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# **The Influence of Regional Military Threats on Israeli Security: Playing Three Dimensional Chess Without Rules**

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*The Growing Spectrum of Potential  
Threats --  
Coupled to Uncertain Probability and  
Scenario in Each Case*

## Potential Threats: “Paranoia” versus a “State of Siege”

- **Rising Threat from Iran**
- **Lebanon and Hezbollah**
- **Hamas and Palestinian Islamic Jihad**
- **Syria**
- **Al Qa’ida, wider threat of terrorism/extremism**
- **Egyptian and Jordanian instability**
- **Improvements in Saudi Capabilities**
- **Uncertain stability of Iraq**
- **Peace settlements/Palestinian statehood.**
- **Turkey’s alignments with Iran & Arab states**
- **Russian, Chinese, North Korean, (European?) arms transfers.**
- **Weapons of mass destruction. Weapons of Mass Effectiveness.**
- **Uncertain future level of US presence and power projection.**
- **Dependence on US transfers and aid.**
- **Impact of undeclared Israeli nuclear force.**

## **Changing Nature of Warfare Erodes Value of Israel's Conventional "Edge"**

- **1973 was last "conventional" war.**
- **1982 conflict classic illustration of the problem of stability operation and inability to create a stable end state.**
- **First missile attacks in 1991.**
- **Fighting with Hezbollah, Hamas, activists inconclusive.**
- **Paramilitary and non-military challenges to security system like "flotilla."**
- **War by arms transfer: Rockets, ATGMs, SHORADS, UCAVs, anti ship missiles,**
- **Now face full spectrum from indirect threats to WMD.**
- **Technology no longer provides the same "edge,"**
- **But poses a steadily growing and potentially existential threat.**
- **Spectrum keeps widening - "Hybrid Warfare"**
- **Threat of near parity in technology of friendly/stand-off states.**
- **Growing impact of information warfare**

# Deal With the Evolving Spectrum of Conflict

- Propaganda, intimidation, indirect threats.
- Non-state actors, proxy forces, wars of influence.
- Low to high intensity asymmetric warfare.
- Terrorism.
- Indirect attacks on peace partners, stability of key states.
- Selective conventional forces, mixed with asymmetric warfare.
- Passive-active threats or pressure on internal security.
- Loss of “edge:” real or perceived.
- Conventional warfare.
- Direct missile and WMD threats.
- Proxy, indirect/unclaimed, slow WMD attack.
- Arms and technology transfers.
- Peace process/Arms control
- Pressure/tensions with US and impact on military support.
- Budget, trade, economic impact.

## Human Factors

- **Uncertainty is real and constant.**
- **Threats are “now,” no way to safely prioritize or time. Strategic gives way to tactical; patience to expediency.**
- **Cannot predict stability in any aspect of environment.**
- **Conflicts over priorities, assessment of every aspect of threat.**
- **Political-military divisions coupled to fracture politics.**
- **No predictable scenarios, uncertain levels of escalation.**
- **Think tank problem: Ideological and political pressure**
- **Steadily less real-world contact with Arab world;**
- **Iran as a black box.**
- **Loss of European support.**
- **Relations with US; differing strategic and tactical priorities.**
- **Lack of political and social cohesion in Israel.**
- **Hypersensitivity to attacks and casualties.**

*“Hybrid Warfare”*

*Need for New Forms of Military  
Capability*

## **Israeli Forces and National Security Policy Must Deal with “Hybrid” Challenges**

- **Propaganda, intimidation, indirect threats.**
- **Non-state actors, proxy forces, wars of influence.**
- **Low to high intensity asymmetric warfare.**
- **Terrorism.**
- **Indirect attacks on peace partners, stability of key states.**
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## **Israeli Planning for Defense Against Asymmetric Warfare**

- **Maintain counterterrorism and conventional capability while add counter-asymmetric, and counter missile/WMD.**
- **Plan for spectrum of, retaliatory/deterrent/preventive attacks on Hezbollah, Lebanon, Syria, or Iran**
- **Deter/contain Gaza or seek a changed “End State?”**
- **Develop new emphasis on deterrence, passive defense, and conflict prevention areas critical as active defense:**
  - **New family of ant-rocket, missile defense system.**
- **Arab-Israeli peace can be a threat, source of security, or “same old, same old?”**

## **Impact of Weapons of Mass Destruction; Weapons of Mass Effectiveness**

- **Quasi existential threats in a casualty averse state.**
- **Challenges for force building, and predictable capabilities, with undeclared force.**
- **Can offset or end the impact of conventional “edge.”**
- **Prospects for serious arms race; cost and political impact.**
- **Diversity of nuclear, radiological, chemical, and biological threats.**
- **Matching diversity in threat delivery systems: Air, cruise, missile, sea, infiltration.**
- **New burden of civil and passive defense.**
- **Cost and effectiveness challenges of ATBMs and new demands on air defense systems.**
- **Strike periphery expands to Iran.**
- **Potential proliferation by non-threat states still a threat.**
- **Risk of truly smart cruise and ballistic attacks with conventional warheads.**

## **Adapt to Challenges Posed by Undeclared Israeli Nuclear Forces**

- **Constant target of “WMD Free Zone,” NNPT pressure.**
- **Problem for deterrence: How do potential threats appraise and “unknown” force.**
- **Potential stimulus to proliferation.**
- **US must ignore or distance itself.**
- **Cannot fully test; predict key aspects of capability.**
- **Cannot deter (or strike at?) non-state actors, covert or proxy attacks.**
- **Threshold questions if come under chemical and/or bio attack.**

*Country by Country:*

*Case Studies in Key Potential Threats*

## Rising Threat From Iran

- **Missiles, Chemical weapons, nuclear, (biological?)**
- **Manipulation of Lebanon and Hezbollah**
- **Manipulation of Hamas and Palestinian Islamic Jihad**
- **Links to Syria: ranging from Hezbollah to Latin America to nuclear**
- **Al Qa'ida, wider threat of terrorism/extremism**
- **Steady growth of asymmetric capabilities, impact of Al Quds force and ideological training.**
- **Use of arms transfers as a weapon.**
- **Uncertain degree to which Iran sees Israel as key threat and uses it as a proxy to defuse Arab concerns**
- **Uncertain stability of Iraq**
- **Impact on Turkey's alignments with Iran & Arab states**
- **Uncertainty over Russian, Chinese, North Korean, (European?) arms transfers; growth of Iran's military industries.**
- **Manipulation of "WMD free zone."**

## Hamas and Palestinian Islamic Jihad

- **Rearmed with “rockets, including new longer-range Iranian systems designed for movement through tunnels.**
- **Key threat of terrorism.**
- **Steadily more threatening control over Gaza.**
- **Coupled to corruption and incompetence of PA, threat to West Bank, and to a peace based on Palestinian statehood.**
- **Tied to Iranian arms suppliers, trainers as well as others.**
- **War by strategic communications; war by “flotilla.”**
- **Exploitation of humanitarian and “war crimes” issues.**
- **Problems for Egypt; challenge of Sinai security.**

## Iran and Hamas/Islamic Jihad

- **Iran openly supported Hamas and spoke out against the lack of support for Hamas by Arab regimes throughout the Middle East during engagements between the IAF and Hamas in late 2008 and early 2009 in Gaza.**
- **Iran provided training, arms and logistical support to Hamas during the fighting in Gaza between Israeli forces and Hamas militants in late December 2008 and early January 2009.**
- **Continued to fund Islamic Jihad, over which it has more direct influence and control,**
- **Israeli intelligence sources continued to report Iranian efforts to rearm Hamas after a ceasefire agreement was reached in January 2009.**
- **Has equipped Hamas and Islamic Jihad with long range rockets that can be broken down in to four units for transfer through tunnels. They now have a larger and more modern inventory than in “Gaza War.”**
- **Islamic Jihad fired rockets into Eilat and Aqaba in August 2000.**
- **Arms transfers come through Sudan and Sinai. Tunnels are key route.**
- **Level of Iranian financial support uncertain.**

