets to handle the possible use of nuclear weapons against Israel. IDF helicopter forces operating in northern Lebanon would take heavy initial losses from MANPADS, and continued helicopter

¹¹ (b) (5) [REDACTED]

operations would be limited by the precision missile strikes on their bases. The war in northern Lebanon would therefore turn into a light infantry battle with Israeli forces unable to use GPS guided weapons on the one hand, and well dug in Hezbollah forces on the other hand. Israeli casualties are in the thousands. Israel is diplomatically isolated. Given the possible existence of Iranian nuclear weapons, Syria may be emboldened to mobilize its forces, adding to the strains on the IDF. The operation ends with Israeli withdrawal and Hezbollah weakened, but in control of Lebanon. If Iranian nuclear facilities are attacked, they are damaged, but can be openly reconstituted, given international reaction to Israeli “aggression.”

It is useful to highlight what assumptions underlie the imputed preferred Hezbollah military operational world:

- (b) (5) [REDACTED]
- (b) (5) [REDACTED]
- (b) (5) [REDACTED]
- (b) (5) [REDACTED]

IRAN

While Iran and Hezbollah may share some characteristics, the operational requirements of Iran will be different from that of Hezbollah. Iran is not vulnerable to conventional ground force operations conducted by Israel, and is less exposed to Israeli aerial bombardment, but does face the possibility of attack from US naval forces, and has more area within which to conceal its assets. Iran also has the ability to utilize perceptions of its nuclear weapons and missile programs to shape American and Israeli behavior.

The logic of the Iranian approach to war would be to place as many critical elements of its defense infrastructure in deep underground tunnels as possible, and to construct multiple redundant, decoy, and deceptive tunnels and tunnel “entrances,” and “vents” (b) (5) [REDACTED]

[REDACTED] By doing so, Iran would also magnify the perceived size and effectiveness of its missile forces. The underground sites would shelter anti-ship cruise missiles and missile launchers, small craft, mine-laying craft and mines, as well as sites related to nuclear weapons production. The fragmented, redundant nature of the Iranian bureaucracy would make much such deceptive activity natural and effective, since there would be real, multiple agencies for missiles, chemical weapons, and so forth, all of

which would want headquarters and underground protection. The long term, higher cost underground basing would be supplemented by programs for the expedient dispersal of assets upon receipt of strategic warning, such that active operational units would shift under radio silence to prepared alternative underground bases that had been vacant up to that point, hidden among other movements of units.

The fragmented redundant nature of the Iranian bureaucracy, and the general Iranian desire in a crisis to manipulate foreign perceptions of its capabilities upwards, may lead to actions, intended or otherwise, that generate a foreign perception that Iran is preparing military actions using ballistic missiles and nuclear weapons.

In Iranian plans, if war occurs, it would begin with an American attack, but the initial battles would have been shaped by Iranian military developments in peacetime. Specifically, Iran will magnify perceptions of the size and effectiveness of its ambiguous nuclear arsenal and cruise and ballistic missile programs in order to exact virtual attrition by forcing the United States to operate, at least in the initial operations, from bases outside the region, limiting the United States to the use of longer range forces, or forces operating at the limits of their ranges, thereby limiting their payloads. Virtual attrition would have been exacted by forcing the United States to devote scarce resources to ballistic missile defense of US Navy ships, and to ballistic missile defense of American bases and friendly nations in the region. Virtual attrition would be exacted by deep tunneling, limiting the United States to the use only of munitions that could destroy assets in deep tunnels. Damage would be limited by expanding the number of aim points against which the United States would have to operate.

When war began, the Iranian response would be to act as a victim, with active responses only taken by proxies or deniable means: “pirates” operating in the Persian Gulf, along with “rogue” mines, Hezbollah and Hamas attacks against Israel, Shi’ite attacks on American forces in Iraq, and cyber attacks against unhardened computer networks in the United States or Europe. These asymmetric attacks would be designed to divert scarce US resources to protecting civilian merchant shipping and to raise the political costs for the United States. The war would end with much of the Iranian nuclear and military infrastructure intact, and the political conditions for reconstruction improved.

It is useful to highlight what assumptions underlie the imputed preferred Iranian military operational world:

- (b) (5) [Redacted]
- (b) (5) [Redacted]
- (b) (5) [Redacted]

(b) (5) [Redacted]

- (b) (5) [Redacted]
- (b) (5) [Redacted]

UNITED STATES

The United States is extremely unlikely to take an active military role in a new war only between Israel and Hezbollah in Lebanon. The United States has stated that military options against Iran are a last resort. A military attack by the United States on Iran appears unlikely under current conditions. The preferred course of action of the United States is to support the continued territorial integrity of Israel by peaceful means, to seek a peaceful resolution of the Israeli-Palestinian conflict, and to ensure the compliance of Iran with all United Nations (UN) resolutions and International Atomic Energy Agency (IAEA) requests relevant to Iranian nuclear programs.

However, if in the context of an ongoing Israeli war with Lebanon, Iran begins to act in ways that suggest that Iran is preparing to use nuclear weapons, the United States may decide that it must take military action against Iranian nuclear weapons facilities. (b) (5) [Redacted]

[Redacted]

[Redacted] The United States will put its forces on alert in Iraq and Afghanistan, and engage in whatever force protection operations are possible with resources already in country. Israel will be left to deal with any issues in Lebanon, the West Bank, or Gaza.

The United States will employ force against Iran as a last resort, after an escalating diplomatic and economic campaign, a force build-up in the region meant to signal American resolve and capabilities, and multiple warnings and deadlines. Strategic surprise is unlikely, but the exact timing of the initiation of the campaign will be secret. Low observable platforms and weapons will be used in the first wave of the attack, to neutralize warning, command, and anti-access capabilities (in the case of Iran, anti-ship cruise missiles, mine warfare, other maritime assets that could hinder carrier operations in the Gulf), and time critical elements of the enemy nuclear weapons infrastructure. The extensive network of deep underground bases will require the use of GBU-28 class bombs, which currently are deliverable only by B-2s and F-15s, or BLU-118 thermobaric weapons, deliverable by F-15s.

Uncertainties about the Iranian nuclear arsenal in the near- and mid-term may induce the United States to operate its tactical strike aviation from bases outside the range of ballistic missile attack. Over the longer term, to the extent that Iran has precision guided ballistic missiles or cruise missiles that can target the bases from which the first wave of American attacks would be generated, those attacks will need to be conducted with forces that can operate from bases at greater distances. The United States will only be able to attack the targets it has identified, and will have to rely on subsequent diplomatic pressure to deal with surviving capabilities. Extended or renewed military operations past an initial campaign measured in weeks will not be politically possible.

It is useful to highlight what assumptions underlie the imputed preferred American military operational world:

- (b) (5) [Redacted]
- (b) (5) [Redacted]
- (b) (5) [Redacted]
- (b) (5) [Redacted]
- (b) (5) [Redacted]

CHINA

Consistent with the discussion of China's strategic culture above, two alternative preferred courses of action for China will be sketched in this section.

The China that carefully shapes the environment in its favor by aligning itself with trends, and that lulls its rivals into complacency, would prefer to continue with support for Iran that is confined to diplomatic opposition to Israeli or American use of force against Iran, the transfer of lower profile technologies that make more difficult any attack on Iran ((b) (5) [Redacted]), and limited, incremental sales of defensive weapons that also make attacks on Iran more difficult, such as more advanced anti-ship cruise missiles and mines. The objective over time would be to

make the cost of attacking Iran so high as to deter such an attack, and for China to gain influence over the Iranian government as a way of competing with American influence in the region. Iran would not be China's proxy, but would be more able to challenge American influence with the smaller Gulf states, Iraq, and Saudi Arabia. Conceivably, China could build a relationship with Iran in order to "trade it in" for a better relationship with Iraq and Saudi Arabia, by cutting off its military supplies to Iran and switching them to Saudi Arabia in return for reduced Saudi support for American policies in the region.

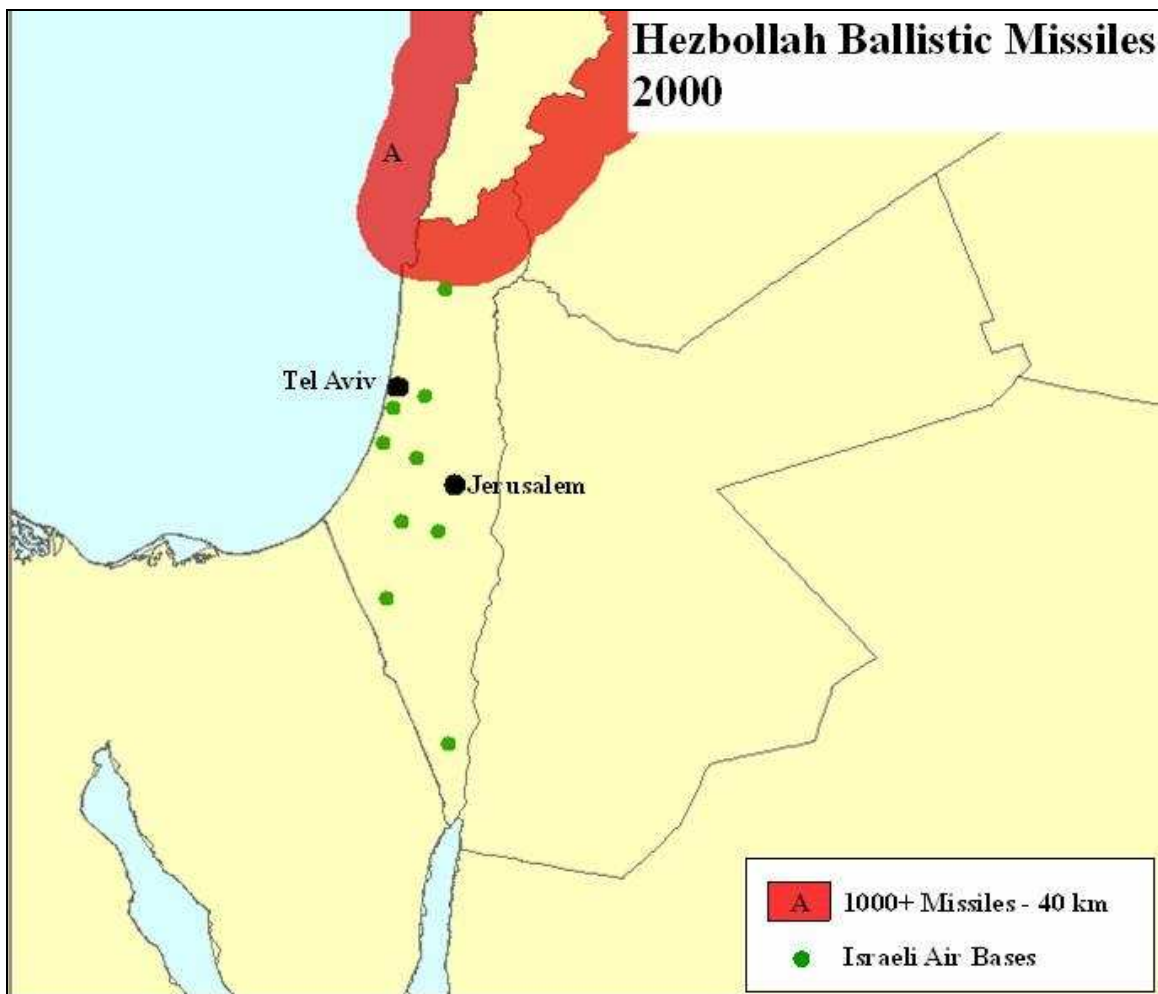
Alternatively, in the run up to a conflict involving Iran, Israel, and the United States, China might take bolder action. China could send People's Liberation Army Navy (PLAN) ships to make prolonged port calls in Iran and patrols in the Persian Gulf. China could send military delegations of air defense officers to Tehran to discuss expedient and longer term improvements in Iranian air defenses, both active and passive, including the limited deployment of People's Liberation Army Air Force (PLAAF) fighters to Iran for "peaceful joint training exercises." China could secretly discuss the transfer of non-nuclear pumped EMP weapons to Iran in ways that became known to the United States. These actions would have primary importance in terms of extending Chinese deterrence to Iran, such that an attack on Iran became an attack on China.

