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Saudi National Security and the Saudi-US Strategic Partnership

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in Strategy**

*Rough Working
Draft: Revised
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Key Issues Addressed

- **Saudi Arabia defense policies and key threats;**
- **Past, current and future state of the forces shaping security policy and defense trends and needs of Saudi Arabia;**
- **Political influences on Saudi Arabia defense decisions and reactions;**
- **Defense policy decision-making process in Saudi Arabia; and**
- **US engagement with the Saudi Arabia defense departments and adjunct government organizations.**

Saudi Arabian Defense (and Security) Policies

*Strategic Priorities and Threat
Perceptions*

Saudi Arabian Defense Policies

- *Internal security and stability first.*
- Use diplomacy and aid to secure the Kingdom against neighbors.
- Rely on mix of external powers to deter outside threats while limiting their involvement in Saudi Arabia;
- GCC more image than real.
- Create overlapping security forces for internal security;
- Focus military development on outside threats: Iran, Iraq, Yemen; regional challenges like Israel and India
- Focus military forces on airpower and land based air defense, defense of upper Gulf and Yemen, coastal areas, Gulf, and Red Sea. Emerging Gulf and Red Sea fleets.
- Land forces in military cities backed by air bases at critical borders: Yemen-Iraq. Airpower provides strategic mobility, compensates for limited manpower and forces.
- Constantly assess ballistic missile and nuclear threats.

Key Perceived Threats

- **Iran: Nuclear, missiles, Iraq, Non-State Actors, and asymmetric forces in Gulf and region.**
- **Al Qa'ida in Peninsula, terrorist groups.**
- **Yemeni instability, demographics, military threat, border problems;**
- **Shi'ite internal unrest.**
- **Other unrest, sabotage.**
- **Instability or discrediting of Pilgrimage and Saudi role as custodian of Islamic Holy Places.**
- **Threat to oil and gas export routes/imports/chokepoints.**
- **Syria, Lebanon, "Shi'ite crescent"**
- **Israel, Palestinians, and Jordanian stability.**
- **Iraqi stability and border**

Most Likely Foreign 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 Quds force.**
- **Harassment and attrition through low level attacks, clashes, incidents.**
- **Piracy**
- **Limited, demonstrative attacks to increase risk, intimidation.**
- **Strike at critical node or infrastructure.**

Border Threats and the Periphery

Large Territory: Threatened Periphery

- **2,149,690 sq km; slightly more than one-fifth the size of the US**
- **Uncertain land boundaries: Iraq 814 km, Jordan 744 km, Kuwait 222 km, Oman 676 km, Qatar 60 km, UAE 457 km, Yemen 1,458 km. History of Israeli overflights**
- **2640 kilometers of coastline on Gulf and Red Sea.**
- **Coast vital to exports, water (desalination & power) and food.**
- **Air transport and ships also critical.**
- **Defense in depth difficult given dependence on coasts; population distribution.**
- **Security of Gulf, Strait of Hormuz, Gulf of Oman, Bab el Mandab, Red Sea critical. Threat of Piracy as well as hostile forces.**

Saudi Periphery & Oil Infrastructure

Selected Oil and Gas Pipeline Infrastructure in the Middle East



Source:

http://www.eia.doe.gov/meu/cabs/Persian_Gulf/images/pg_map.pdf

Yemen

- **Massive population for small country, constant inflow into Saudi Arabia because of poverty. (23 million with per capita income of only \$2,300 ppp.)**
- **Uncertain 1,458 kilometer border demarcation; past tensions over claims to Asir in Saudi Arabia**
- **Has reinforced its concrete-filled security barrier along sections of the now fully demarcated border with Yemen to stem illegal cross-border activities. Poor border security in spite of fence; smuggling, illegal immigration, etc.**
- **Infiltration: Base for Al Qa'ida in the Peninsula; history of Marxism, Dhofar Rebellion in Oman, PDRY radicalism.**
- **Ongoing struggle for tribal influence in border area; Shi'ia-Sunni tribal tensions. Large land forces;**
- **Kingdom must disperse land forces to different border areas.**