*Source Multiple news outlets and Congressional reports and Intelligence assessments including: Kenneth Katzman, Iran: U.S. Concerns and Policy Responses, Congressional Research Service Report for Congress RL32048, April 14, 2009, available at: <http://www.fas.org/sgp/crs/mideast/RL32048.pdf>; Alon Ben-David, “Iranian influence looms as fragile Gaza ceasefire holds,” Jane’s Defence Weekly, 22 January 2009; Mike Shuster, “Iranian Support For Hamas Running High Post-Gaza,” NPR, available at: 4 February 2009, available at: <http://www.npr.org/templates/run downs/run down.php?prgId=3>; The Israel Project, “Hezbollah, Hamas Rearm as Israel Works to Resume Peace Process,” press release, February 22, 2007, available at: [www.theisraelproject.org/site/apps/nl/content2.asp?c=hsJPK0PIJpH&b=689705&ct=3601455](http://www.theisraelproject.org/site/apps/nl/content2.asp?c=hsJPK0PIJpH&b=689705&ct=3601455); etc.*

## **Uncertain Cost-Benefits of Peace Settlements/Palestinian Statehood**

**Successful peace offers great potential benefits but a peace also creates new risks:**

- **New internal security challenges; problems in Palestinian sovereignty.**
- **Level of demilitarization, control of air space.**
- **Challenge from Israeli, Palestinian, and other extremists.**
- **Syrian pressure, use of Lebanon and Hezbollah if Golan not included.**
- **Uncertain future of Palestinian Authority; replacement by more hostile government.**
- **Clashes between Gaza and West Bank.**
- **Challenge of providing economic stability for Palestinians.**
- **Impact on stability of Jordan.**
- **Impact of Palestinian refugees excluded from “right of return.”**

## Lebanon and Hezbollah

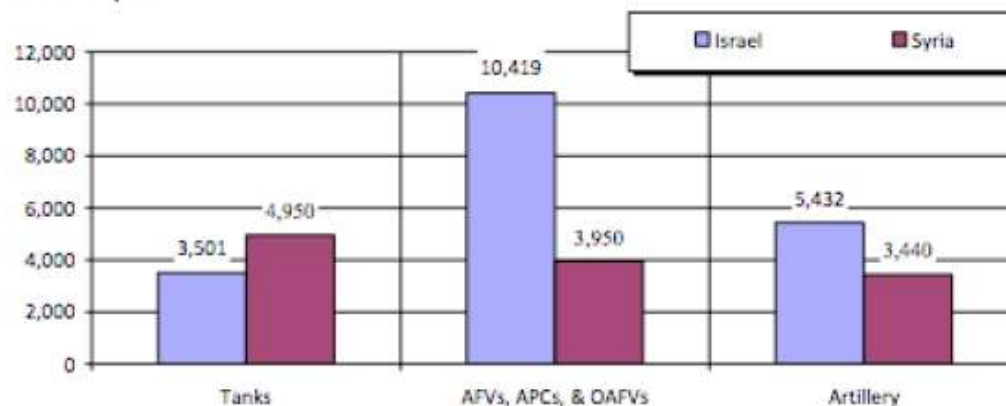
- **No foreseeable political stability.**
- **Rearmed Hezbollah with “40,000 rockets,” Scuds?, new family of ATGMs and SHORADs.**
- **Major new Hezbollah facilities and C4I/BM systems.**
- **Lebanese Army emerging as possible threat.**
- **Failure of UN to limit arms flows.**
- **Major reassertion of Syrian role.**
- **Iran present at some level, training of Hezbollah.**
- **Proxy use of elements of Hezbollah?**
- **Links of Hamas, PIJ**
- **Some elements of Al Qa’ida range of Sunni extremists.**
- **No clear end state from any IDF action.**

## Syria

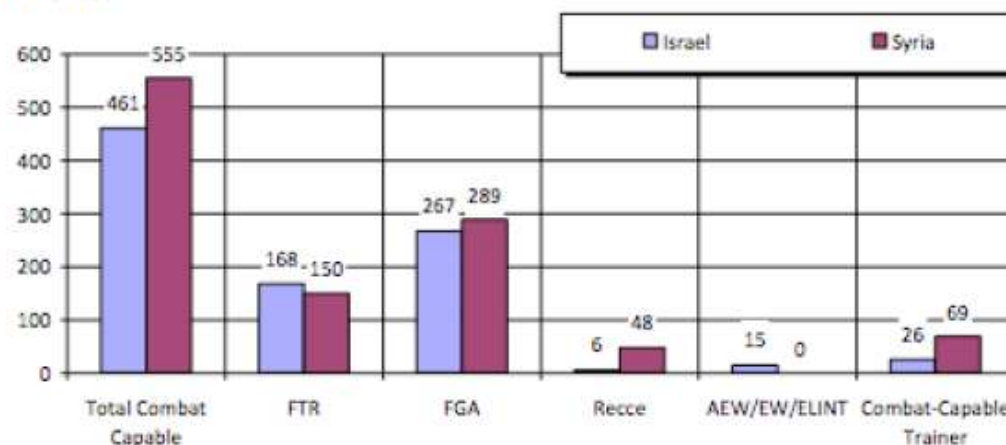
- **Joined with Iran in proxy war in Lebanon; Major reassertion of influence.**
  - **Can raise the ante by increasing quality of weapons transfer.**
  - **Pressure on Lebanese Army.**
- **Can threaten Golan without moving.**
- **Iran, (Iraq?), Lebanon: “Shi’ite crescent”.**
- **Nuclear attempt; missile and chemical reality. Bio?**
- **Weak and obsolescent conventional forces could shift rapidly with major Russian transfers of aircraft and S-300/S400.**
- **Hamas, PIJ.**
- **Impact on Iraq.**

# Quality is Critical but Numbers Still Matter: Israeli versus Syrian Operational Force Strength; 2010

Land Weapons



Air Forces



Note: Israeli AEW/EW/ELINT include 6 Phalcon B-707, 1 Gulfstream G550 Eitam with 2 more on order, 6 RC-12 D Recce, 3 B-707 ELINT/ECM, 3 Gulfstream G-500 Shavit and 2 EC-130H AEW. Syrian combat-capable trainers include 40 L-39 Albatros, 6 MFI-17, 20 MIG-21U, 6MIG-23UM and 2 MIG-25U. Total air forces include operational fixed-wing combat and combat-capable aircraft, including fighters, attack, fighter-attack, and combat-capable reconnaissance and training aircraft.

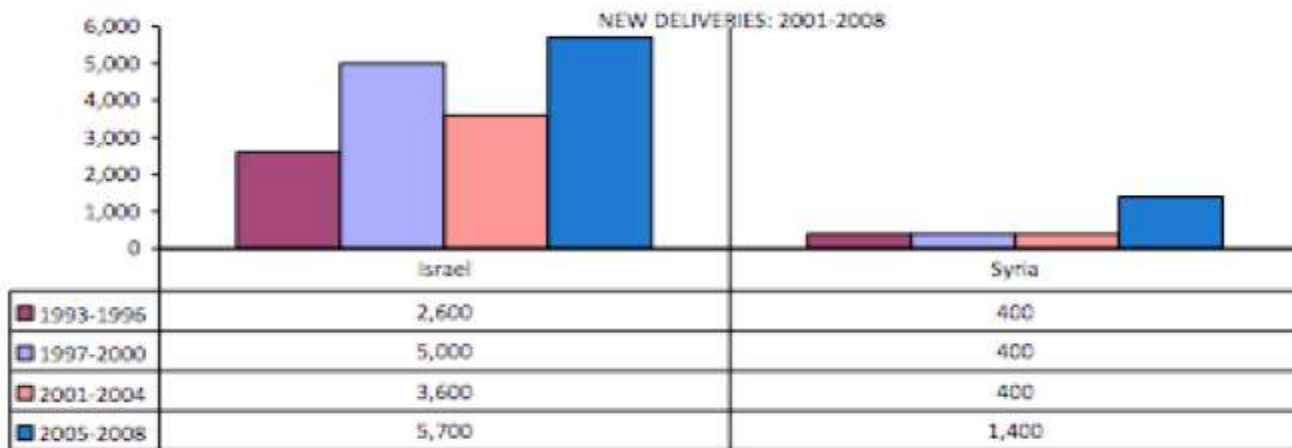
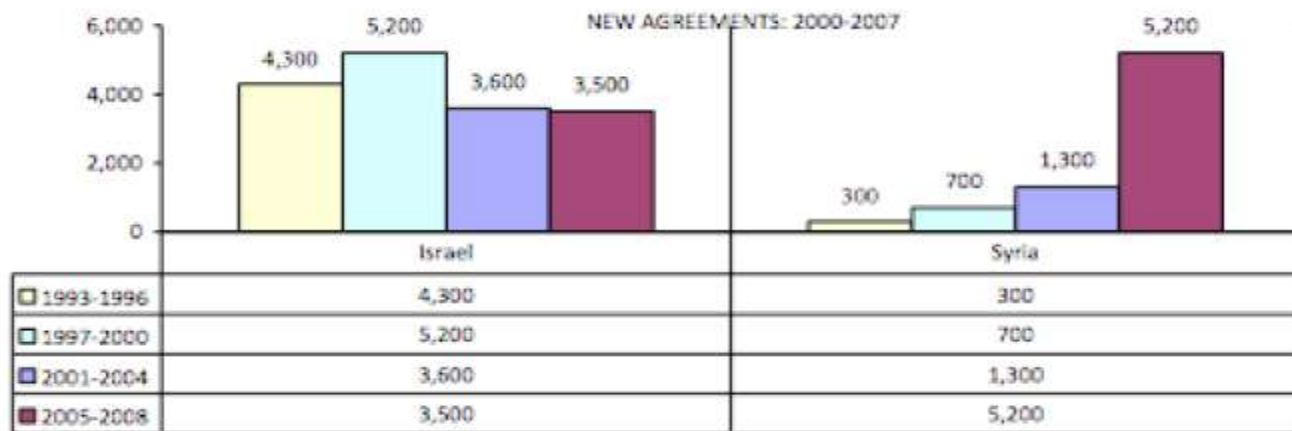
Source: Adapted by Anthony H. Cordesman and Aram Nerguizian from data provided by U.S. experts, and the IISS, *The Military Balance*, various editions.