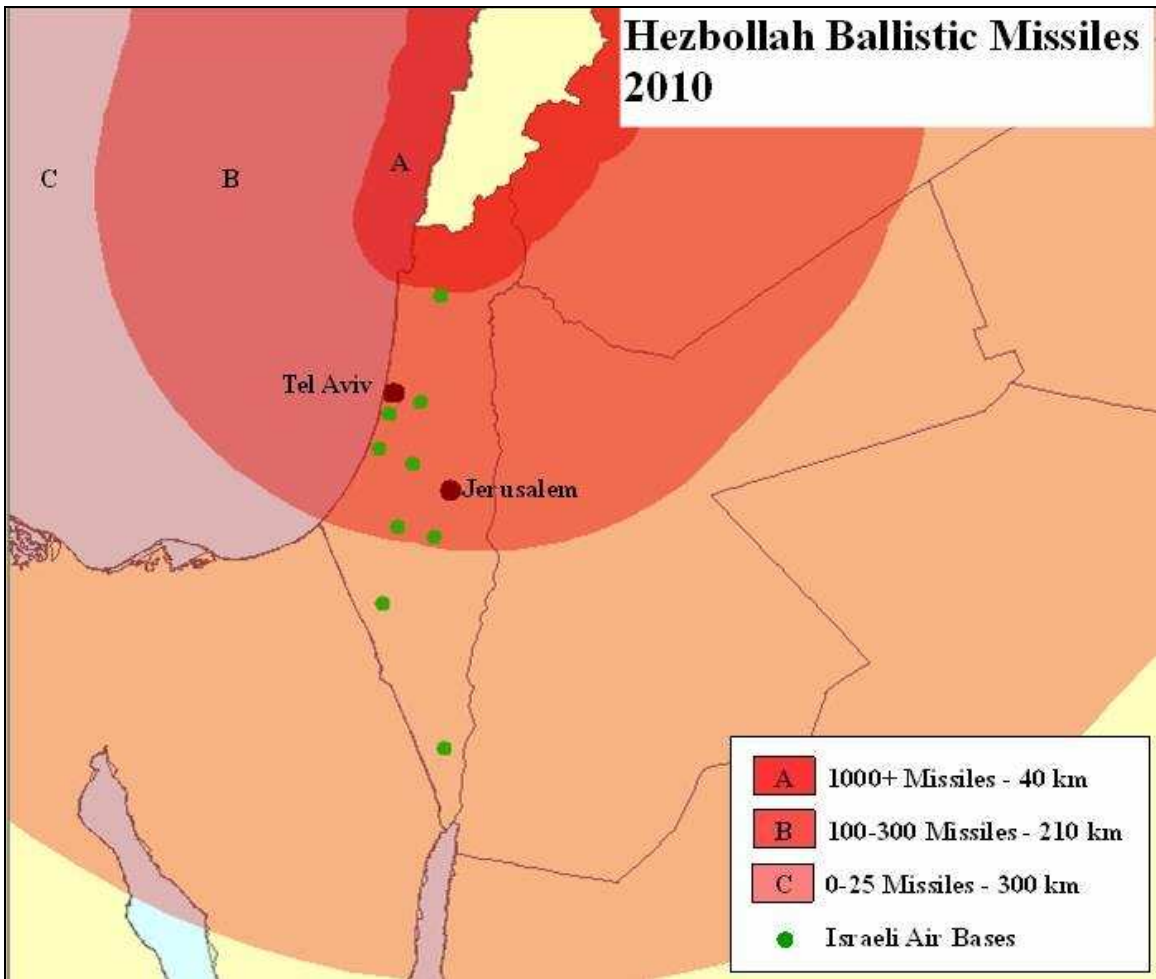
If it is thought that China would be unlikely to undertake such actions in the period during which an American/Israeli attack was thought imminent, it may be useful to consider whether such actions are more plausible in the aftermath of an Israeli or American attack that improved the political position of Iran.

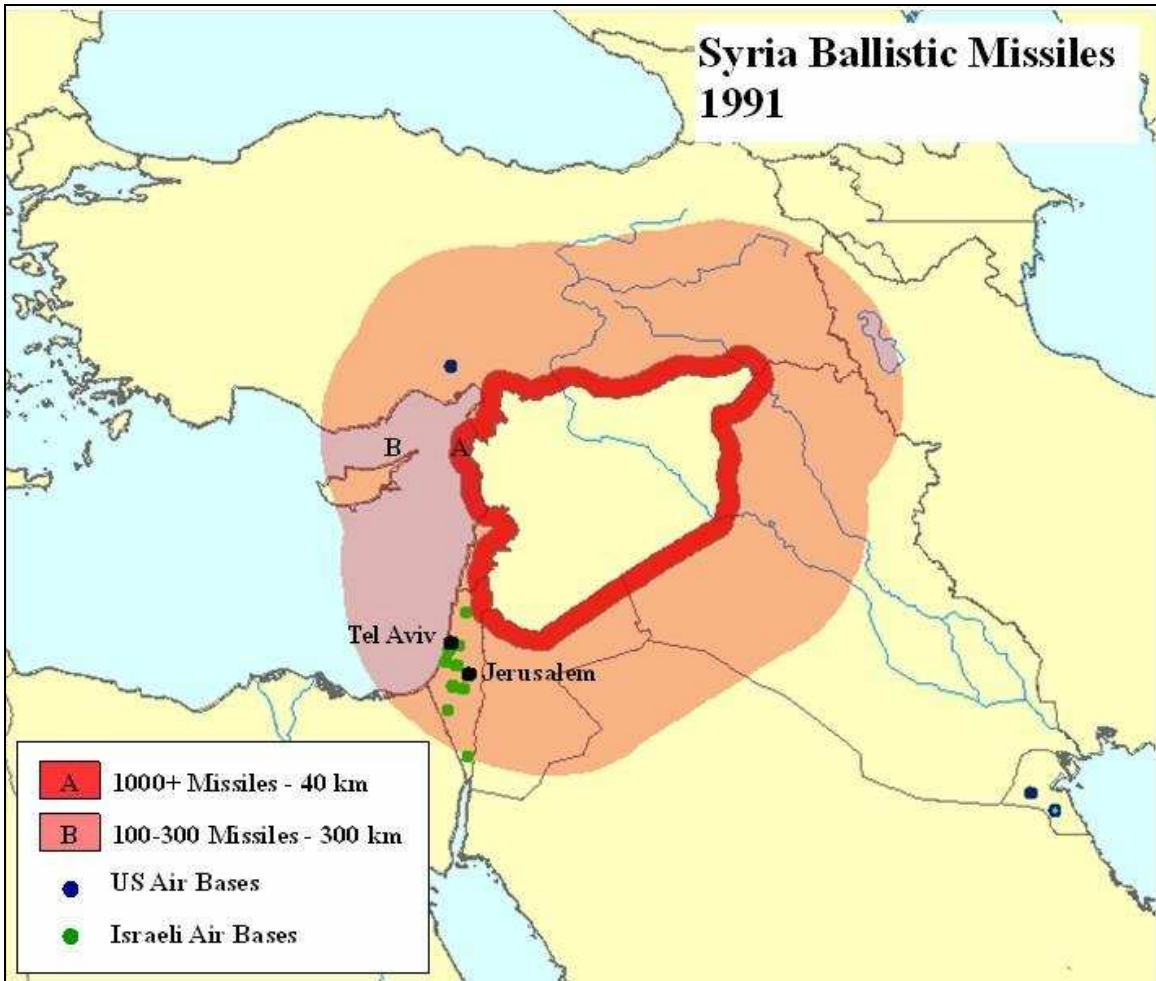
TRENDS

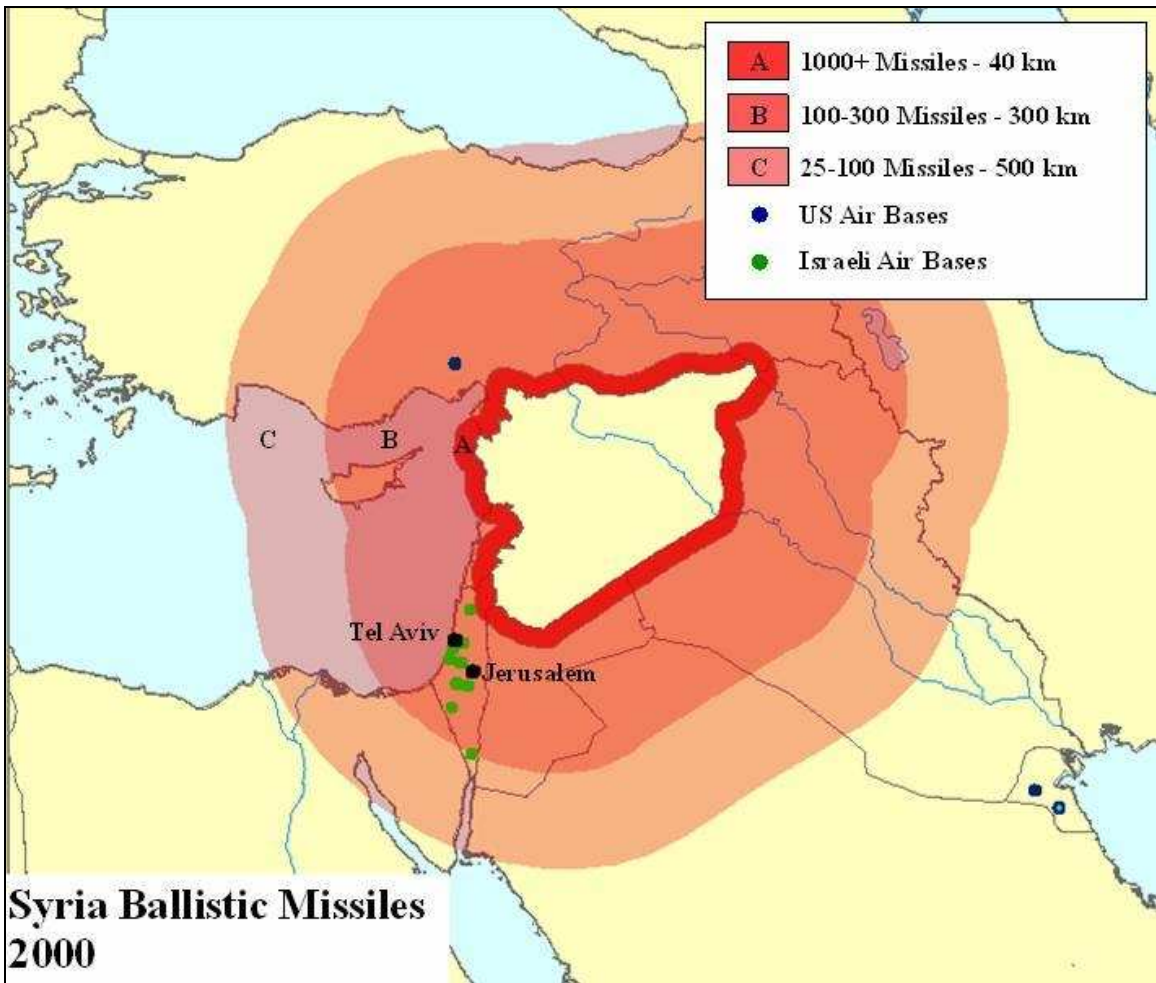
The analysis in the sections above helps us focus on the aspects of the military balance that are most important to the United States.

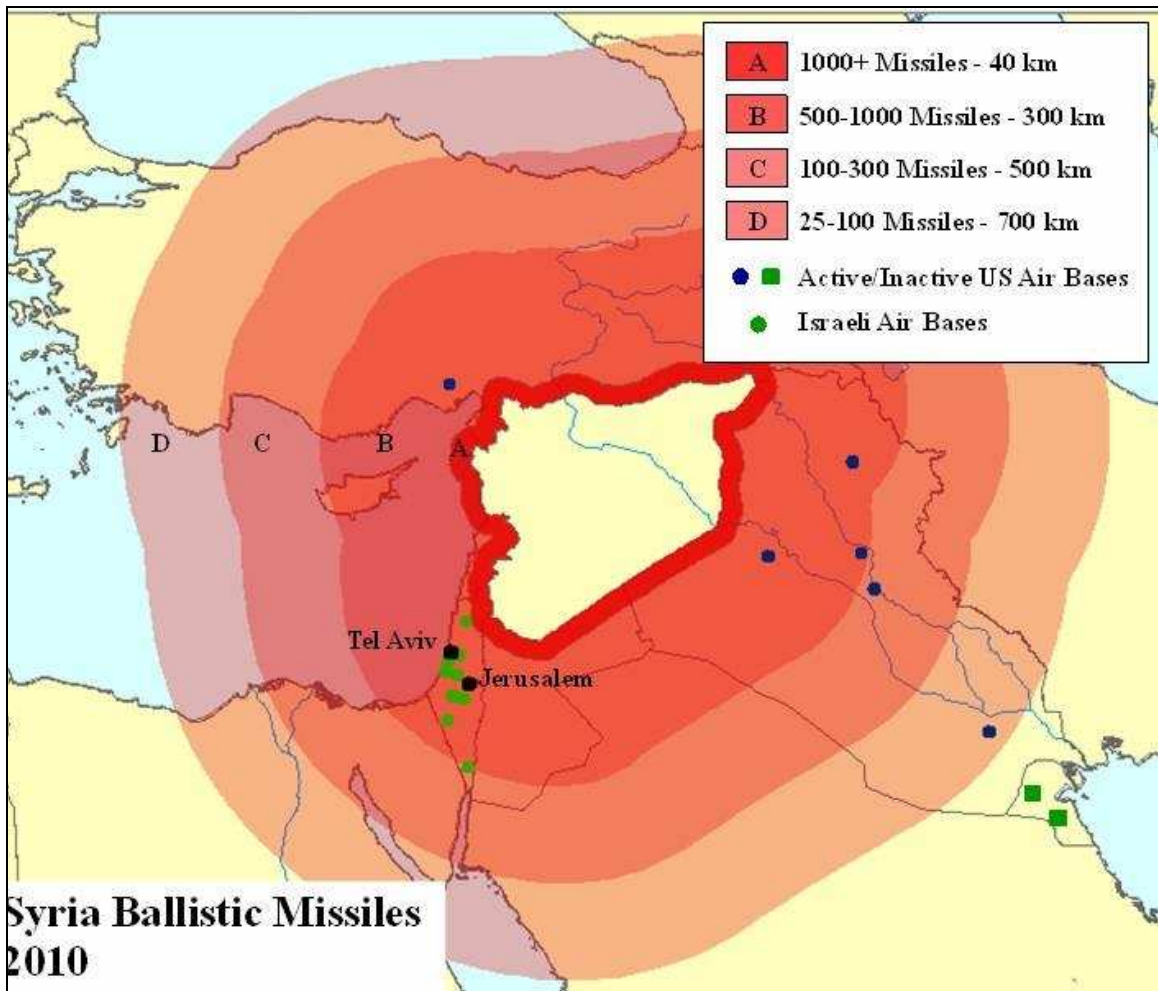
If American offensive capabilities rest on operating tactical range fighter aircraft from bases in the region, then the changing nature of that base structure is important. The ability of adversaries to attack those bases is also important. In the past, the dominance of American fighter aircraft effectively neutralized the possibility of attacks by manned aircraft. The introduction of ballistic missiles creates the possibility of attacks that can not be so effectively neutralized. The range and density of ballistic missiles deployed in the region relative to the United States base structure is of interest. While it is beyond the ability of this report, given the data to which it has access to assess the accuracy and penetration capabilities of offensive ballistic missiles in region, the trend in numbers is still significant, given the general shift toward higher accuracies. The maps below portray the actual changes over time in the reach and density (but not accuracy) of potential ballistic missile attacks relative to Israeli and American base structures.