The Yemeni Border Issue - I

- Saudi Arabia started construction of separation barrier along border with Yemen began in the fall of 2003, after terrorist infiltration and attacks, and problems with smuggling and illegal labor migration.
- The border demarcation treaty signed in Jeddah in 2000 included a 20 kilometer-wide neutral zone as grazing land whose use was permitted to both sides.
- Saudi Arabia constructed, variously reported as 75 and 95 km-long, in an open area between two mountains along its 1,800 kilometer (1,100 mile) border with Yemen to block smugglers in cars from infiltrating Saudi lands. It was north of the region of the agreed upon 20 km-wide strip.
- The barrier consisted of a network of sandbags and pipelines, three metres (10ft) high, filled with concrete and fitted with electronic detection equipment.
- Saudi Arabia indicated it would construct a more sophisticated set of barriers and sensors.
- Yemeni government objected as did a heavily armed Shi'ite tribe, the Wayilah, which has been a source of violence in the area.
- Saudi officials told the London Arabic-language daily Al-Sharq Al-Awsat that the "barrier of pipes and concrete" could in no way be called a "separation fence." Saudi Border Police Commander Talal 'Anqawi said: "What is being built within our borders is a barrier of pipes full of concrete, aimed at deterring infiltration and smuggling... This barrier does not in any way resemble a fence. The site chosen to establish it is located within sovereign Saudi territory."
- Saudi government promised to finish construction in co-operation with Yemen in February 2004, after extensive US and Egyptian mediation., Yemen agreed that the two sides would conduct joint patrols and set up security watch towers along the frontier to curb cross-border smuggling and infiltration.
- October 2006, reports were made of Saudi plans to build improved security barriers to cut down on the 400,000 illegal immigrants who cross it every year

The Yemeni Border Issue - II

- In February 2007, Saudi and Yemeni security officers met in Jeddah to discuss measures to improve security.
- Lt. Gen. Talal Mohsen Angawi, director general of the border guards the largest number of smuggling operations was taking place through the Kingdom's southern border. Border guards recently foiled the smuggling of four anti-tank missiles, one rocket propelled grenade, 390 bombs, 3,190 dynamite sticks and 819 kg of explosives into the Kingdom.
- An annual report issued by the border guards said they had stopped 344,781 intruders and 2,894 smugglers and confiscated 12,000 kg of hashish, 32 kg of opium, 10,000 narcotic tablets and more than five million kg of qat.
- "The foiling of large-scale operations to smuggle weapons and drugs reflects the vigilance of our officers along the Kingdom's vast borders," Angawi said. "We, the border guards are considered the first defense line of the country," he said, and emphasized the need for protecting young Saudi men and women from the influence of drug mafias.
- Angawi said he had noticed a considerable rise in the smuggling of weapons, drugs, cattle and foodstuffs though number of intruders from Iraq through the Kingdom's northeastern border had declined considerably. "But the number of intruders through the southern border is increasing and they include Eritreans, Somalis and other Africans," he said.
- In July 2008, the Saudi border guards reported that they had seized a ton of explosives and large quantities of arms and drugs on Yemen's border over the past three months, making hundreds of arrests. Okaz newspaper reported that the guards had said these include 13 hand- and rocket-propelled grenades, 99 sticks of dynamite, 100 fuses, 12 detonators, more than 100 guns and 15,000 cartridges figured in the seizures. As many as 800 suspected arms and drugs dealers were arrested over the same period, along with 83 illegal immigrants, the report said. The seizures also included 1,600 kilograms (2,640 pounds) of hashish, two million amphetamine pills and 280 bottles of alcohol.

Source: MEMRI, Wikipedia, AFP, Al Hayat, Reuters

Iraq and Other Borders

- 1981 border treaty “resolved” the last uncertainty over the Saudi-Iraqi border and neutral zone issues but was never fully registered with UN.
- In 2006 Saudi Arabia began to issue RFP for construction of a separation barrier along its border with Iraq – partly because of infiltration, partly because of smuggling, and fear young Saudis were going to Iraq as volunteers for extremist groups.
- Fence would run for approximately 900 kilometers (560 miles), and add to an 7-meter high sand berm that runs along the border, and is in front of which there is a 8 kilometer stretch of no-mans-land that is regularly swept smooth, and patrolled so that infiltrators can be detected and tracked.
- France's Thales had been negotiating for 12 years over the MIKSA contract until the Saudi government decided to launch an international tender in April, 2007.
- Interior Minister Prince Naif Bin Abdul Aziz announced on 24 August 2008 that a contract would soon be issued.
- Thales, U.S-based Raytheon Co and DRS Technologies and a consortium led by European aerospace group EADS are competing for a 4 billion riyal (\$1.07 billion) contract which would create a sensor fence combining pressure sensors, razor-wire fence, and thermal imaging and radar equipment.
- Project part of a wider defense plan to secure the country's 6,500 km (4,000 miles) borders, which could add hundreds of radar facilities, coastal detection centers, telecommunications networks and reconnaissance aircraft/UVs.