# Israel Does, However, Have a Critical Lead in Quality and Quantity of Arms Imports: 1993-2008

**Israel**

**Syria**

(\$U.S. Current Millions)

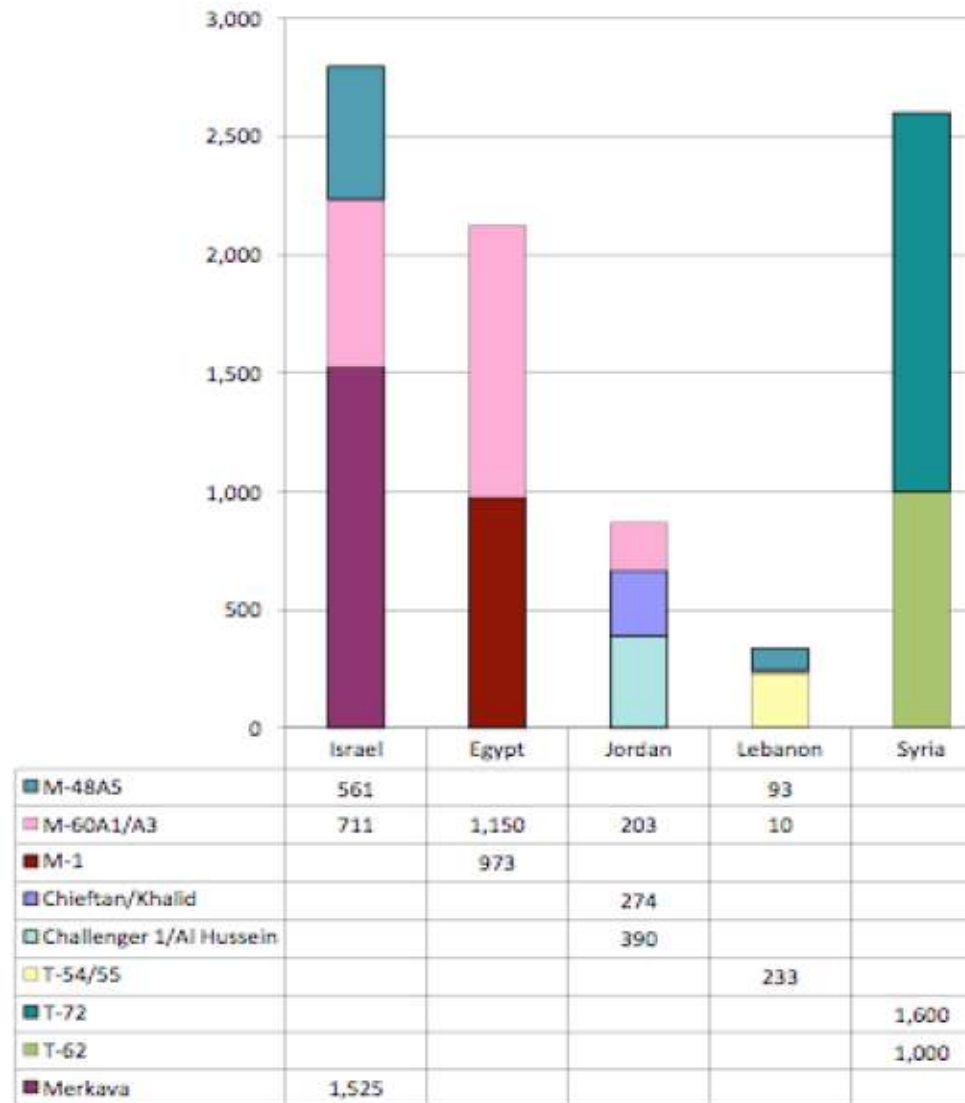


Source: Richard F. Grimmett, *Conventional Arms Transfers to the Developing Nations*, Congressional Research Service, various editions.

## **Egyptian and Jordanian Instability**

- **Should not exaggerate risks, but,**
  - **Potential succession crisis in Egypt and instability in Jordan.**
  - **Advanced weapons transfers to both states could become a potential threat.**
- **Both states already caught up in Israeli-Palestinian tensions; possible backlash effects if peace talks fail, new cycle of violence.**
- **Egyptian military forces now far more modern and capable than Syria.**
- **Jordanian security and stability critical to security of West Bank and any Israeli-Palestinian peace settlement.**
-

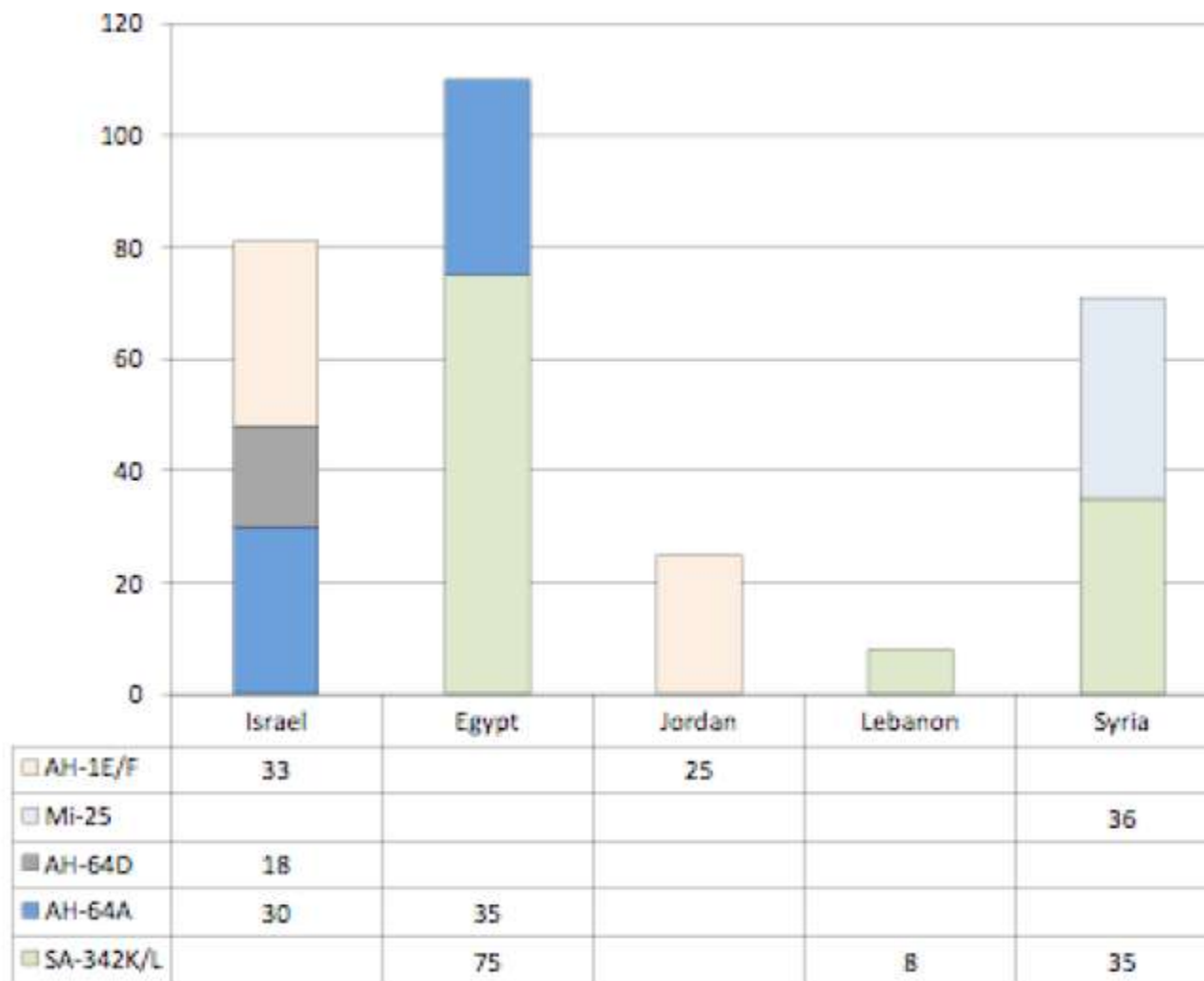
# Who Has Force Quality: Arab-Israeli Tanks by Type: 2010