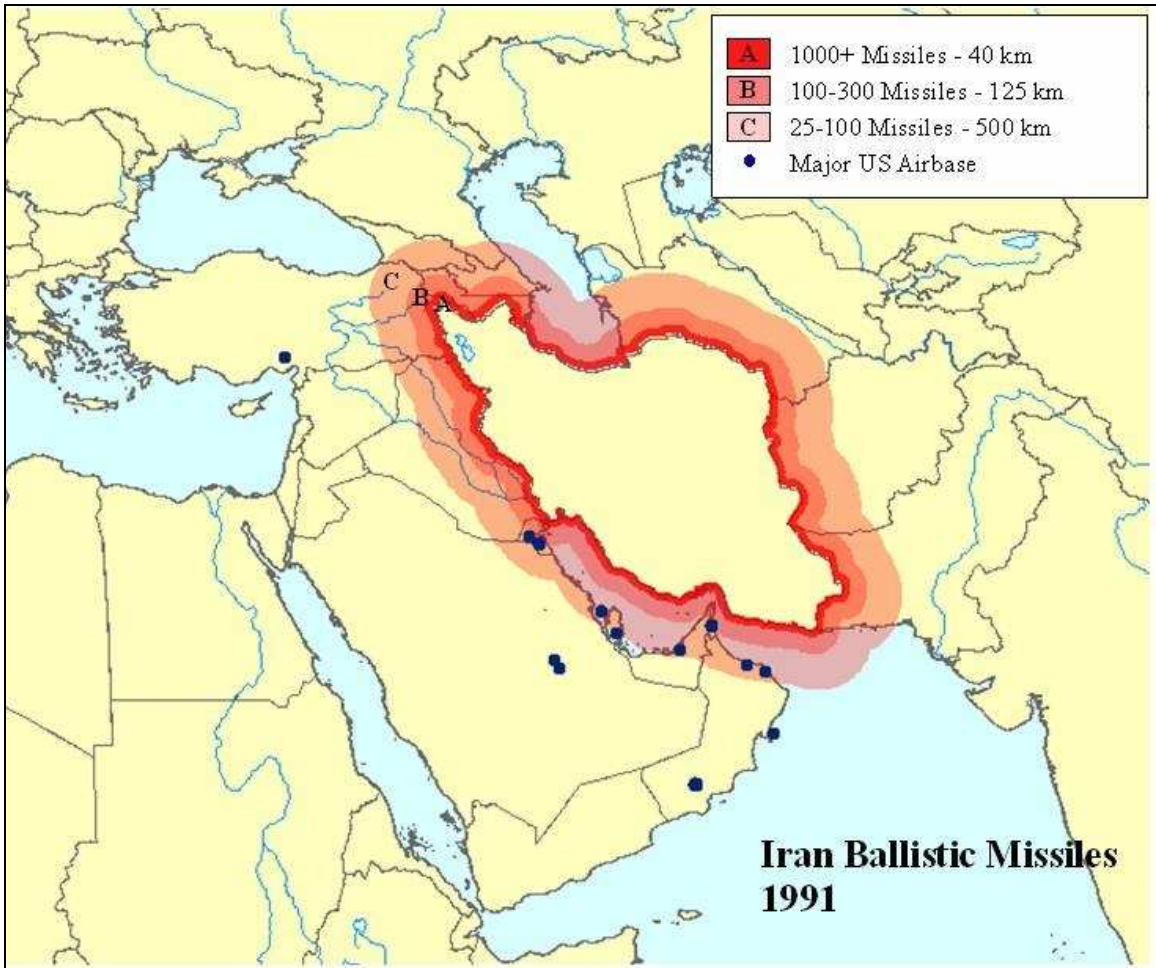


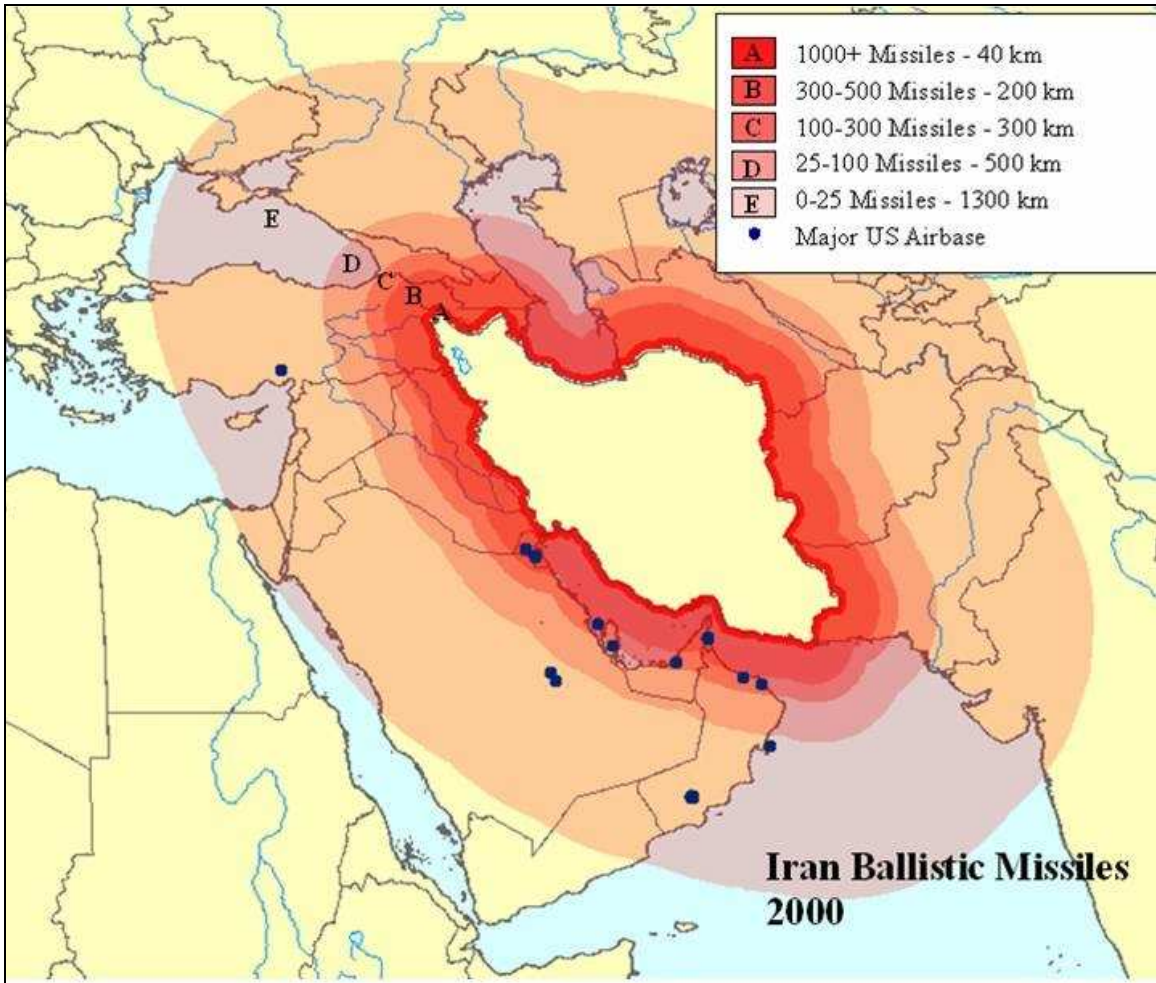


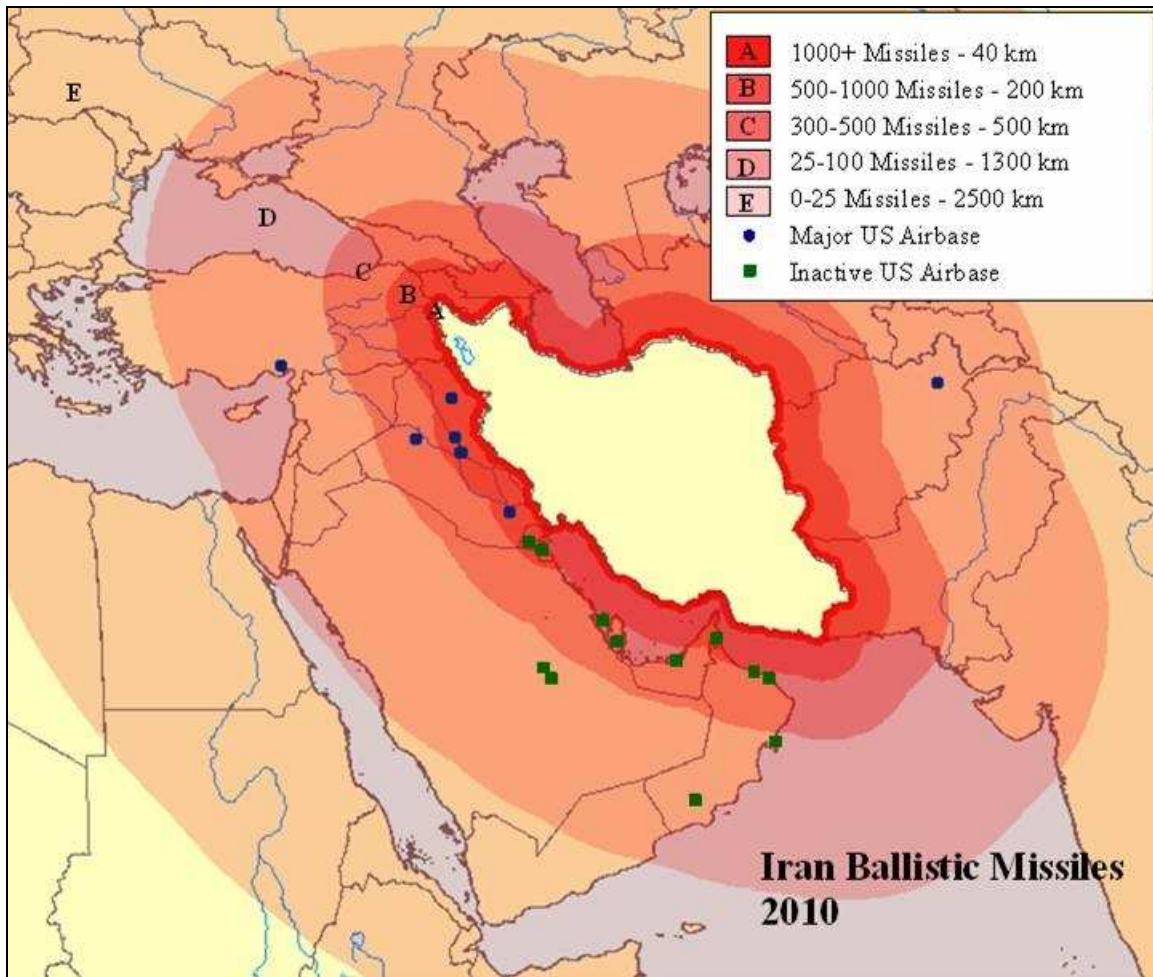








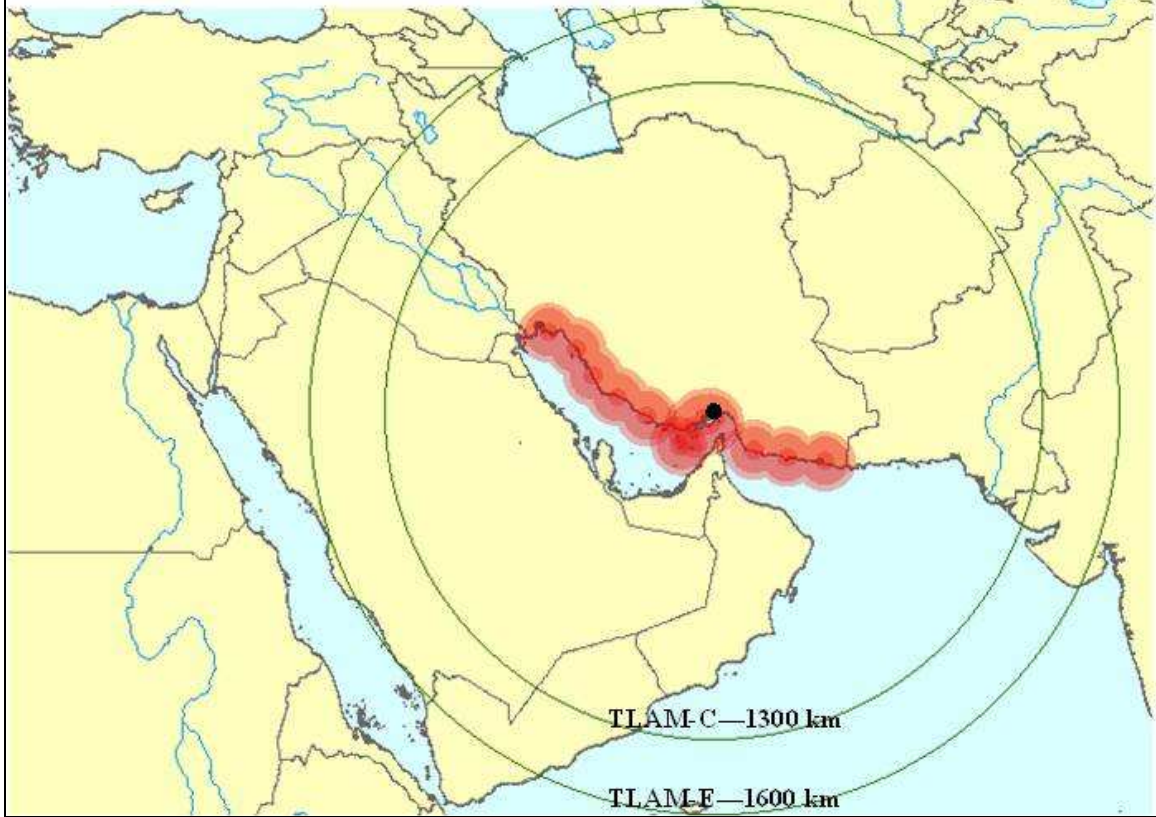




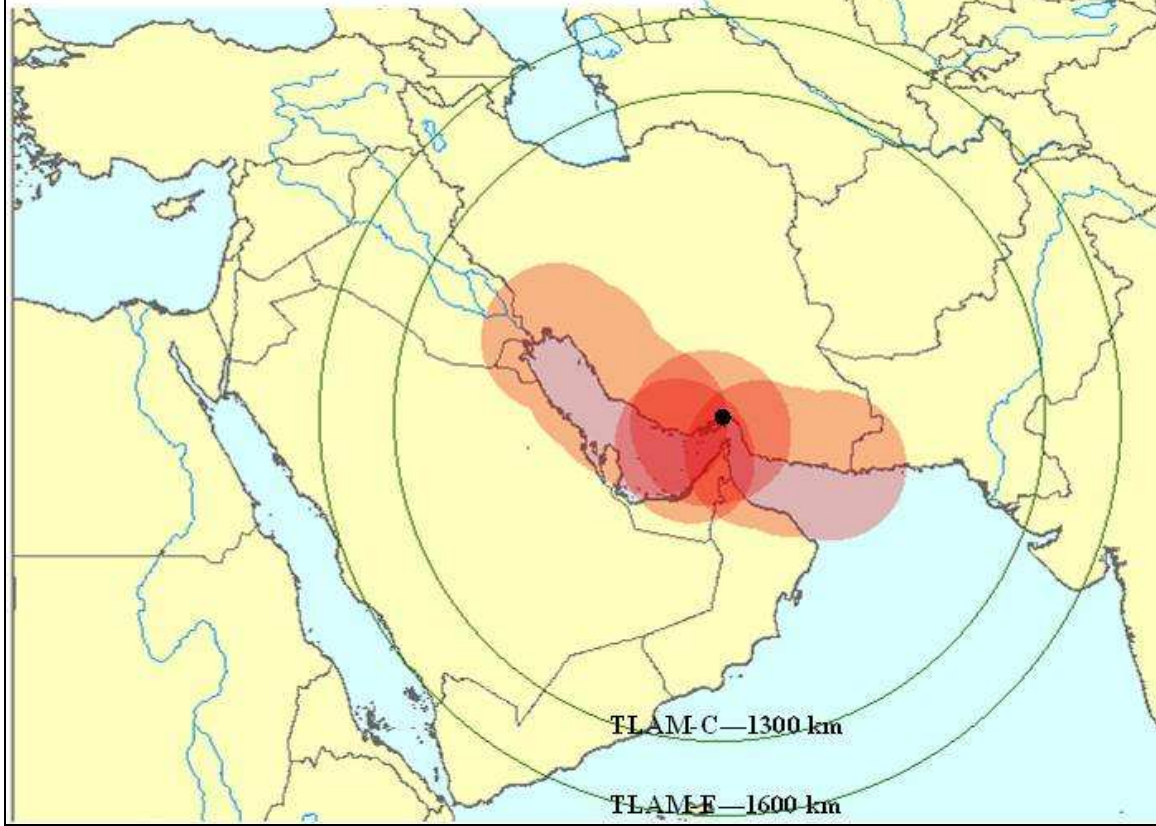
The main point of these charts is the increasing number of American and Israeli air force operating bases within range of ballistic missiles based in Iran and Lebanon.

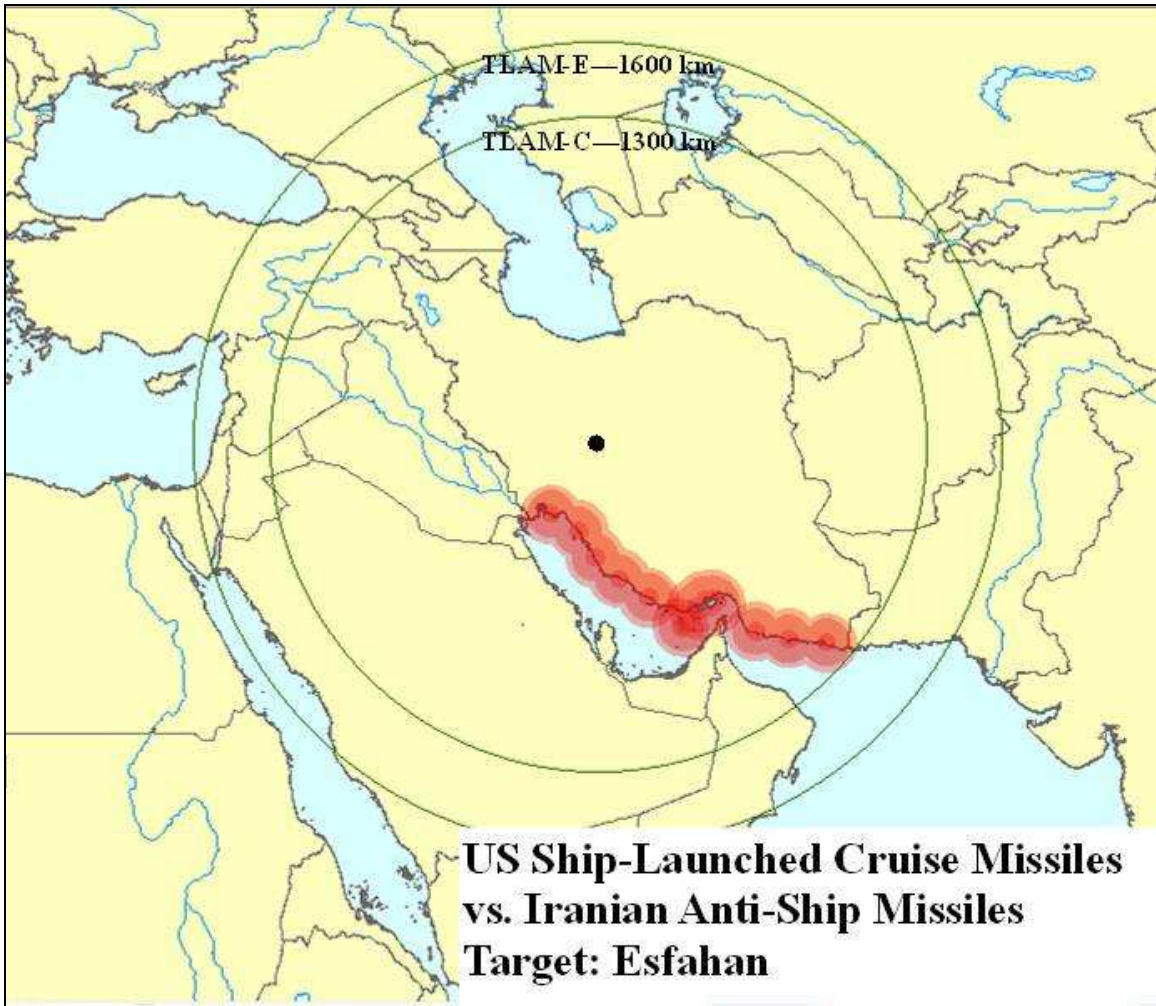
If American offensive capabilities also rest on the ability to operate tactical aircraft from American aircraft carriers, the range and density of anti-ship cruise