Source: Saudi Gazette, Reuters, Wikipedia, Saudi experts

The Challenge of Asymmetric Warfare

Planning for Asymmetric Warfare

- **Deterrence and conflict prevention as critical as defense.**
- **Need integrated GCC force planning and war planning efforts.**
- **Must show GCC will act together. Threats cannot divide or exploit weakest link.**
- **Exercise realistic “red-blue” war games to determine common options and requirements.**
- **Follow-up with realistic CPXs and FTXs.**
- **Emphasize joint warfare approaches that tie in paramilitary and security forces.**
- **Demonstrate have exercised a retaliatory capability.**
- **Interoperability with other Gulf states and with US, UK, France.**
- **Defend against strikes at critical nodes and infrastructure.**

The Islamic Revolutionary Guards Corps

- **125,000+, drawing on 1,000,000 Basij.**
- **Key is 20,000 Naval Guards, including 5,000 marines.**
 - **Armed with HY-3 CSS-C-3 Seersucker (6-12 launchers, 100 missiles, 95-100 km), and 10 Houdong missile patrol boats with C-802s (120 km), and 40+ Boghammers 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 Farsiyah, Halul, Sirri.**
- **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.**

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.**
- **“Incidents” in pilgrimage in Makkah.**
- **Support of Shi’ite groups in Bahrain.**
- **Missile and space tests (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.**

Military Threats and the Conventional Balance

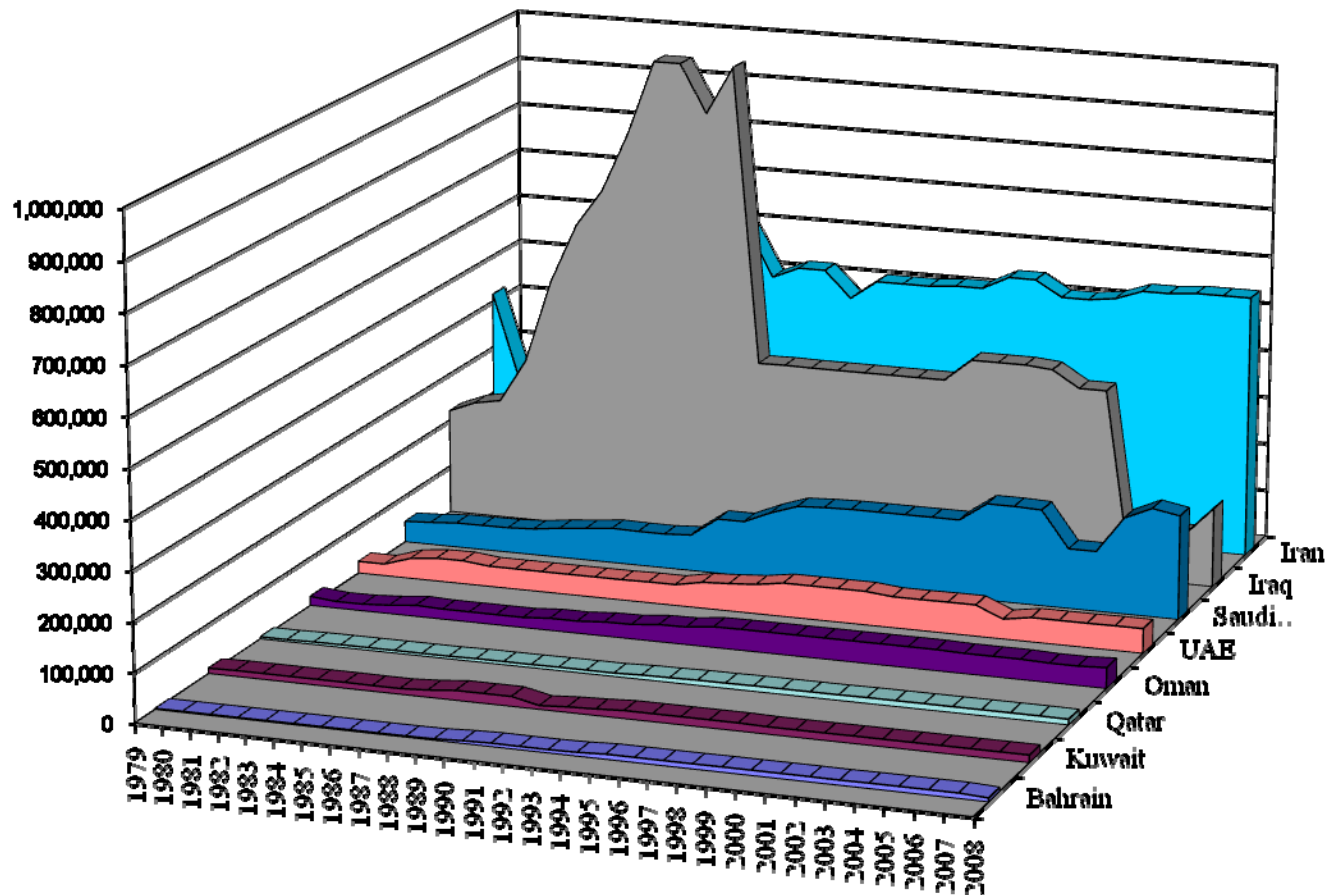
Land Threats

- **Limited direct threat from Yemen (Significant land forces, but Yemen lacks real air power, sustainability, modernization.)**
- **Iran has limited amphibious lift and capability; would need secure access through Southern Gulf state.**
- **Iran might gain influence over Iraq; drive across Kuwait, but difficult.**
- **Stability of Bahrain is an issue and is Iran's future influence.**