Note: The totals exclude large numbers of older vehicles that are in storage or are fixed in place. In 2010, these include 500 T-62 and 840 T-54/55 for Egypt, 111 Magach-7, 261 Ti-67, 206 Centurion, 561 M-48A5 and 126 T-54 for Israel, 292 Tarik and 23 M-47/M-48A5 for Jordan and 2,250 T-54/55 for Syria. All of Lebanon's holdings are included, and there is no confirmation on their operational status.

# Who Has Force Quality: Arab-Israeli Attack Helicopters by Type: 2010

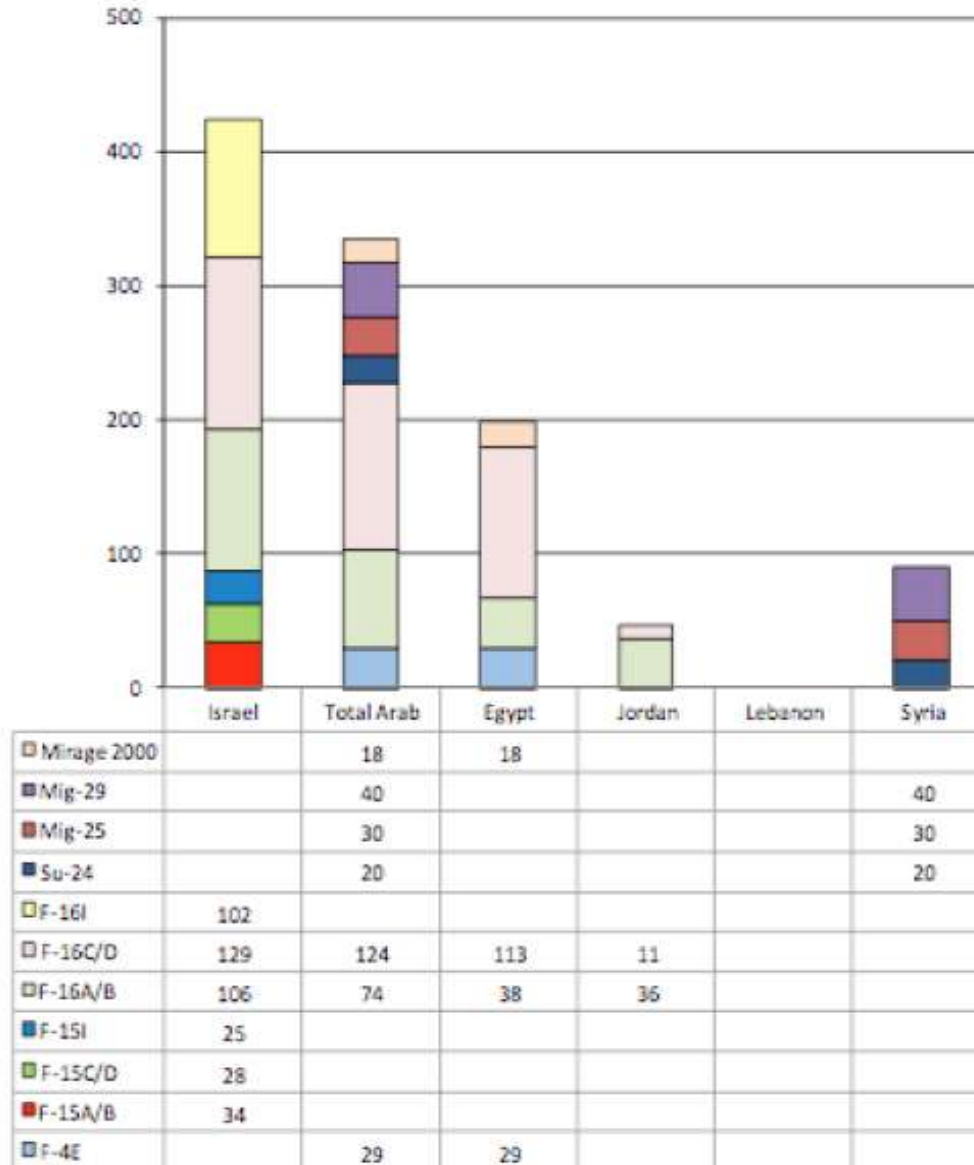
(Does not include antisubmarine warfare or antiship helicopters)



Source: Prepared by Anthony H. Cordesman and Aram Nerguizian based upon the IISS, *The Military Balance*, and discussions with U.S. and regional experts.

# Who Has Force Quality: Arab-Israeli High Quality Combat Aircraft by Type: 2010

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



## **Al Qa'ida, Wider Threat of Terrorism/Extremism**

- **Dual role of Hamas, PIJ, and other Palestinian groups -- potential ability to push them into conflict.**
- **Forces Israeli military and internal security efforts to deal with additional potential threat.**
- **Pressure on Egypt, Jordan, and in Sinai. Recent rocket attacks.**
- **Key security issues in any peace settlement; spoiler role.**
- **Use of anger against Israel in propaganda to manipulate Arab/Islamic support, public opinion, attack friendly and stand-aside Arab regimes.**
- **No fixed presence to attack; no limits on potential extremism in use of violence.**
- **Mid to long term threat to secular Arab states.**
- **Alliances of expediency with Iran.**

## Turkey's Alignments with Iran & Arab States

**Should not exaggerate or prejudge risks, but:**

- **Longer-term legacy of the “Flotilla Crisis.”**

**Turkish military losing leverage; promotion cycle for military intelligence now far more controlled by government.**

- **Uncertain goals of moderate Islamic government affected by popular views, and national interest in trade and influence in Arab world, Iran Iraq, and rest of Gulf.**
- **Potential loss of exercise and training opportunities.**
- **Competition with Turkey for US influence, support?**
- **Longer term impact of Turkish ties to Syria.**
- **Erosion of US and NATO position in Turkey?**

## Improvements in Saudi Capabilities

### Positives

- **Common interest in deterring/controlling Iran.**
- **Saudi ties to US military supply and advice offer far more security than shift to European or other Non-US suppliers.**
- **Saudi peace proposal offers opportunity for the future.**
- **Saudi Arabia strong force in counterterrorism, limiting Al Qa'ida.**
- **Saudi/GCC missile and other defenses also benefit Israel.**

### Risks

- **Future succession may change attitudes.**
- **Saudi pressure on US over peace process.**
- **Stronger Saudi forces could present some increase in future threat over next 5-10 years.**

## Uncertain Stability of Iraq

- **No way to predict future attitudes of Iraqi government over at least the next decade.**
- **Iranian influence over Iraq could pose major threat: “The Shi’ite (Iran, Iraq, Syria, Lebanon) crescent.**
- **US failure to create an effective strategic partnership could have major impact on US role in Gulf, and perception by moderate Arab states of cost-benefit in ties to Iran.**
- **Potential new problems with arms flows, support of Hezbollah.**
- **A divided Iraq with ongoing Sunni insurgency could create far more serious Sunni extremist threat in area.**
- **Kurdish problem in Iraq could impact on Turkey, push Turkey to work with Syria and/or Iran to limit Kurdish “independence.”**