missiles is similarly of interest. As is the case with ballistic missiles and ground bases, the effectiveness of such attacks cannot be here assessed, but the trend in numbers may be indicative, given the generally increasing capabilities of anti-ship cruise missiles. The difficulty striking at inland targets from American aircraft carriers when anti-ship missiles are deployed on the Iranian coast is illustrated. The Iranian cruise missile inventories are notional.

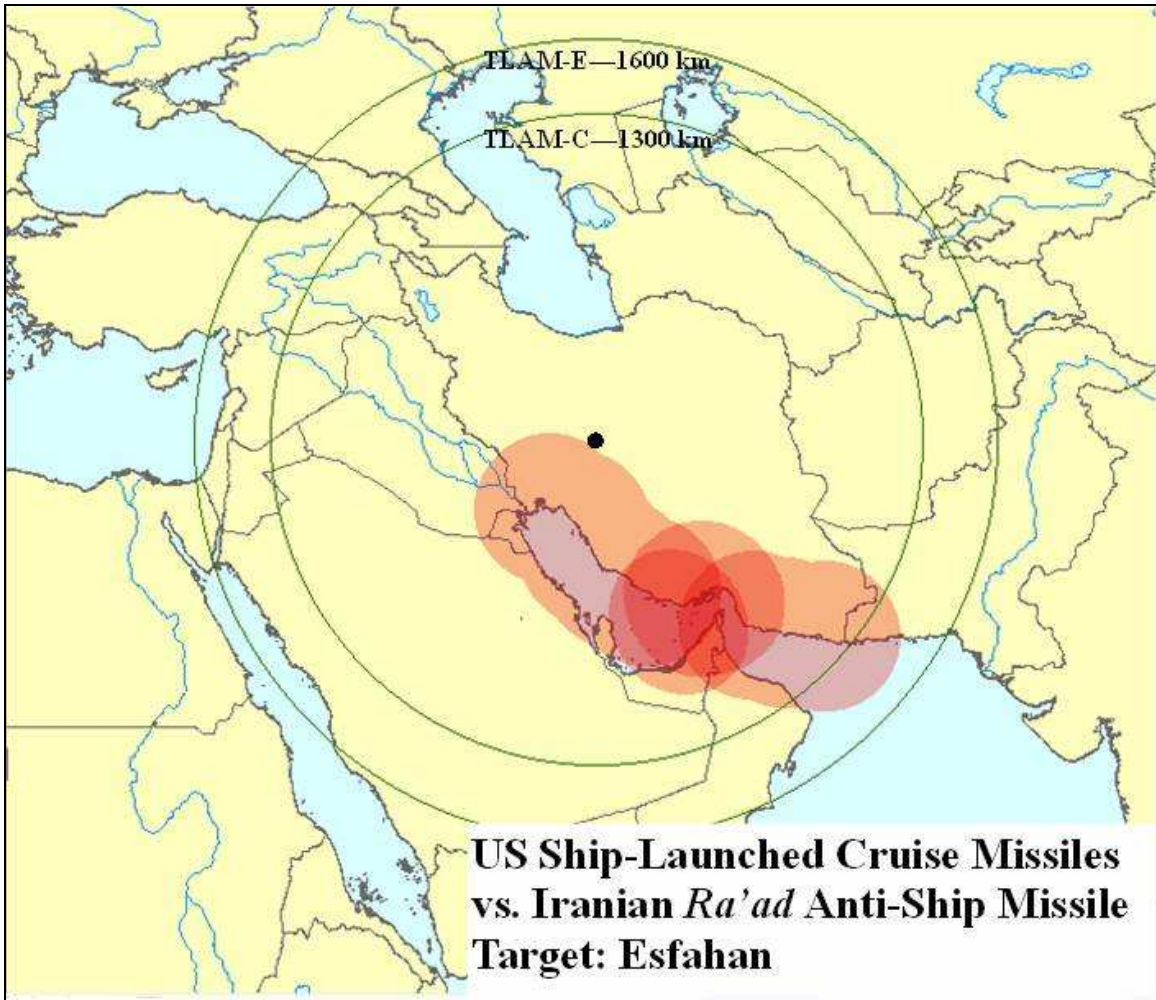
**US Ship-Launched Cruise Missiles
vs. Iranian Anti-Ship Missiles
Target: Bandar Abbas**