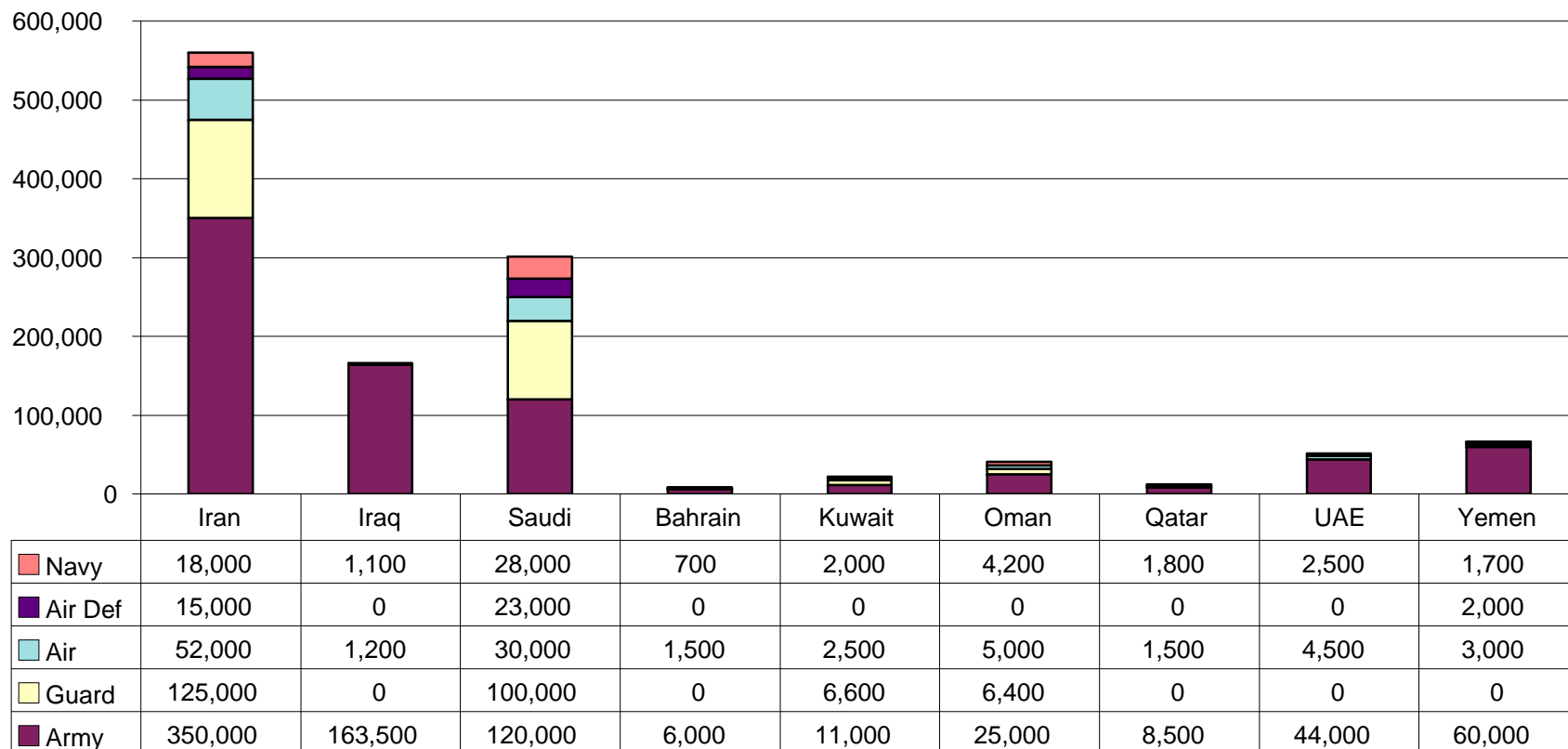
But:

- ***Threats to periphery are real.***
- ***Expansion of Iranian influence and Yemeni stability are issues.***