## **Russian, Chinese, North Korean, (European?) Arms Transfers**

- **Key source of any major shift in conventional balance, loss of Israeli “edge.”**
- **North Korean transfer of nuclear and missile technology.**
- **Russian fighters (China in future) only practical way for Iran and Syria to modernize.**
- **Transfers of S300/S400 or Chinese equivalent only way to modernize Iranian and Syrian land-based air defenses.**
- **Possible upgrades to aircraft, tanks, radars, IS&R, and battle management systems can offset wear and obsolescence, and effectively upgrade major weapons platforms.**
- **Even limited transfers of more advanced anti-ship missiles, MANPADs/SHORADs, ATGMs, rockets and SSMs can have a major impact increasing threat from Hezbollah, Hamas, PIJ.**
- **Impact on Iran’s industrial base.**

# Dependence on US Transfers and Aid

**Advantages vastly outweigh costs, but:**

- **Any dependence involves some risk; trust is a justifiable issue get the past.**
- **Paranoia sometimes does take over from real risks.**
- **Pushes into peace talks, concessions with Palestinians, links to 1967 boundaries.**
- **Some restrictions on arms sales.**
- **Problem of adjusting to US strategic interest with Arab states.**
- **Problem of constant lobbying effort for aid and high technology sales and transfers.**
- **Growing Uncertainty over future US role and force strength in Middle East and Gulf.**

## *Competition with Iran:*

# *The Conventional-Asymmetric Threat*

## **Most Likely Iranian Threats Are Not Formal Conflicts**

- **Direct and indirect threats of using force. (I.e. Iranian efforts at proliferation)**
- **Use of irregular forces and asymmetric attacks.**
- **Proxy conflicts using terrorist or extremist movements or exploiting internal sectarian, ethnic, tribal, dynastic, regional tensions.**
- **Arms transfers, training in host country, use of covert elements like Al Quds force.**
- **Harassment and attrition through low level attacks, clashes, incidents.**
- **Limited, demonstrative attacks to increase risk, intimidation.**
- **Strike at critical node or infrastructure.**

# Iran: Threat or “Competitor”

## Non-Military Competition

- *Ideology, religion, and political systems*
- *“Terrorism” and violent extremism vs. “counterterrorism”*
- *Energy, sanctions, and global economic impacts*
- *Arms control, arms exports, and arms imports*
- *International diplomacy*

## Military Competition

- *Weapons of mass destruction*
- *Conventional forces*
- *Asymmetric and irregular warfare*
- *Proxy use of state and non-state actors*
- *Threat and intimidation*

## Nations and Sub-Regions of Competition

- *Gulf Cooperation Council countries*
- *Yemen*
- *Iraq*
- *Jordan*
- *Syria*
- *Lebanon*
- *Israel*
- *Gaza and West Bank*
- *Morocco*
- *Pakistan*
- *Turkey*
- *Afghanistan*
- *Central Asia*
- *Europe*
- *Russia*
- *China*
- *Japan and Asia*
- *Venezuela, Cuba, Brazil, Argentina*

# The Broader Patterns in Iranian Activity

Iranian Actors	Related States/ Non-State Actors	Key Target/Operating Country
Revolutionary Guards	Iran	Iraq
Al Quds force	Syria	Israel
Vevak/other intelligence	Hezbollah	Gaza/West Bank
Arms transfers	Hamas	Egypt
Military and security advisors	Mahdi Army	Kuwait
Clerics, pilgrims, shrines	Yemeni Shi'ites	Bahrain
Commercial training	Bahraini Shi'ites	Yemen
Finance/investment	Saudi Shi'ites	Lebanon
Investment/training companies		Afghanistan
Education: scholarships, teachers		Venezuela
Cultural exchanges		Morocco
Athletic visits		

## Iranian Asymmetric Doctrine

- **Iran sends signals about its use of asymmetric warfare through its military parades and exercises.**
- **The IRGC often claims to conduct very large exercises, sometimes with 100,000 men or more. The exact size of such exercises is unclear, but they are often a fraction of IRGC claims.**
- **By displaying both its real and virtual military (e.g. naval) fighting capabilities through electronic, printed and network media, and through official statements, Iran seek to achieve the following politico-diplomatic and propaganda ends (4Ds):**
  - **Defiance (to maintain a course of resistance, targeting primarily the Western political will and system).**
  - **Deception (on the real state of Iranian warfighting capabilities, targeting the Western military establishments).**
  - **Deterrence (with the IRI military “might”, targeting Western public opinion, delivered through the media).**
  - **Demonstration (of the outreach of its own power, targeting the Iranian people and the Moslem world).**

## **“Going Nuclear:” Intimidation as a Form of Terrorism and Asymmetric Warfare**

- **Even the search for nuclear power is enough to have a major effect.**
- **Development of long range missiles add to credibility, and pressure.**
- **Crossing the nuclear threshold in terms of the bomb in the basement option.**
- **Threats to Israel legitimize the capability to tacitly threaten Arab states. Support of Hamas and Hezbollah increase legitimacy in Arab eyes -- at least Arab publics.**
- **Many future options: stockpile low enriched material and disperse centrifuges, plutonium reactor, underground test, actual production, arm missiles, breakout arming of missiles.**
- **Declared forces, undeclared forces, lever Israeli/US/Arab fears.**

## **“Going Asymmetric:” Substituting Asymmetric Forces for Weak Conventional Forces**

- **Combined nuclear and asymmetric efforts sharply reduce need for modern conventional forces -- which have less practical value**
- **Linkages to Syria, Lebanon, other states, and anti-state actors like Hamas and Hezbollah add to ability to deter and intimidate/lever.**
- **Can exploit fragility of Gulf, world dependence on oil exports, GCC dependence on income and imports.**
- **Threats to Israel again legitimize the capability to tacitly threaten Arab states.**

## Some Tangible Examples

- **Iranian tanker war with Iraq**
  - **Oil spills and floating mines in Gulf.**
  - **Libyan “stealth” mining of Red Sea.**
  - **Use of Quds force in Iraq. Iranian use of UAVs. Border and coastal “incidents.”**
  - **Arms transfers, in cooperation with Syria, to Hezbollah.**
  - **“Incidents” in pilgrimage in Makkah.**
  - **Support of Shi’ite groups in Bahrain.**
  - **Missile and space tests; expanding range of missile programs (future nuclear test?).**
  - **Naval guards seizure of British boat, confrontation with US Navy, exercises in Gulf.**
  - **Development of limited “close the Gulf” capability.**
  - **Flow of illegals and smuggling across Yemeni border.**
  - **Hamas/PIJ arms transfer and their rocket attacks on Eilat, Aqaba.**
- In August 2010**

## **The Islamic Revolutionary Guards Corps**

- **125,000+, drawing on 1,000,000 Basij.**

**IRGC air branch reported to fly UAVs and UCAVs, and control Iran's strategic missile force.**

- **1 Shahab SRBM Bde (300-500-700 km) with 12-18 launchers, 1 Shahab 3 IRBM Btn (1,200-1,280 km) with 6 launchers and 4 missiles each.**
- **20,000 Naval Guards, including 5,000 marines.**
  - **Armed with HY-3 CSS-C-3 Seersucker (6-12 launchers, 100 missiles, 95-100 km), 10 Houdong missile patrol boats with C-802s (120 km), 50+ Iranian patrol boat (some with missiles) and 40+ Boghammers/high speed small craft with ATGMs, recoilless rifles, machine guns.**
  - **Large-scale mine warfare capability using small craft and commercial boats.**
  - **Based at Bandar e-Abbas, Khorramshar, Larak, Abu Musa, Al Farsiya, Halul, Sirri.**

## IRGC Commander and Asymmetric Strategy - I

- **On September 1, 2007, Khamenei promoted Mohammad Ali Jafari, then coordinator of the IRGC Research and Command Center, to the rank of major general and the post of commander in chief of the IRGC.**
- **Throughout his military career Jafari has emphasized asymmetrical warfare and developing Iran's ballistic missile capabilities throughout his military career**
- **In 1992, he was appointed commander of the ground forces. One of the tasks he carried out in this capacity was "to study and assess the strengths and weaknesses of America [as reflected] in its attacks on Afghanistan and Iraq."**
- **Jafari has outlined the strategy he means to promote as IRGC commander, reiterating his commitment to developing Iran's ballistic missile capabilities and the asymmetrical warfare capacities of the IRGC:**
  - **Asymmetrical warfare... is [our] strategy for dealing with the considerable capabilities of the enemy. A prominent example of this kind of warfare was [the tactics employed by Hizbullah during] the Lebanon war in 2006... Since the enemy has considerable technological abilities, and since we are still at a disadvantage in comparison, despite the progress we have made in the area of equipment, [our only] way to confront [the enemy] successfully is to adopt the strategy [of asymmetric warfare] and to employ various methods of this kind."**