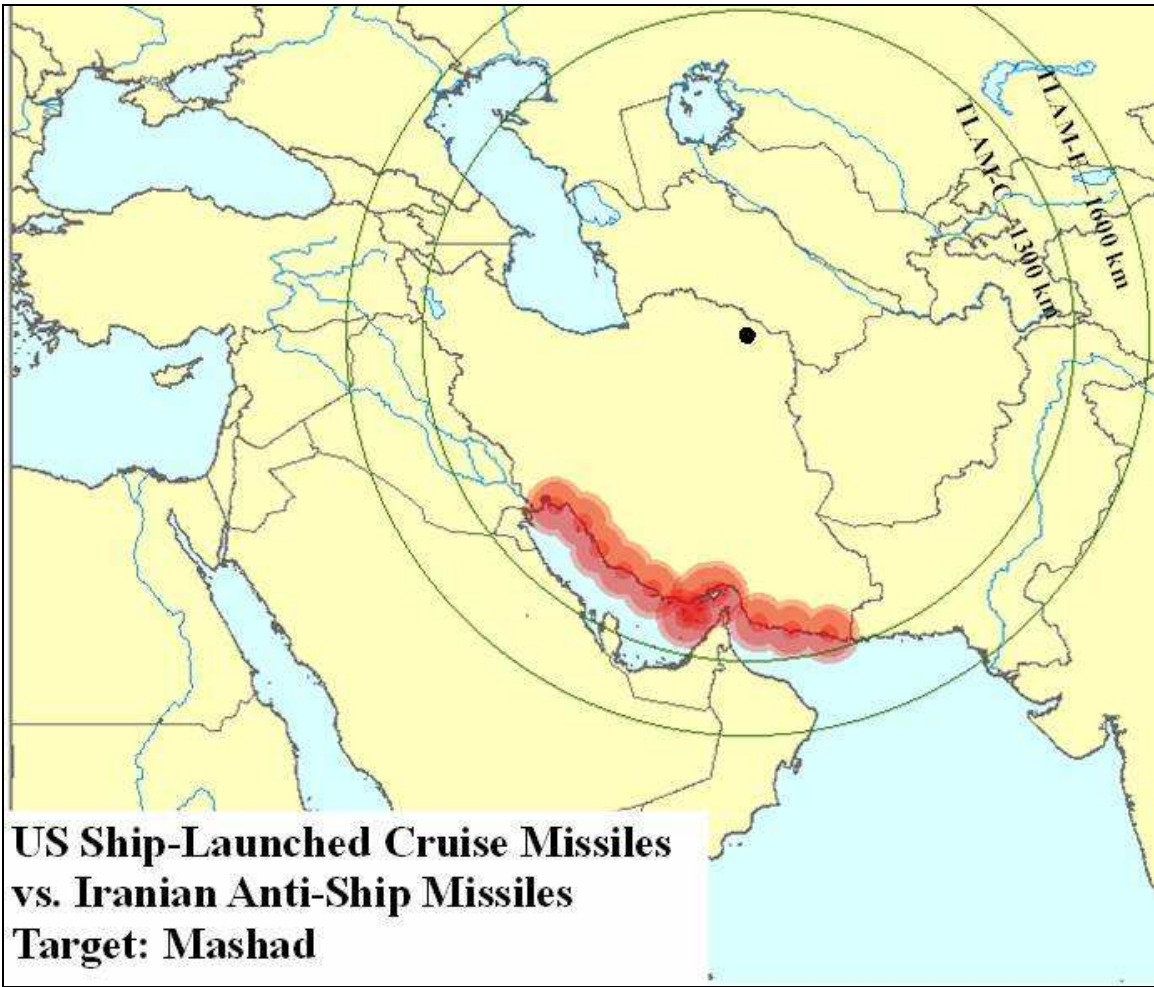


**US Ship-Launched Cruise Missiles
vs. Iranian *Ra'ad* Anti-Ship Missile
Target: Bandar Abbas**

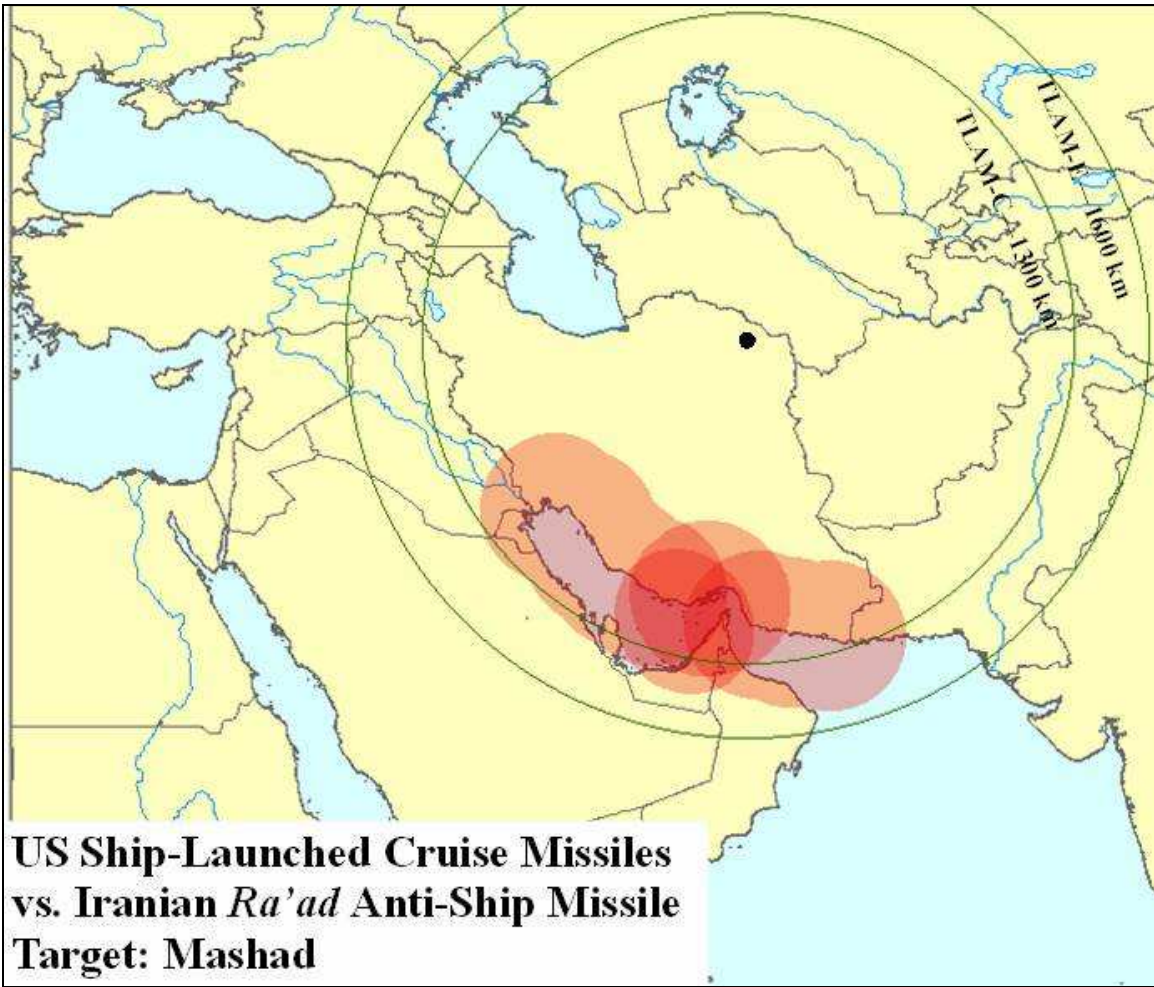