Comparative Military Manpower Trends

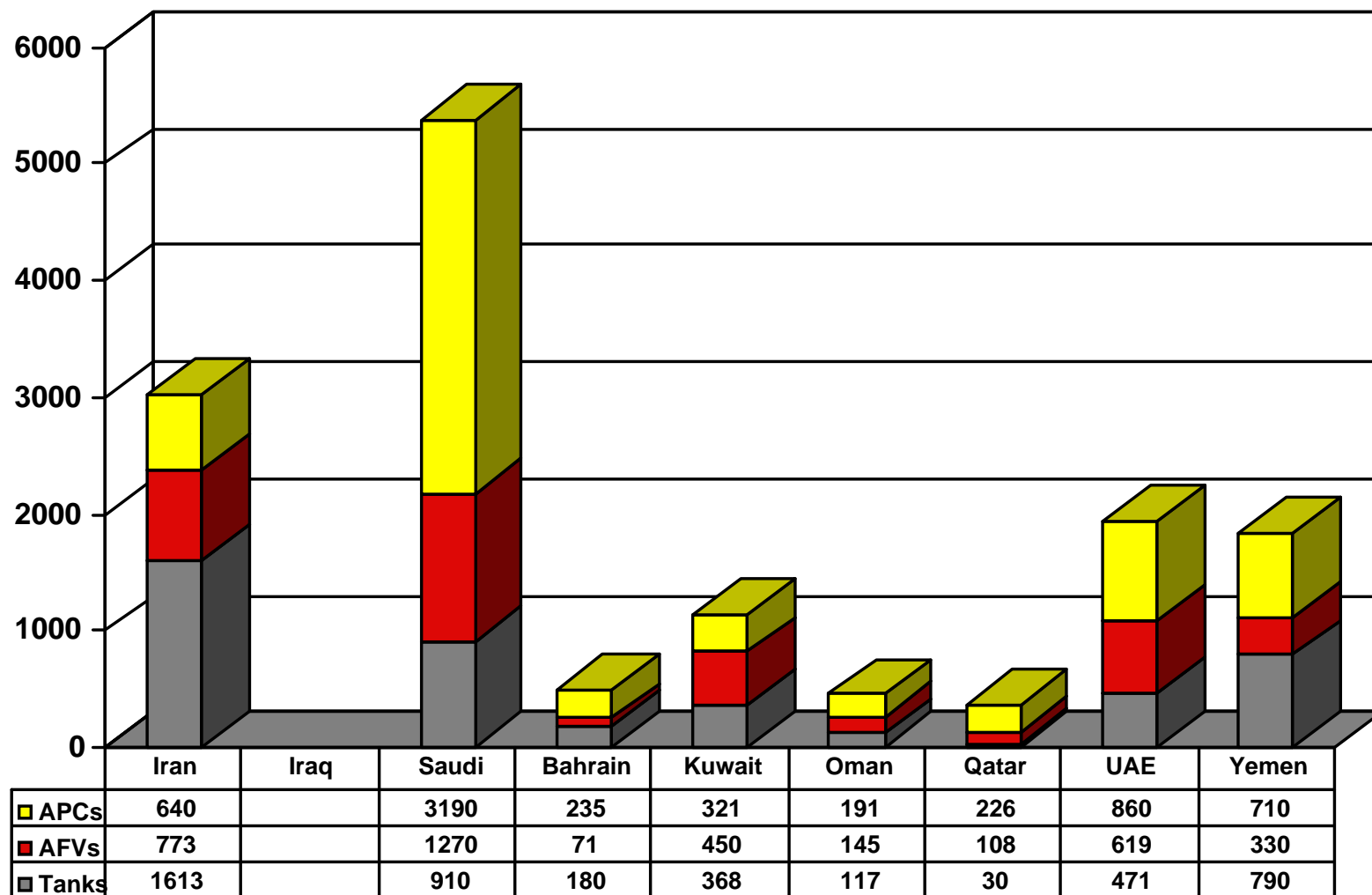


Comparative Military Manpower in 2008

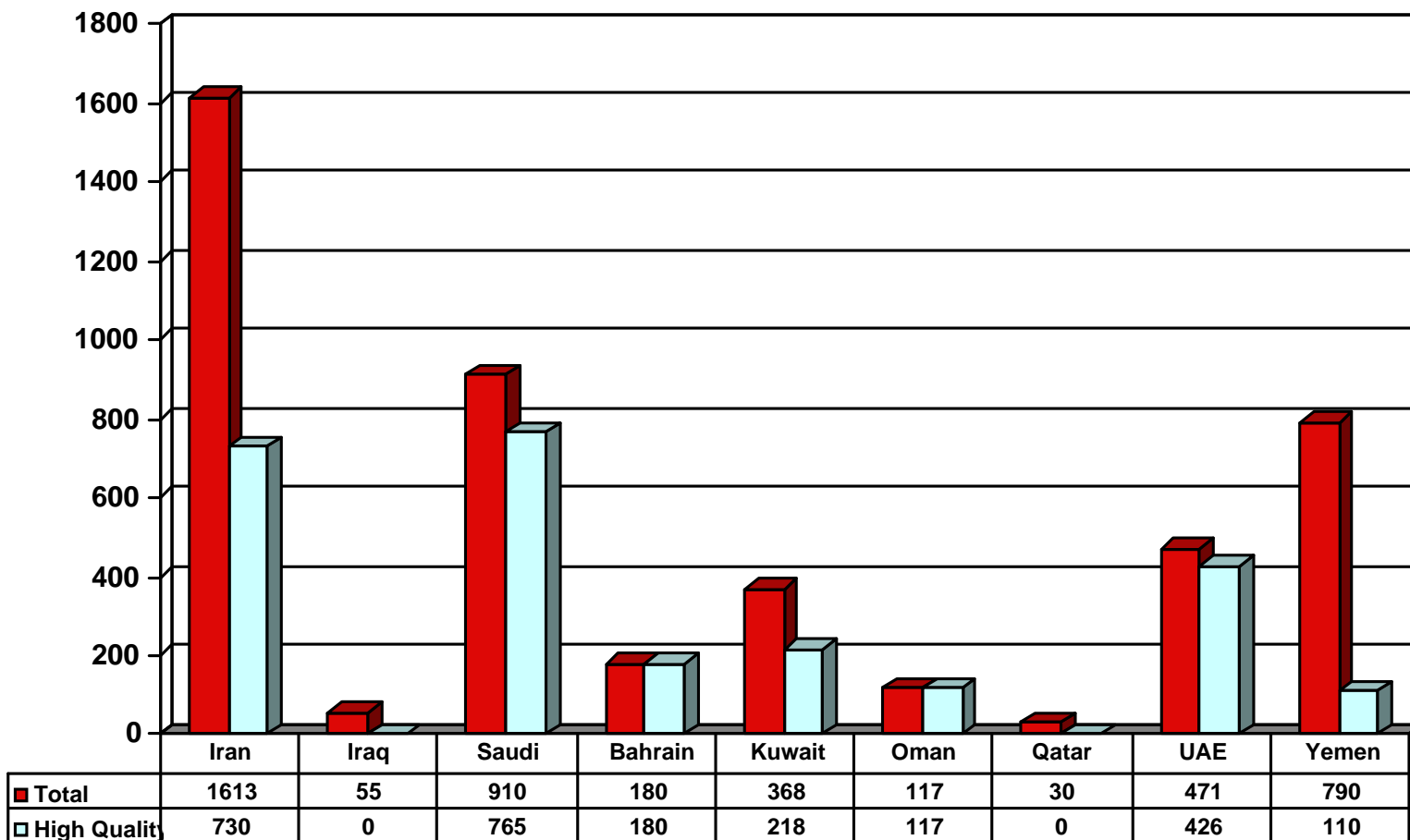