## IRGC Commander and Asymmetric Strategy - II

• **IRGC commander Mohammad Ali Aziz Jafari statements on asymmetric strategy continued:**

- **Jafari has said in the past that, in the case of a confrontation with the West, Iran will be willing to employ the organizations under its influence. In a January 2005 speech to intelligence commanders from the Basij and IRGC, Jafari - then commander of the ground forces - stated: "In addition to its own capabilities, Iran also has excellent deterrence capabilities outside its [own borders], and if necessary it will utilize them."**
- **"the Revolutionary Guards [Corps] will invest efforts in strengthening its asymmetrical warfare capabilities, with the aim of successfully confronting the enemies."**
- **"After September 11, [2001], all [IRGC] forces changed their [mode of] operation, placing emphasis on attaining combat readiness. The first step [towards achieving] this goal was to develop [a strategy] of asymmetrical warfare and to hold maneuvers [in order to practice it]."**

## The Al Quds Force - I

- Comprised of 5,000 - 15,000 members of the IRGC (Increased size of force in 2007)
- Equivalent of one Special Forces division, plus additional smaller units
- Special priority in terms of training and equipment
- Plays a major role in giving Iran the ability to conduct unconventional warfare overseas using various foreign movements as proxies
- Specialize in unconventional warfare mission
- Control many of Iran's training camps for unconventional warfare, extremists, and terrorists
- Has offices or "sections" in many Iranian embassies throughout the world
- Through its Quds Force, Iran provides aid to Palestinian terrorist groups such as Hamas, Lebanese Hezbollah, Iraq-based militants, and Taliban fighters in Afghanistan.
- Despite its pledge to support the stabilization of Iraq, Iranian authorities continued to provide lethal support, including weapons, training, funding, and guidance through its Quds Force.
- General David H. Petraeus has stressed the growing role of the Quds force and IRGC in statements and testimony to Congress.

## The Al Quds Force - II

- Quds Force continue to provide Iraqi and Afghani militants with:
  - specialized training,
  - funding,
  - Iranian-produced advanced rockets,
  - sniper rifles,
  - automatic weapons,
  - mortars,
  - Improvised Explosive Devices (IEDs)
  - and explosively formed projectiles (EFPs) that have a higher lethality rate than other types of IEDs
- Since 2006, Iran has arranged a number of shipments of small arms and associated ammunition, rocket propelled grenades, mortar rounds, 107mm rockets, and plastic explosives, possibly including man-portable air defense systems (MANPADs), to the Taliban.
- Israeli defense experts continue to state that they believe the IRGC and Quds force not only played a major role in training and equipping Hezbollah, but may have assisted it during the Israeli-Hezbollah War in 2006, and played a major role in the Hezbollah anti-ship missile attack on an Israeli Navy Sa'ar-class missile patrol boat.

## Iran and Hezbollah - I

- Hezbollah was originally formed in 1982 by Iranian seminarians.
- Iran's aid packages (arms and money) to Hezbollah are said to exceed \$100 million per year.
- Iran has gone from supplying small arms, short-range missiles and training to providing more sophisticated long-range missiles and other higher-end weaponry
  - Iran exported thousands of 122-mm rockets and Fajr-4 and Fajr-5 long-range rockets to Hezbollah in Lebanon, including the Arash with a range of 21–29 kilometers.
  - Between 1992 and 2005, Hezbollah received approximately 11,500 missiles and rockets; 400 short- and medium-range pieces of artillery; and Aresh, Nuri, and Hadid rockets and transporters/launchers from Iran.
  - In 2005, Iran sent Hezbollah a shipment of large Uqab missiles with 333-millimeter warheads and an enormous supply of SA-7 and C-802 missiles, two of which were used in an attack on an Israeli ship.
- Iran also supplied Hezbollah with an unknown number of UAVs, the *Mirsad*, that Hezbollah briefly flew over the Israel-Lebanon border on November 7, 2004, and April 11, 2005; at least three were shot down by Israel during the summer 2006 war.
- Iran supplied Hezbollah advanced surface-to-air missiles, including Strela-2/2M, Strela-3, Igla-1E, and the Mithaq-1. The same missiles were reported to have been used to target Israeli helicopters.

## Iran and Hezbollah - II

- **During Hezbollah's summer 2006 war with Israel, Iran resupplied the group's depleted weapons stocks.**
- **Hezbollah has recovered from its 2006 confrontation with Israel and has been able to rearm and regroup, and Iran has been an important part of that recovery.**
  - **Various Types of Rockets, reportedly increasing its stockpile to 27,000 rockets, more than double what Hezbollah had at the start of the 2006 war. (some say 40,000)**
  - **Among the deliveries were 500 Iranian-made "Zelzal" (Earthquake) missiles with a range of 186 miles, enough to reach Tel Aviv from south Lebanon.**
  - **Reports of Scud transfer unconfirmed.**
  - **Much better C4I/BM and sheltered positions now in middle of country.**
- **Fighting in Lebanon in 2006 seems to have increased Hezbollah's dependence on Iran and Syria. Both Hezbollah's loss of weapons and fighters in the conflict with Israel and the resulting damage to its reputation and position within Lebanon made it more reliant upon outside supply.**
- **Iran seems to directly control some small Hezbollah cells outside Lebanon.**
- **Elements of Hezbollah planned attacks in Egyptian Sinai; operate in Iraq.**

*Source Multiple news outlets and Congressional reports and Intelligence assessments including: "Israel's Peres Says Iran Arming Hizbollah." Reuters, February 4, 2002; Kenneth Katzman, Iran: U.S. Concerns and Policy Responses, Congressional Research Service Report for Congress RL32048, April 14, 2009, available at: <http://www.fas.org/sgp/crs/mideast/RL32048.pdf>; Robin Hughes, "Iran Answers Hizbollah Call for SAM Systems," Jane's Defence Weekly, August 7, 2006, available at: [www.janes.com/defence/news/jdw/jdw060807\\_1\\_n.shtml](http://www.janes.com/defence/news/jdw/jdw060807_1_n.shtml); Rotella, Sebastian. "In Lebanon, Hezbollah Arms Stockpile Bigger, Deadlier." Los Angeles Times, May 4, 2008; Shadid, Anthony. "Armed With Iran's Millions, Fighters Turn to Rebuilding." Washington Post, August 16, 2006; MEMRI, "Iran and the Recent Escalation on Israel's Borders Reaction in Iran, Lebanon, and Syria," Special Dispatch Series no. 1207, July 17, 2006, available at: [www.memri.org/bin/articles.cgi?Page=archives&Area=sd&ID=SP120706](http://www.memri.org/bin/articles.cgi?Page=archives&Area=sd&ID=SP120706); Ali Nouri Zadeh, "130 Officers from the Iranian Revolutionary Guard Corps and Quds Force Aid Hezbollah: 11,500 Missiles and Rocket-Propelled Grenades Sent from Tehran to Hezbollah," Asharq Al-Awsat, July 16, 2006, available at: [www.aawsat.com/details.asp?section=4&issue=10092&article=373305&search=C802&state=true](http://www.aawsat.com/details.asp?section=4&issue=10092&article=373305&search=C802&state=true); "New Iranian capability is troublesome," The Washington Times, 19 February 2009; The Israel Project, "Hezbollah, Hamas Rearm as Israel Works to Resume Peace Process," press release, February 22, 2007, available at: [www.theisraelproject.org/site/apps/nl/content2.asp?c=hsJPK0PIJpH&b=689705&ct=3601455](http://www.theisraelproject.org/site/apps/nl/content2.asp?c=hsJPK0PIJpH&b=689705&ct=3601455)., etc.*

## Iran and Hamas/Islamic Jihad

- **Iran openly supported Hamas and spoke out against the lack of support for Hamas by Arab regimes throughout the Middle East during engagements between the IAF and Hamas in late 2008 and early 2009 in Gaza.**
- **Iran provided training, arms and logistical support to Hamas during the fighting in Gaza between Israeli forces and Hamas militants in late December 2008 and early January 2009.**
- **Continued to fund Islamic Jihad, over which it has more direct influence and control,**
- **Israeli intelligence sources continued to report Iranian efforts to rearm Hamas after a ceasefire agreement was reached in January 2009.**
- **Has equipped Hamas and Islamic Jihad with long range rockets that can be broken down in to four units for transfer through tunnels. They now have a larger and more modern inventory than in “Gaza War.”**
- **Islamic Jihad fired rockets into Eilat and Aqaba in August 2000.**
- **Arms transfers come through Sudan and Sinai. Tunnels are key route.**
- **Level of Iranian financial support uncertain.**