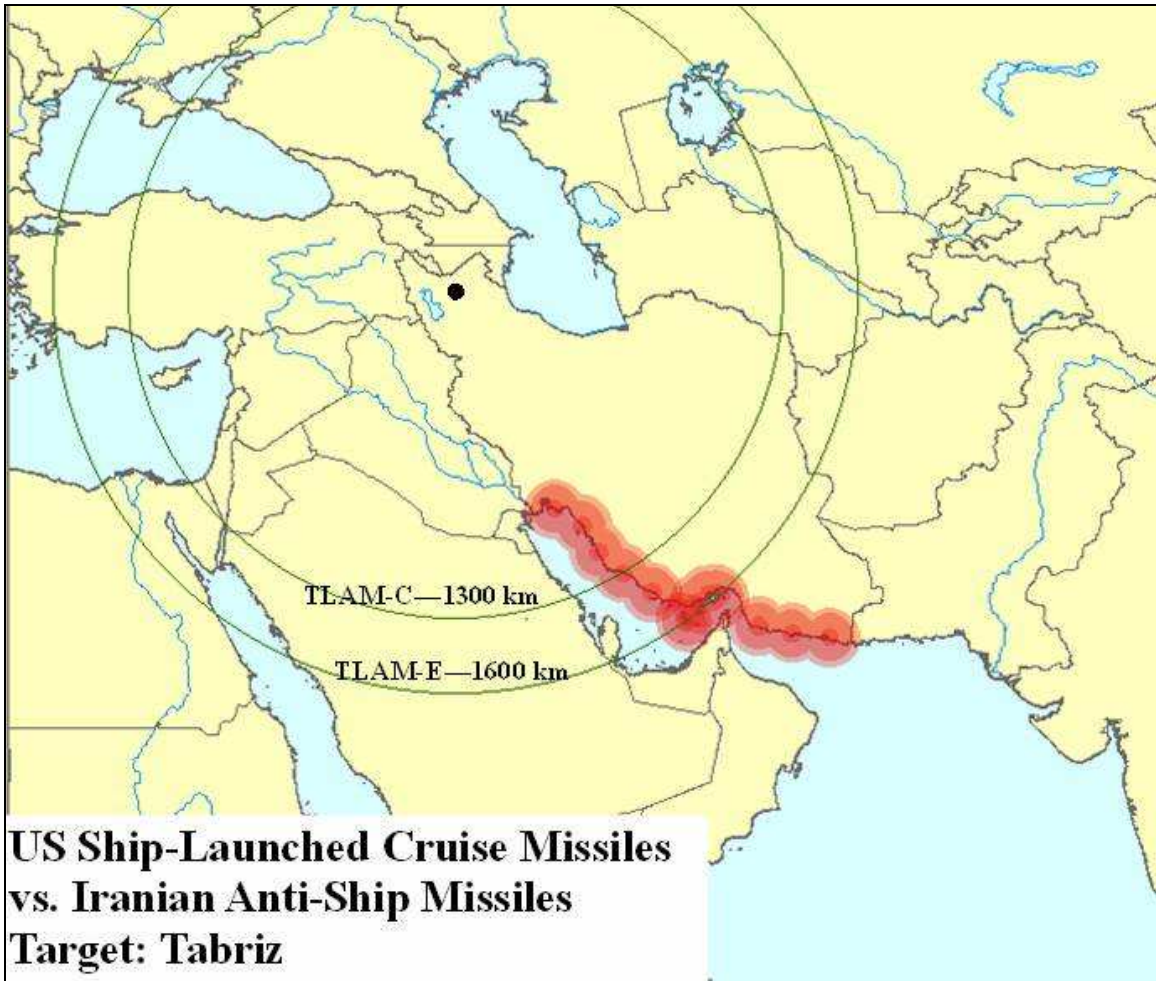


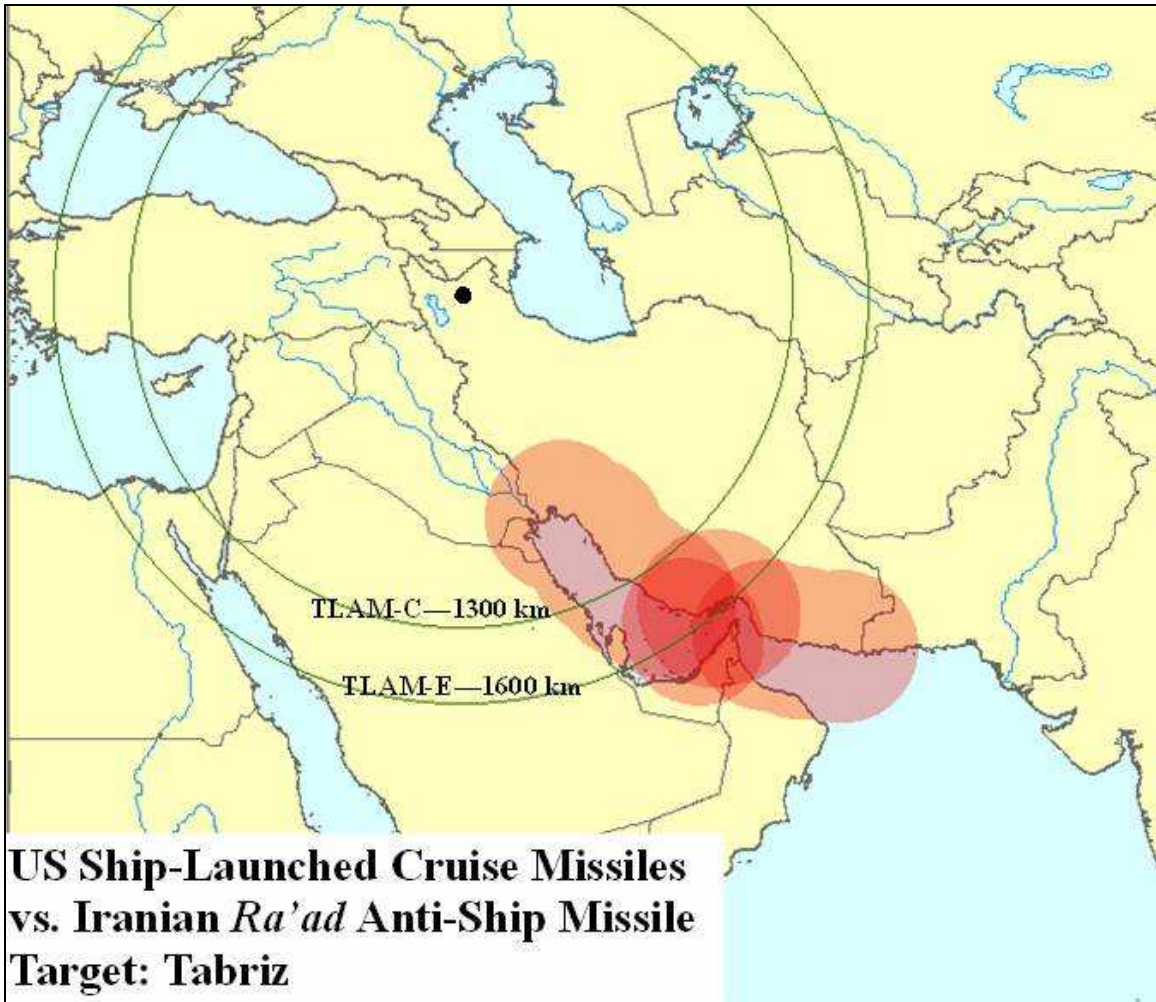


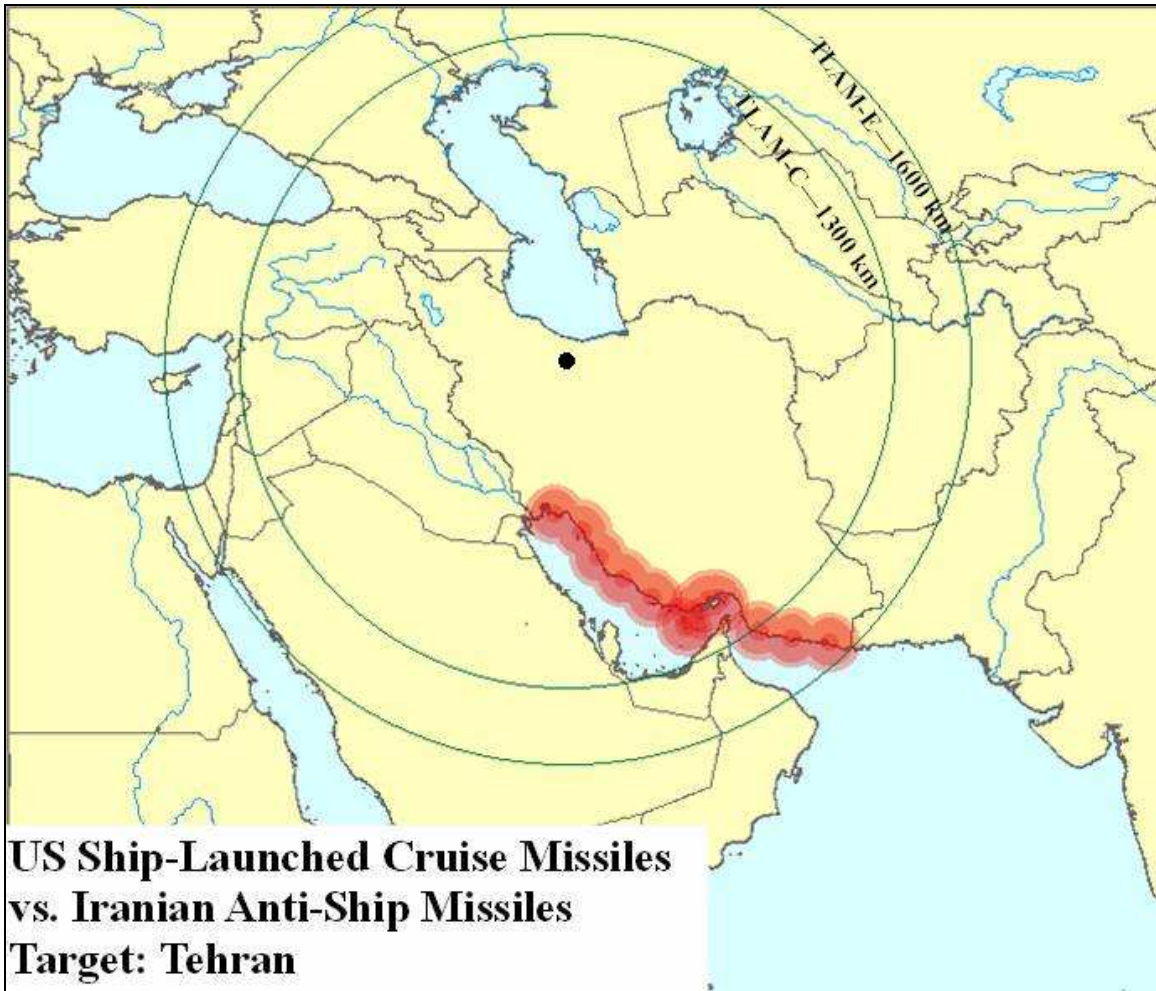
**US Ship-Launched Cruise Missiles
vs. Iranian Anti-Ship Missiles
Target: Mashad**