Source: IISS, Military Balance, 2008; Jane's Sentinel series; Saudi experts

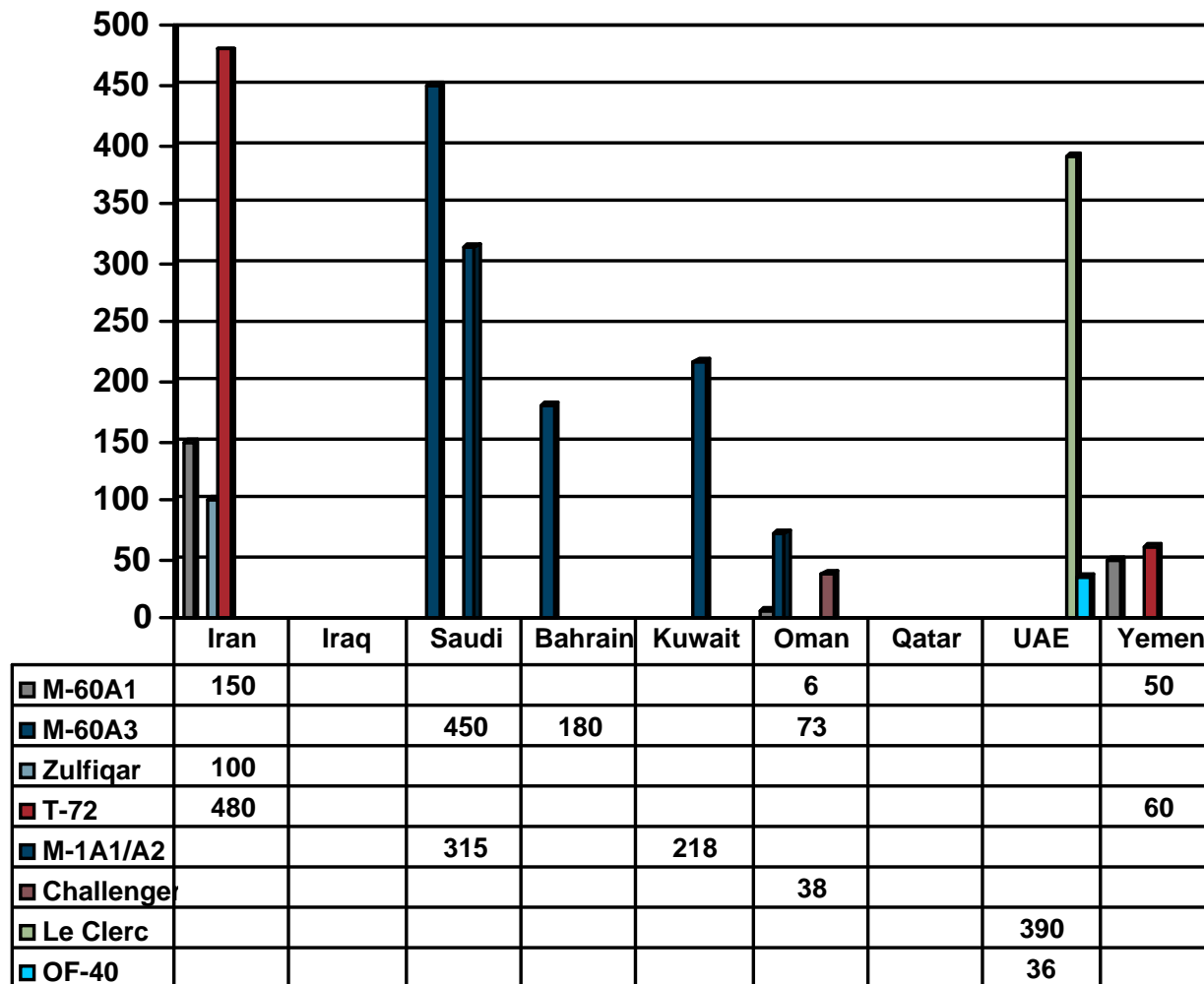
Comparative Total Armor Strength By Category