*Source Multiple news outlets and Congressional reports and Intelligence assessments including: Kenneth Katzman, Iran: U.S. Concerns and Policy Responses, Congressional Research Service Report for Congress RL32048, April 14, 2009, available at: <http://www.fas.org/sgp/crs/mideast/RL32048.pdf>; Alon Ben-David, “Iranian influence looms as fragile Gaza ceasefire holds,” Jane’s Defence Weekly, 22 January 2009; Mike Shuster, “Iranian Support For Hamas Running High Post-Gaza,” NPR, available at: 4 February 2009, available at: <http://www.npr.org/templates/rundowns/rundown.php?prgId=3>; The Israel Project, “Hezbollah, Hamas Rearm as Israel Works to Resume Peace Process,” press release, February 22, 2007, available at: [www.theisraelproject.org/site/apps/nl/content2.asp?c=hsJPK0PIJpH&b=689705&ct=3601455](http://www.theisraelproject.org/site/apps/nl/content2.asp?c=hsJPK0PIJpH&b=689705&ct=3601455); etc.*

*Competition with Iran :*

*The Missile Threat*

# What Is The WMD/Missile Threat?

- **Intimidation and Deterrence?**
- **Test, development, rolling future threat?**
- **Conventional Warhead, Uncertain Reliability, Poor CEP/Accuracy?**
- **Conventional Warhead, High accuracy, maneuvering capability?**
- **Chemical Warhead?**
- **Possible nuclear warhead?**
- **Tested Nuclear warhead?**
- **Ballistic + cruise threat?**
- **Volley or Limited Rate/numbers?**
- **Sheltered or mobile basing?**
- **Launch on warning (LOW), Launch under attack (LUA)?**
- **Biological - now, future genetic engineering?**
- **Proliferation by additional powers: Egypt, Saudi Arabia?**

# “Guesstimated” Iranian Missile Ranges



# **Future Capabilities : Progress and Obstacles**

## **Liquid Propellant**

- **Some future advances will be governed by the fact that Iran will have to produce liquid propellant engines “in house”**
- **Fully functional Shahab-3 and Ghadr-1 require at least 3 to 5 years of prep and testing**
- **Performance analysis in the Shahab missiles compared to the Scuds previously acquired from the Soviet Union show a continued dependence on design and implementation with the Soviet framework.**
- **Speculation of foreign support in the form of technical assistance suggests that Iran may be able to establish a stand alone liquid-propellant engine production line of its own in the near future**

## **Solid Propellant**

- **Iran has established a series of licensed solid-propellant production lines**
- **2 years or more for a functional Solid- propellant rocket**
- **These facilities have demonstrated the ability to develop rocket motors to be used potentially on the Sajjil-2 missile**
- **However much of the Iranian knowledge in dealing with design and implementation of these solid-propellant missiles depends much on the technical aid of Chinese experts, Iran is still between 2 to 3 years away from developing a stand-alone program**

## **Guidance Systems**

- **While Iran still must import complete guidance units for its missiles, evidence indicates Iran has the know-how to assemble basic units and modify them successfully to outfit custom missiles**
- **Minor improvements such as more robust GPS receivers to enhance accuracy**
- **Ability to incorporate Iranian created guidance packages (excluding actual units) improving inertial navigation units**
- **Provides short term advantages**
- **However, needs precise thrust terminations. Post Boost control systems**
- **Without these, Iranian missile accuracy will still fail to improve significantly**

## Future Capabilities : Potential Outcomes

Iran still has to rely heavily on Foreign technical assistance (Russia and China) in developing Liquid-Propellant engines, and both of these countries are starting to adhere more closely to Missile Technology Control Regime guidelines. This will force Iran to rely more on its own technology and industrial base and/or less capable North Korean technology..

•As Iran seeks to develop missiles with a longer range, quicker set up and reaction times, and more reliability it will probably shift to solid fuel. It may develop and strengthen the Sajjil-2 or modify the Safir satellite launcher for military use. Iran has the ability, availability of resources, and expertise to implement this process.

•Implementing some TBM countermeasures seems likely.

•Effective cluster and CBW warheads are possible.

•Improved accuracy is uncertain without new technologies.

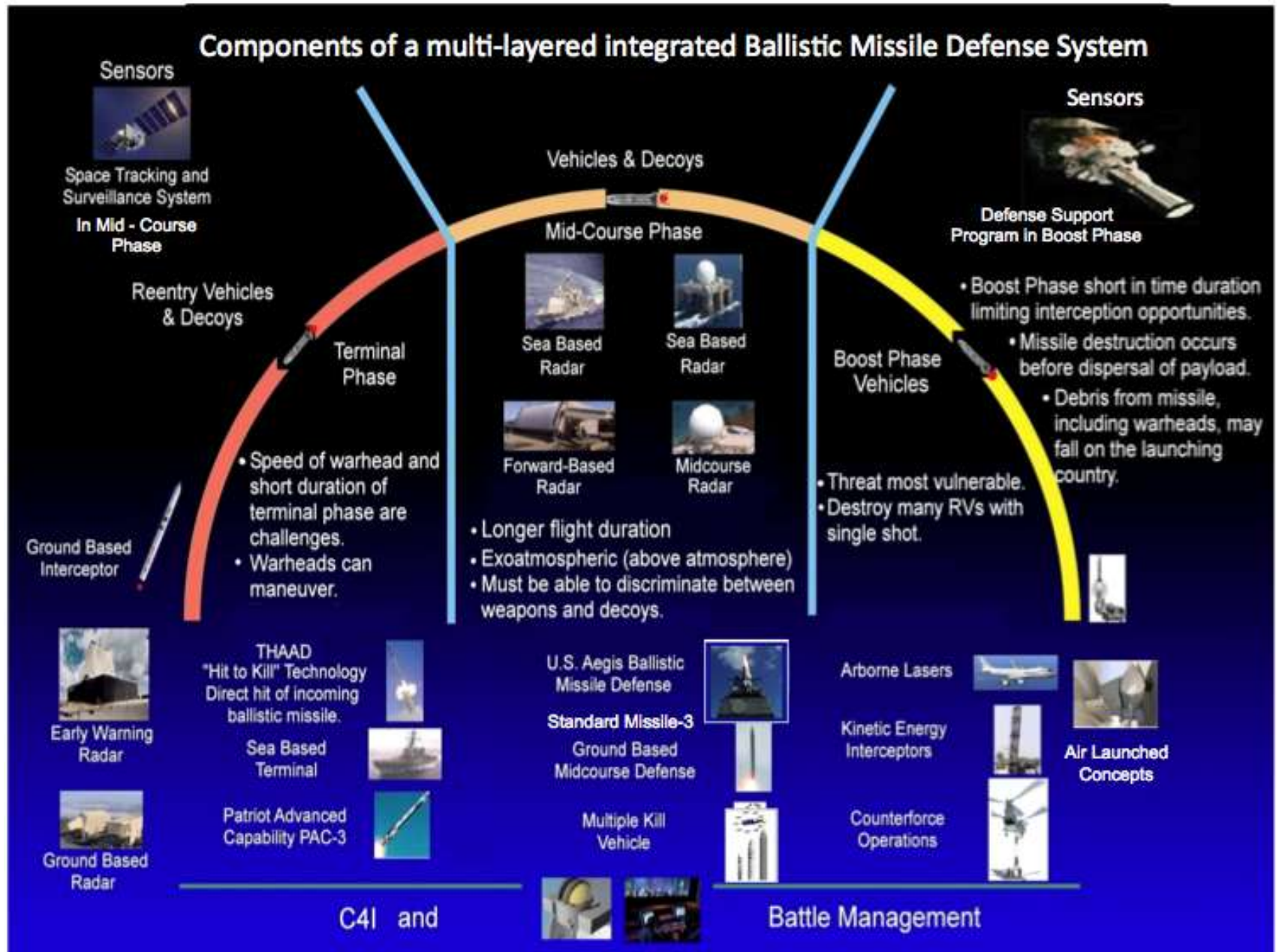
•Would require a far more intensive testing program to have credible reliability for longer range systems.

•Reports of terminal guidance capabilities seem doubtful through mid-term.