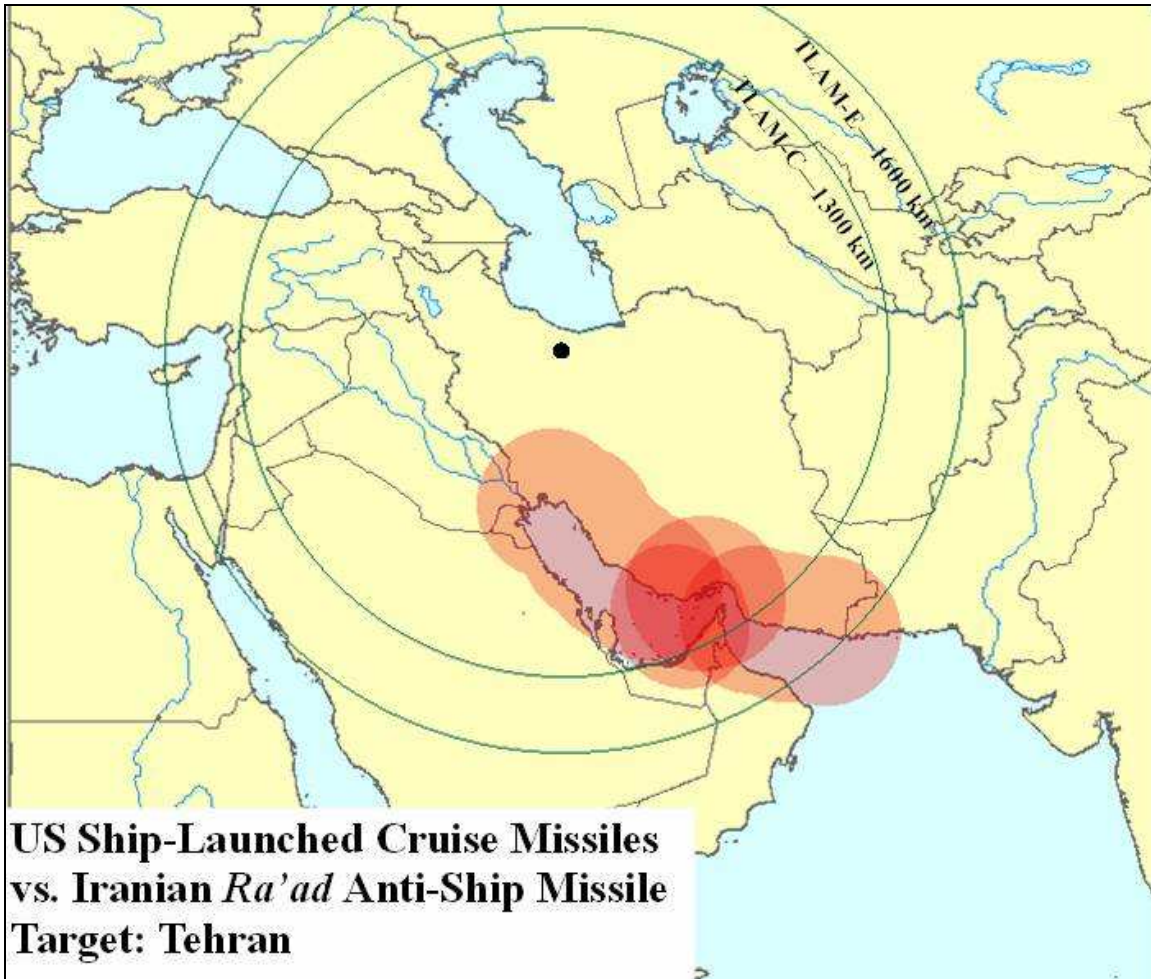


**US Ship-Launched Cruise Missiles
vs. Iranian *Ra'ad* Anti-Ship Missile
Target: Mashad**



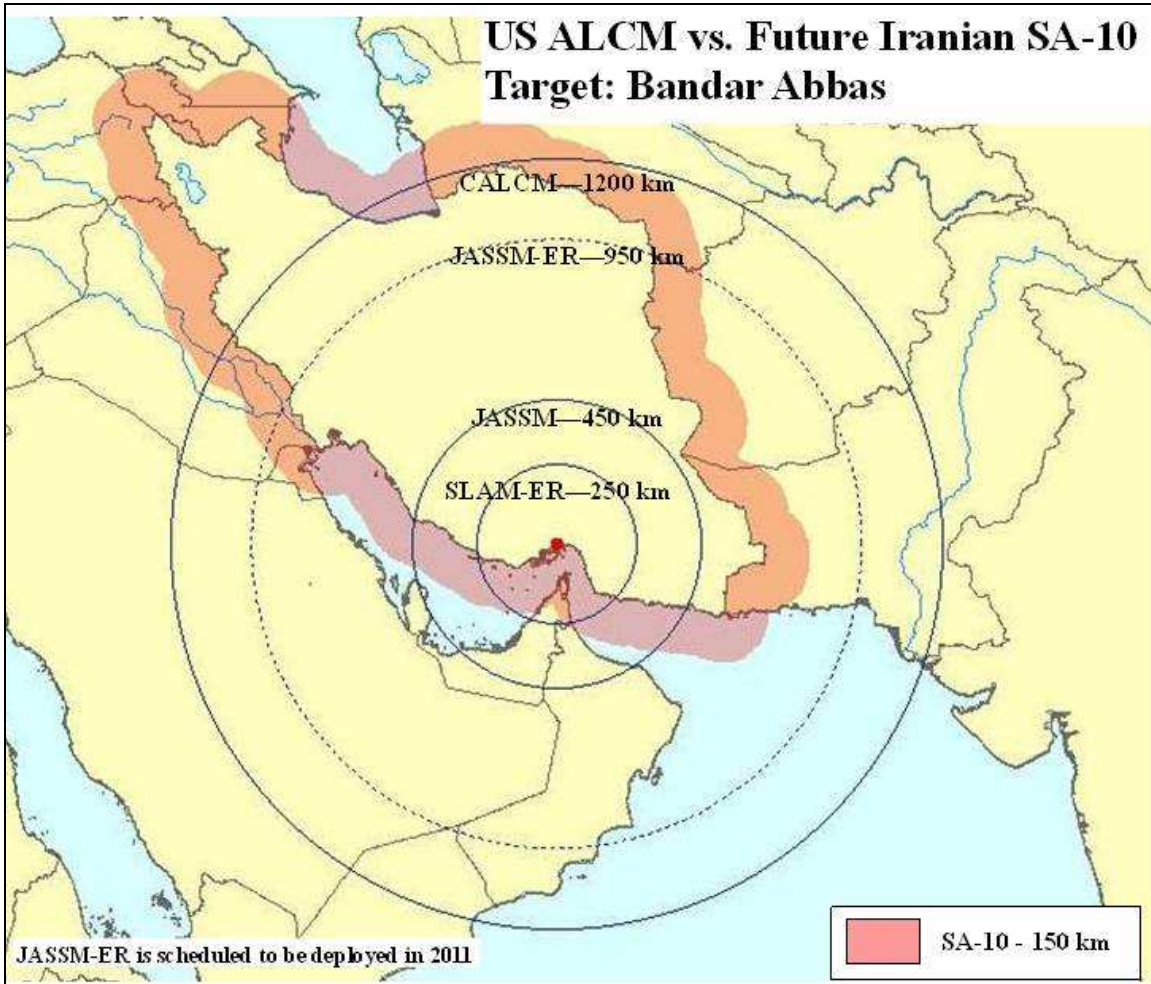




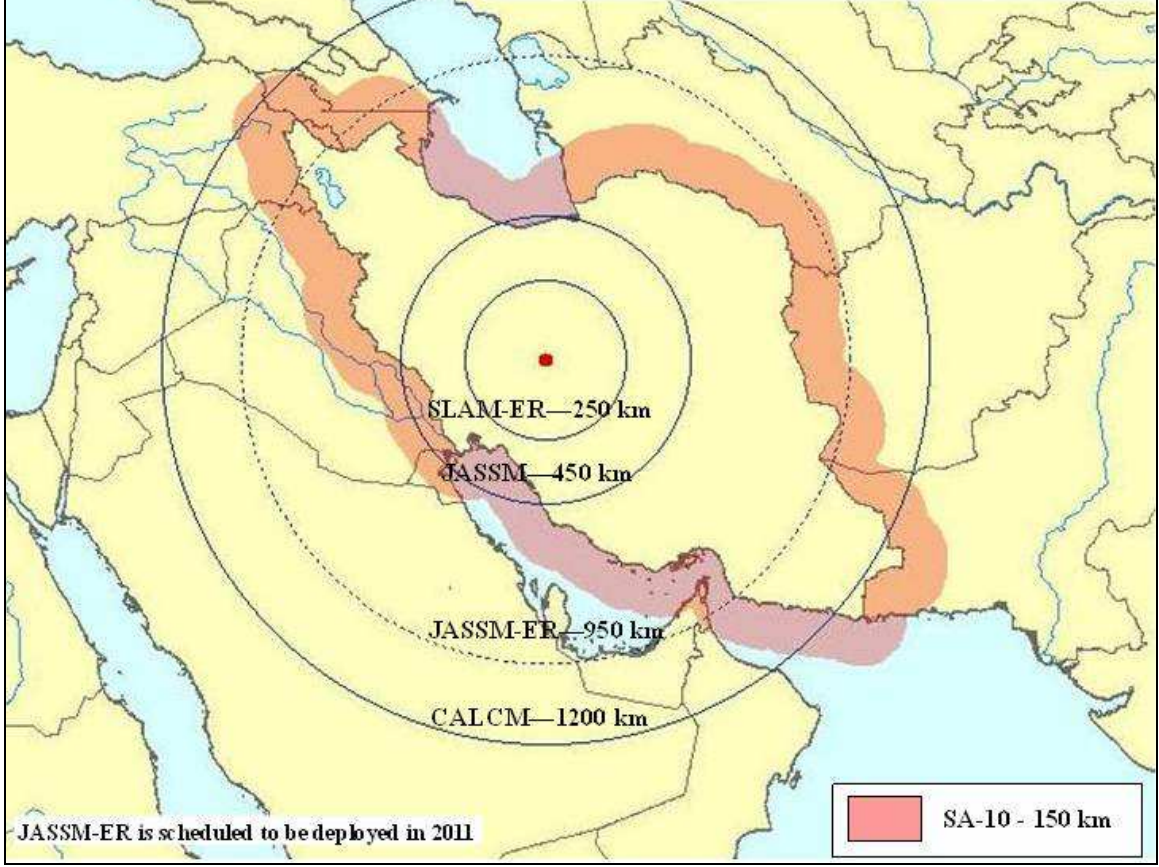


The issue of surface to air missiles (SAMs) against manned aviation is more complicated. While advanced SAMs inflicted major damage on the Israeli air force in the early phases of the 1973 war, the air battles over the Bekaa valley in 1985 showed that Israeli manned aviation was still dominant over Syrian air defenses. The Israeli air strike against the nuclear reactor in Syria in 2007 also indicated the continued ability of Israeli manned aviation to operate with impunity against Syrian air defenses. The success of the Israeli strike merits some reflections. SAMs deployed on a long term basis in the region have the advantage of being able to use land lines for data linking purposes, reducing the opportunities for offensive electronic warfare, unless combined arms tactics force SAM operators to use wireless data links among components of the system, making possible electronic warfare attacks on the portals for wireless data links. This balance is thus difficult to assess. Overall, trends in the range and density of SAMs in the region seem not to tell a conclusive story, but are of some interest. At the point at which countries in the region obtain long range SAMs that affect the ability of the United States to operate air-to-air refueling aircraft in secure rear areas, or to operate RC-135 or airborne warning and control system (AWACS) aircraft, the balance may change significantly. The trends also illustrate the difficulty of striking at certain targets deep within Iran if long range SAMs are deployed in a national perimeter defense system.

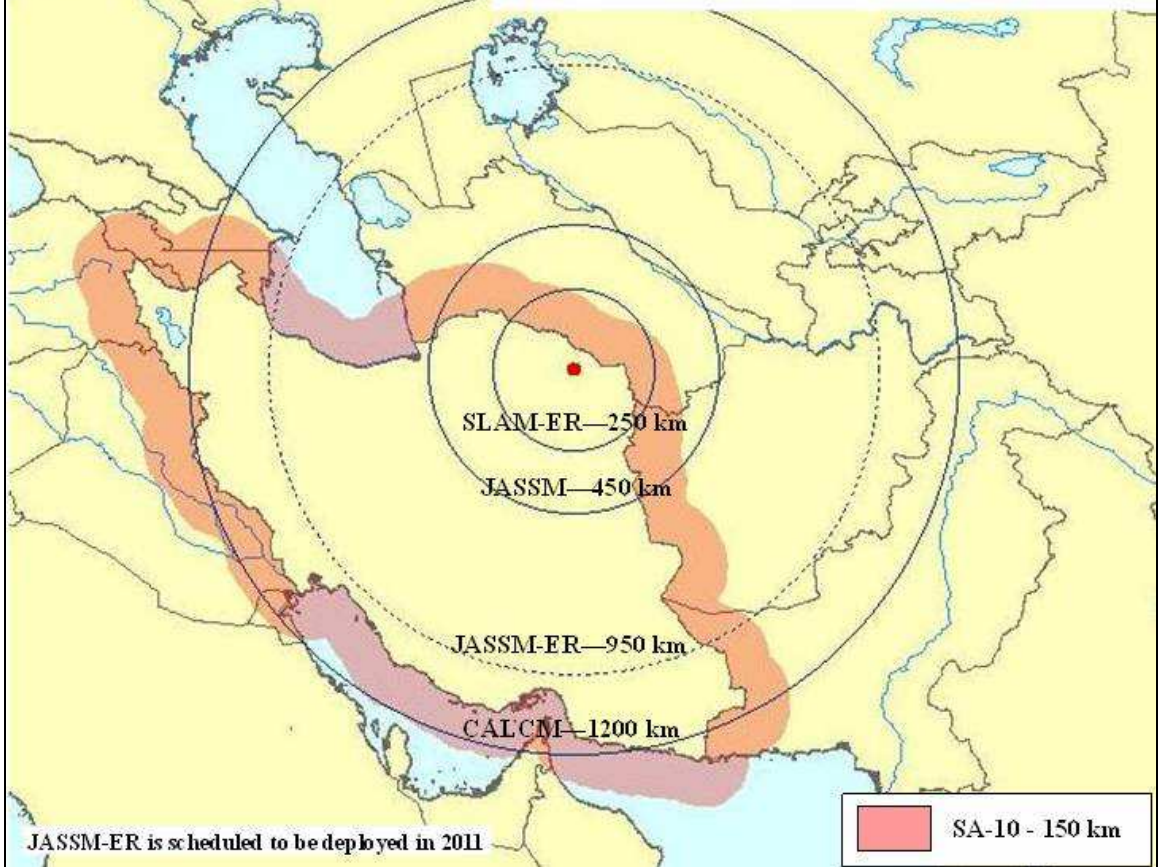
US ALCM vs. Future Iranian SA-10 Target: Bandar Abbas