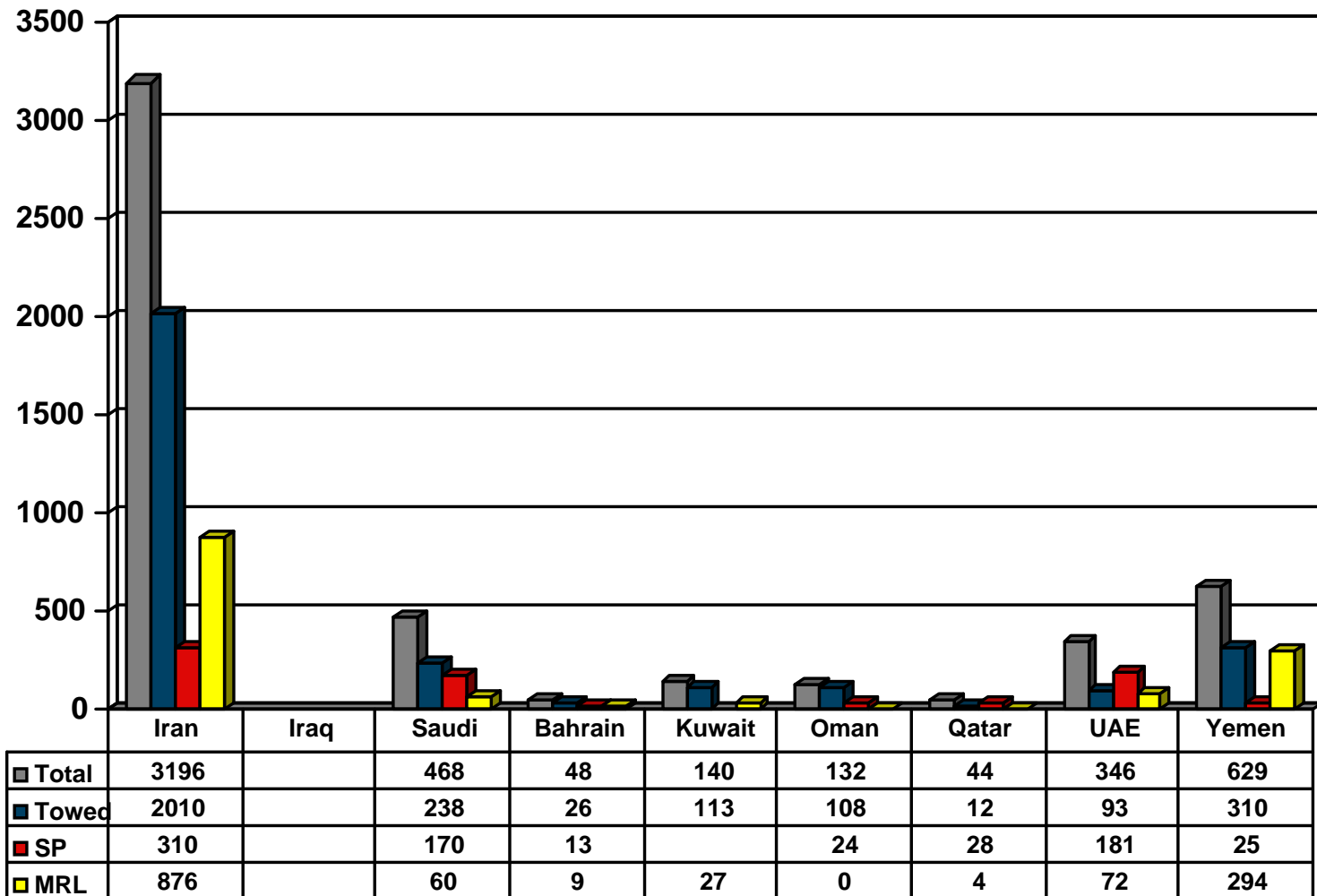
Comparative Total Gulf Tank Strength versus High Quality Tanks