•Important caveats

- Still necessary to engage in multiple testing phases
- Acquisition of tracking and telemetry systems that can be deployed on sea-based platforms
- Tehran would have to develop and implement reliable technologies for all forms of advanced warheads that could withstand shock and re-enter the atmosphere

# Gulf Integrated Missile Defenses



# *Competition with Iran :*

## *The WMD Threat*

# Nuclear Uncertainty

- **Must plan to deal with possible Iranian force with unknown weapons characteristics, delivery systems, basing, and timelines.**
  - **Technology base now exists, enrichment to fissile levels is only limiting factor.**
- **Already a key factor in Iranian capability to conduct “wars of intimidation.”**
- **Clear Iran proceeding with extensive ballistic missile program regardless of whether it pursues the nuclear option.**
- **Cannot predict timeframe for nuclear threat. Worst case is 2009, but could well be 2015.**
  - **Break out, bomb in basement, tested, deployed, serious numbers, mobile, sheltered, LUA/LOW? Fission, boosted, thermonuclear?**
- **Chemical and biological options as well.**

## Strike on Iran?

- **Timelines: Acquisition? Deployment? Modernization?**
- **Targeting intelligence?**
- **Dispersal, hardening, concealment?**
- **Hardening vs. Attack Lethality**
- **SEAD: Penetration? Suppression? Kill?**
- **Range-payload, refuel, recovery**
- **Restrike? Penetration corridor enforcement?**
- **LOW? LUA? Covert?**

## Post-Strike on Iran/ Parallel Iranian Options

- **IR-2, IR-3, IR-3 “cooled,” IR-4**
- **Folded centrifuge**
- **Concealed heavy water reactor**
- **LWR cannibalization**
- **LWR download**
- **Dirty weapons**
- **Basic biological**
- **Genetic engineered weapons**

# How Much is Enough?

## Amount of Fissile Material Need to Build a Basic Fission (Non-Boosted) Weapon

### Highly Enriched Uranium

#### HEU (90% U-235)

Simple gun-type weapon	90-110 lbs/40-50 kg
Simple implosion weapon	33lbs/15 kg
Sophisticated implosion weapon	20-26lbs/9-12kg

### Weapons Grade Plutonium

Simple implosion weapon	14lbs/6 kg
Sophisticated implosion weapon	4.5-9lbs/2-4 kg

*Extract from the unclassified estimates in Union of Concerned Scientists, "Preventing Nuclear Terrorism Fact Sheet," April 2004, and work by Abdullah Toucan*

300 miles  
500 km

TURKEY

TURKMENISTAN

CASPIAN SEA

Lashkar A'bad

Tehran

Sites circled in red  
unknown pre-mid 2002

IRAQ

Arak

Isfahan

Natanz

IRAN

Saghand

Ardekan

AFGHANISTAN

MIDDLE EAST

- MW Megawatts
- Uranium processing facility
- Uranium mines
- Heavy-water facility
- Research reactors / research facilities
- Uranium enrichment facility
- Light-water reactor (under construction)

KUWAIT

1000 MW

Bushehr

SAUDI ARABIA

BAHRAIN

QATAR

PAKISTAN

Gachin

Gulf of Oman

Vehicle Entrance Ramp  
(before burial)

Bunkered underground  
production halls

Admin/engineering  
office area

*DigitalGlobe Quickbird commercial satellite image*

20 SEP 02

Vehicle Entrance Ramp  
(after burial)

Bunkered underground  
Centrifuge cascade halls

Helicopter  
pads

New security  
wall

Dummy building  
concealing tunnel  
entrance ramp

Admin/engineering  
office area

*DigitalGlobe Quickbird commercial satellite image*

21 JUL 04

## Seeking Effective Concealment



## Images of Qom



*The Potential Israeli-Iranian  
Nuclear  
Missile Arms Race*

## Guesstimates of Israel's Nuclear Forces

- **Israel almost certainly has a significant, if undeclared, inventory of nuclear weapons.**
- **Reports were manufactured at the Negev Nuclear Research Center, outside the town of Dimona.**
- **Based on estimates of the plutonium production capacity of the Dimona reactor, Israel has approximately 100-200 advanced nuclear explosive devices but such estimates are based on nominal production figures and very uncertain estimates of the material required for a given number of nuclear weapons. They do not address yield, design, or the mix of fission, boosted, and thermonuclear weapons,**
- **Global Security estimates that the total could be as high as 375 to 500 weapons. No reliable unclassified data on Israel mix of nuclear weapons, but Israel did obtain substantial amounts of nuclear weapons design and test data from France before 1968, and probably has a stock of both tactical and thermonuclear weapons.**

# Guesstimates of Israel's Missile Forces

**Virtually any Israeli fighter could be equipped with nuclear bombs or stand off weapons, but its F-15s and F-16s seem the most likely delivery platforms.**

**No reliable unclassified reports on Israel's ballistic missile holdings, but **unclassified sources speculate Israel has the following capabilities:****

**Jericho I:** 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 seems to be close or identical to the Dassault MD-620, which was test fired in 1965. 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:** Solid fuel, two-stage medium-range ballistic missile system tested in launches into the Mediterranean from 1987 to 1992. Reports that the longest was around 1,300 km, and fired from the facility at Palmachim, south of Tel Aviv. Jane's reports that a test launch of 1,400 km is believed to have taken place from South Africa's Overberg Test Range in June 1989, but other sources indicate that this was part of a series of launches of a system using a larger booster. reports that it has a 1,000 kg payload, capable of carrying a considerable amount of high explosives or a 1 MT yield nuclear warhead. It uses a two-stage solid propellant engine with a separating warhead. It also reports that the missile can 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.

**Jericho III:** Estimates 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 with 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 silo-based with road and rail mobility. No reliable estimate of its range exists. It may have maximum range of about 7,800 km with a smaller 500 kg payload. This could hit any target in the Middle East and targets as far away as Pakistan and Russia,

## Israel's Hypothetical Forces in 2020

- **200-400 boosted and fusion weapons.**
  - **Most 20-100 Kt variable yield, some 1 Megaton.**
- **100 Jericho 1 and 2.**
- **30-100 Jericho 3/ER.**
- **JSF, F15I, F-16I with nuclear-armed cruise missiles, advanced conventional precision strike capability.**
- **3 Dolphin submarines with nuclear armed SLCMs.**
- **High resolution satellite targeting and damage assessment capability.**
- **Moderate ballistic missile point and area defense capability with Arrow IV/V and Patriot PAC-3 TMD.**
- **CW? Assume Yes. BW? Assume No.**
- **Meaningful civil defense? CW only.**

## **Iran's Hypothetical Forces in 2020**

- **Less than 50 nuclear weapons, most fission, possibly some boosted. 30 Nuclear warheads, 20 bombs.**
  - **Most 20-30 Kt, some 100 KT**
- **100 Shahab 3 and 3 ER on mobile TELs. 60 TELs.**
- **Su-24, F-14 convert, and Su-37 strike aircraft.**
- **Reverse engineered KH-55 cruise missiles.**
- **Mustard and persistent nerve gas, stable bombs, bombs and warheads with cluster munitions.**
- **Limited satellite targeting and damage assessment capability.**
- **Limited ballistic missile point defense capability with SA-300/SA-400**
- **Meaningful civil defense? No.**

# Key Force Posture Decisions

- **US and/or Israel**
  - **Prevent, preempt**, contain, deter, retaliate, mutual assured destruction.
- **Iran and Israel:**
  - **In reserve (secure storage), launch on warning (LOW), launch under attack (LOA), ride out and retaliate**
  - **Continuous alert, dispersal**
  - **Point, wide area defense goals**
- **Israel:**
  - **Basing mode: sea basing, sheltered missiles.**
  - **Limited strike, existential national, multinational survivable.**
- **US:**
  - **Level of defensive aid.**
  - **Ambiguous response**
  - **Clear deployment of nuclear response capability.**
  - **Extended deterrence. Assured retaliation.**
- **Gulf:**
  - **Passive (wait out), defensive, or go nuclear.**
  - **Ballistic, cruise missile, air defense.**
  - **Seek extended deterrence from US**

## Key Force Posture Decisions - II

- **Syria:**
  - **Link or decouple from Iran.**
  - **Passive (tacit threat) or active (clear, combat ready deployment).**
- **Non-State Actor:**
  - **Tacit or covert capability.**
  - **Proven capability.**
  - **Deployment mode: Hidden, dispersed, pre-emplaced**