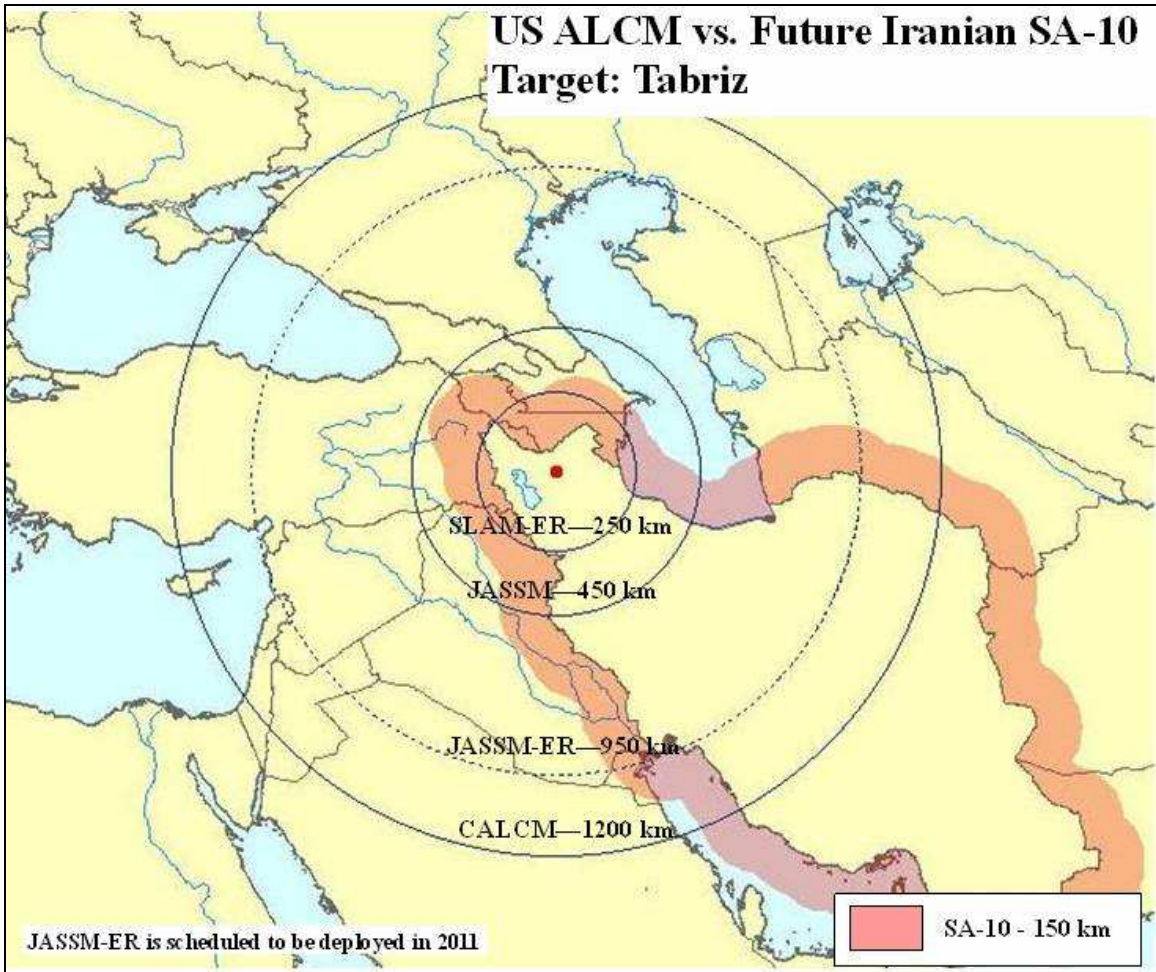


US ALCM vs. Future Iranian SA-10 Target: Esfahan

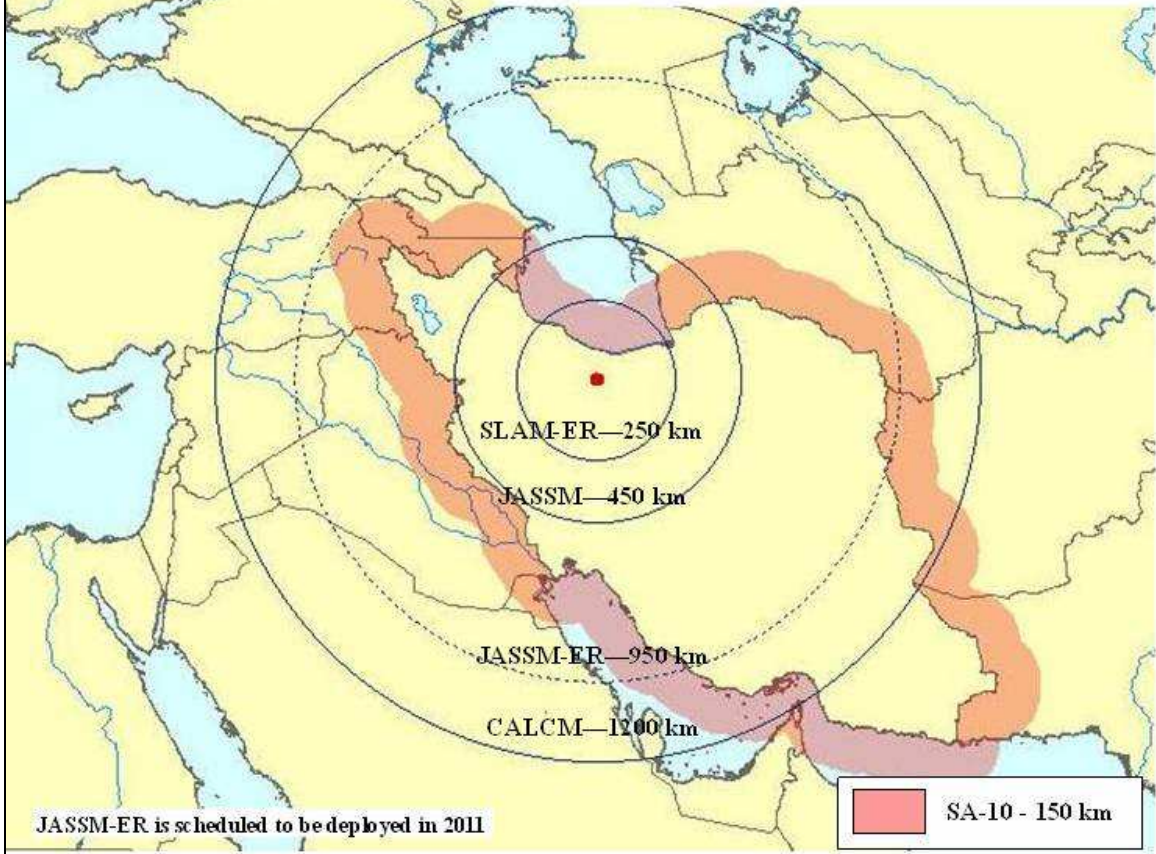


US ALCM vs. Future Iranian SA-10 Target: Mashad





US ALCM vs. Future Iranian SA-10 Target: Tehran



CONCLUSION

THE BALANCE: KEY QUESTIONS AND FACTORS

Given the preferred modes of warfare of each country, what would have to happen for each country to be able to fight the way it wanted to, and given the trends observable at the unclassified level, whose vision of future warfare is likely to prevail over the next five years?

THE FIRST HOURS

(b) (5)

[REDACTED]

(b) (5)

[REDACTED]

A final issue will be the shadow of Iranian nuclear weapons. If Iran is assessed as having some number of nuclear weapons and the means to deliver them, Israel will need to divert substantial military assets to monitor the status and movement of such weapons. This will impose significant virtual costs (b) (5)

[REDACTED]

THE LONGER WAR

Enemy stockpiles of accurate ballistic missiles will not be infinite. Damage to airfields will be repaired. American re-supply will be requested. To that extent, the balance can be expected to swing back to the Israelis after some days. Two factors may impede Israeli intra-war recovery from attack. First, if any long range precision-guided ballistic missiles survive and are withheld, they could have disproportionately large effects (b) (5)

Second, as the war goes on, the chances that Iran will begin to posture its ballistic missiles or aircraft in ways that suggest that it may be preparing for an attack on Israel may go up. If so, it is likely that (b) (5)

. If the United States becomes involved in a Middle East conflict because of a fear of Iranian use of nuclear weapons in an ongoing war, the virtual attrition imposed by Iranian nuclear weapons will also be significant. The dominant task of American ISR assets will be to monitor the status and location of Iranian nuclear weapons and delivery systems. (b) (5)

This may include the positioning of (b) (5) facilitate the defense of friendly nations against Iranian ballistic missile attack.

To the extent that Iran has precision guided anti-ship cruise missiles, the ability of the United States to provide the offensive air power necessary to deal with targets deep inside Iran from bases and ships in the region will be limited.

If China continues its incremental strategy of transferring anti-ship cruise missiles and communications and electronics warfare technology to Iran, the virtual costs imposed on the United States by the possibility of Iranian intervention in the war will further increase. These costs will be even larger in the event of deployments of small People's Liberation Army (PLA) elements to Iran.

IMPLICATIONS FOR THE UNITED STATES

The Middle East matters to the United States because countries in the region can amass power from their energy resources and use them in ways contrary to the interests of the United States. The sections above suggest that the United States will have greater difficulty affecting the outcome of wars waged by Iran and Hezbollah within the region. These difficulties derive from the vulnerability of regional bases from which the United States, Israel, or other friendly countries can operate tactical aviation. This vulnerability arises from the combination of long range precision guided weapons, large numbers of long range unguided weapons, shorter range precision guided weapons employed by irregular forces, and the indirect effects of Iranian nuclear weapons in diverting general purpose offensive and defensive forces.

To the extent that this analysis is accepted, it may be useful to consider a variety of potential American policy responses:

- (b) (5) [REDACTED].
- (b) (5) [REDACTED].
- (b) (5) [REDACTED].
- (b) (5) [REDACTED].
- (b) (5) [REDACTED].

The Middle East is also important to the United States because (b) (5) [REDACTED].

[REDACTED] China is one country that has been trying to increase its influence in the region, (b) (5) [REDACTED]. China has been increasing its influence by means of investments, trade, arms transfers, and transfers of dual use technology, and may in the future seek to increase its influence by deploying small elements of the PLA to countries in the region seeking to limit American influence. (b) (5) [REDACTED].

APPENDIX

DATA CHARTS

SYRIA 1991		
<i>Quantity</i>	<i>Type</i>	<i>Range</i>
10000	BM-21	45 km
120	FROG-7	70 km
36	SS-21	70 km
180	SCUD-B	300 km

SYRIA 2000		
<i>Quantity</i>	<i>Type</i>	<i>Range</i>
11200	BM-21	45 km
120	FROG-7	70 km
36	SS-21	70 km
200	SCUD-B	300 km
60	SCUD-C	500 km

SYRIA 2010		
<i>Quantity</i>	<i>Type</i>	<i>Range</i>
12000	BM-21	45 km
120	FROG-7	70 km
36	SS-21	70 km
320	SCUD-B	300 km
160	SCUD-C	500 km
80	SCUD-D	700 km

HEZBOLLAH 2000		
<i>Quantity</i>	<i>Type</i>	<i>Range</i>
"Thousands"	BM-21	45 km

HEZBOLLAH 2010		
<i>Quantity</i>	<i>Type</i>	<i>Range</i>
2000	BM-21	45 km
(Included in BM-21 total)	Fajr 3	45 km
(Included in BM-21 total)	Fajr 5	75 km
"Hundreds"	Fateh A-110	210 km
220 (A)	Zelzal-2	210 km
???? (B)	SCUD-B	300 km

(A) As of 2004, though many were destroyed in the 2006 conflict; more may have been supplied since then.

(B) The transfer of Syrian SCUDs to Hezbollah is still speculative, and there is no evidence of how many would have been transferred; however, it is likely to be a small amount, as Hezbollah would have difficulty hiding a significant number of SCUDs from Israeli detection

IRAN 1990		
<i>Quantity</i>	<i>Type</i>	<i>Range</i>
2600	BM-21 (& variants)	40 km
	Type 83 & Oghab	45 km
50	Nazeat	125 km
80	Shahab 1	300 km

IRAN 2000		
<i>Quantity</i>	<i>Type</i>	<i>Range</i>
6000	BM-21 (& variants)	45 km
	Type 83 & Oghab	45 km
	Fajr 3	45 km
50?	Nazeat	125 km
150	M7	150 km
	Zelzal-2	200 km
200	Shahab 1	300 km
>100	Shahab 2	500 km
20	Shahab 3	1300 km

IRAN 2010		
<i>Quantity</i>	<i>Type</i>	<i>Range</i>
6000	BM-21 (& variants)	45 km
10	Fajr 3	45 km
	Fajr 5	75 km
175	M7	150 km
	Zelzal-2	200 km
"Hundreds"	Fateh A-110	200 km
130	Shahab 1	300 km
170	Shahab 2	500 km
100	Shahab 3	1300 km
	Shahab 3A	2500 km
	Shahab 3B	2500 km
	Ghadr 1	2500 km

Israeli Air Bases
Hatzerim
Hatzor
Nevatim
Ovda
Palmachim
Ramat David
Ramon
Sedot Mikha
Tel Nof

Iranian Nuclear Facilities 2010	
Location	Type
Arak	Heavy Water Reactor
Ardakan	Uranium Ore Purification
Bonab	R&D
Bushehr	Light Water Nuclear Reactor
Chalus	Weapons Development Facility
Damarand	Plasma Physics Research
Darkhouin	Suspected Uranium Enrichment
Esfahan	Nuclear Research & UCF Facilities
Fasa	Uranium Conversion
Gorgan	R&D
Jabr Iban Hagan	R&D & Uranium Conversion
Karaj	Cyclon Acclerator Research
Khondab	Heavy Water Plant
Lashkar Abad	Uranium Enrichment
Mo-Allem Kalayeh	Suspected R&D
Narigan	Uranium Mine
Natanz	Uranium Enrichment
Qom	Uranium Enrichment
Ramandeh	Uranium Enrichment
Tabriz	R&D
Tehran (Atomic Energy of Iran)	R&D
Tehran (Kalaye Electric Enrichment)	R&D
Tehran (Nuclear Research Center)	R&D
Tehran (Sharif University)	R&D
Saghand	Uranium Mine
Yazd	Uranium Milling Plant
Zarigan	Uranium Mine

US Bases 1991	
Base	Country
Shaik Isa	Bahrain
Ahmed Al Jabr	Kuwait
Ali al Salem	Kuwait
Masirah	Oman
Masna'ah	Oman
Seeb IAP	Oman
Thumrait	Oman
Al Udeid	Qatar
Eskan Village	Saudi Arabia
Prince Sultan	Saudi Arabia
Incirlik	Turkey
Al Dhafra	UAE
Fujihara IAP	UAE

US Bases 2000	
Base	Country
Shaik Isa	Bahrain
Ahmed Al Jabr	Kuwait
Ali al Salem	Kuwait
Masirah	Oman
Masna'ah	Oman
Seeb IAP	Oman
Thumrait	Oman
Al Udeid	Qatar
Eskan Village	Saudi Arabia
Prince Sultan	Saudi Arabia
Incirlik	Turkey
Al Dhafra	UAE
Fujihara IAP	UAE

US Bases 2010	
<i>Active</i>	
Base	Country
Bagram	Afghanistan
Al Asad	Iraq
Ali	Iraq
Joint Base Balad	Iraq
Kirkuk	Iraq
Sather	Iraq
Incirlik	Turkey
<i>Inactive</i>	
Base	Country
Shaik Isa	Bahrain
Ahmed Al Jabr	Kuwait
Ali al Salem	Kuwait
Masirah	Oman
Masna'ah	Oman
Seeb IAP	Oman
Thumrait	Oman
Al Udeid	Qatar
Eskan Village	Saudi Arabia
Prince Sultan	Saudi Arabia
Al Dhafra	UAE
Fujihara IAP	UAE

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“The Middle East and North Africa,” *The Military Balance* 110, 1. The International Institute for Strategic Studies, 2010. 235-282.

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Given the scarcity of data, a few key assumptions were made concerning the Order of Battle for Syria’s missile force:

- For “the late 1980s,” Navias lists the number of Syrian launchers for FROG-7 (24) and SCUD-B (36) missiles, but then says that there are 300 FROG-7 and SCUD-B missiles in total; for 1991, the division of the 300 total into specific FROG-7 and SCUD-B totals is based on the proportion of FROG-7 launchers to SCUD-B launchers (4:6)
- The IISS data shows no change in the number of Syrian launchers for the FROG-7 and SS-21 missiles, but provides no totals for the actual number of missiles; as such, the number of missiles is also held constant from 1991 to 2010
- The number of SCUD-B and SCUD-C missiles in Syria’s arsenal in 2000 is taken from *Jane’s Strategic Weapons Systems*, which claims that these were Syria’s force levels in 2003; since *Jane’s* data for 2009 only lists an aggregate number for Syrian SCUD-B, SCUD-C, and SCUD-D missiles (550), this total is disaggregated on a ratio of 4:2:1 SCUD-B:SCUD-C:SCUD-D, based roughly on the ratio from the previously-cited 2003 data

Sources for Hezbollah Missiles:

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