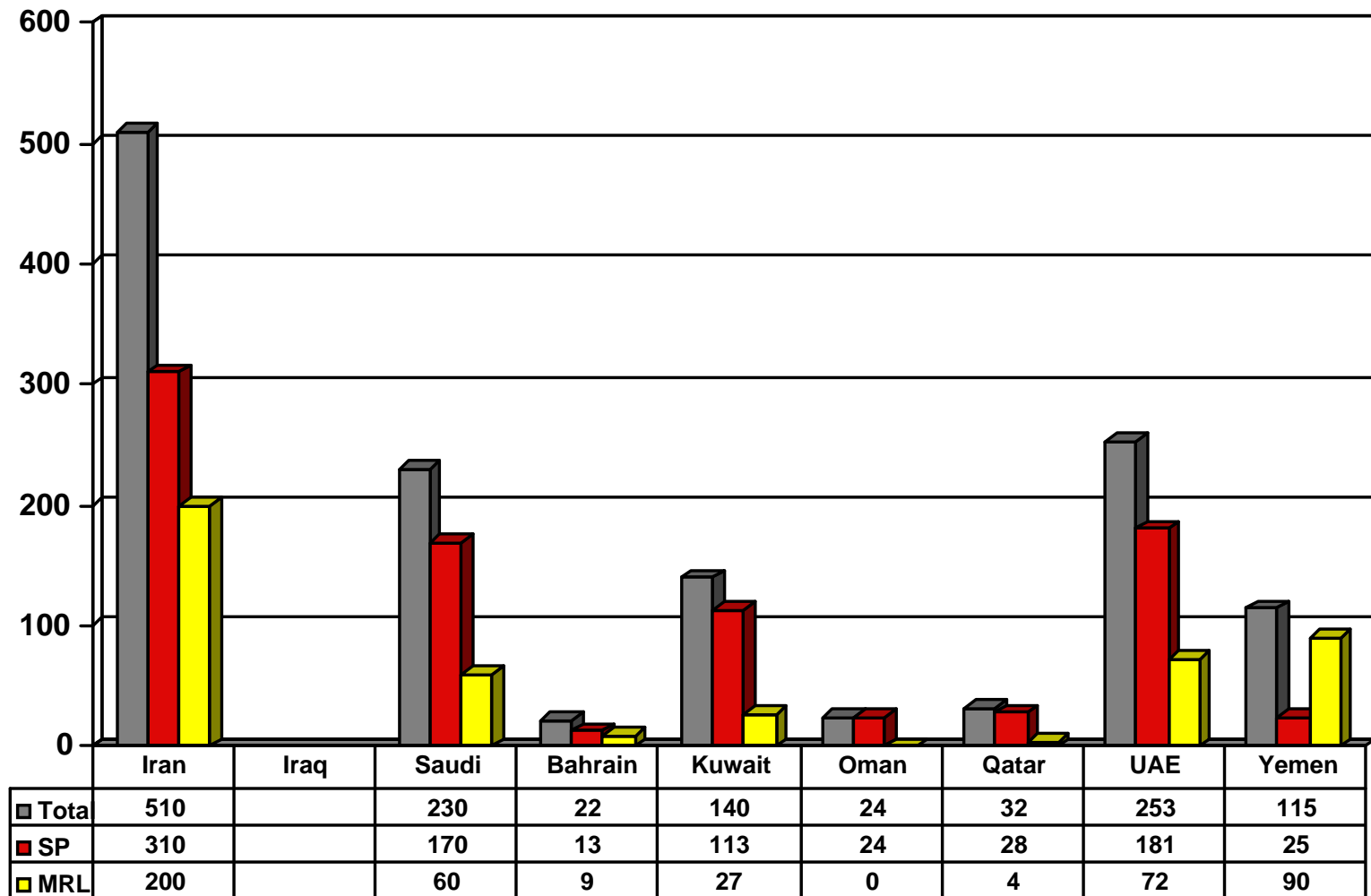
Comparative Gulf High Quality Tank Strength By Type



Comparative Artillery Strength By Category



Comparative Self-Propelled Rapid Maneuver Artillery Strength By Category



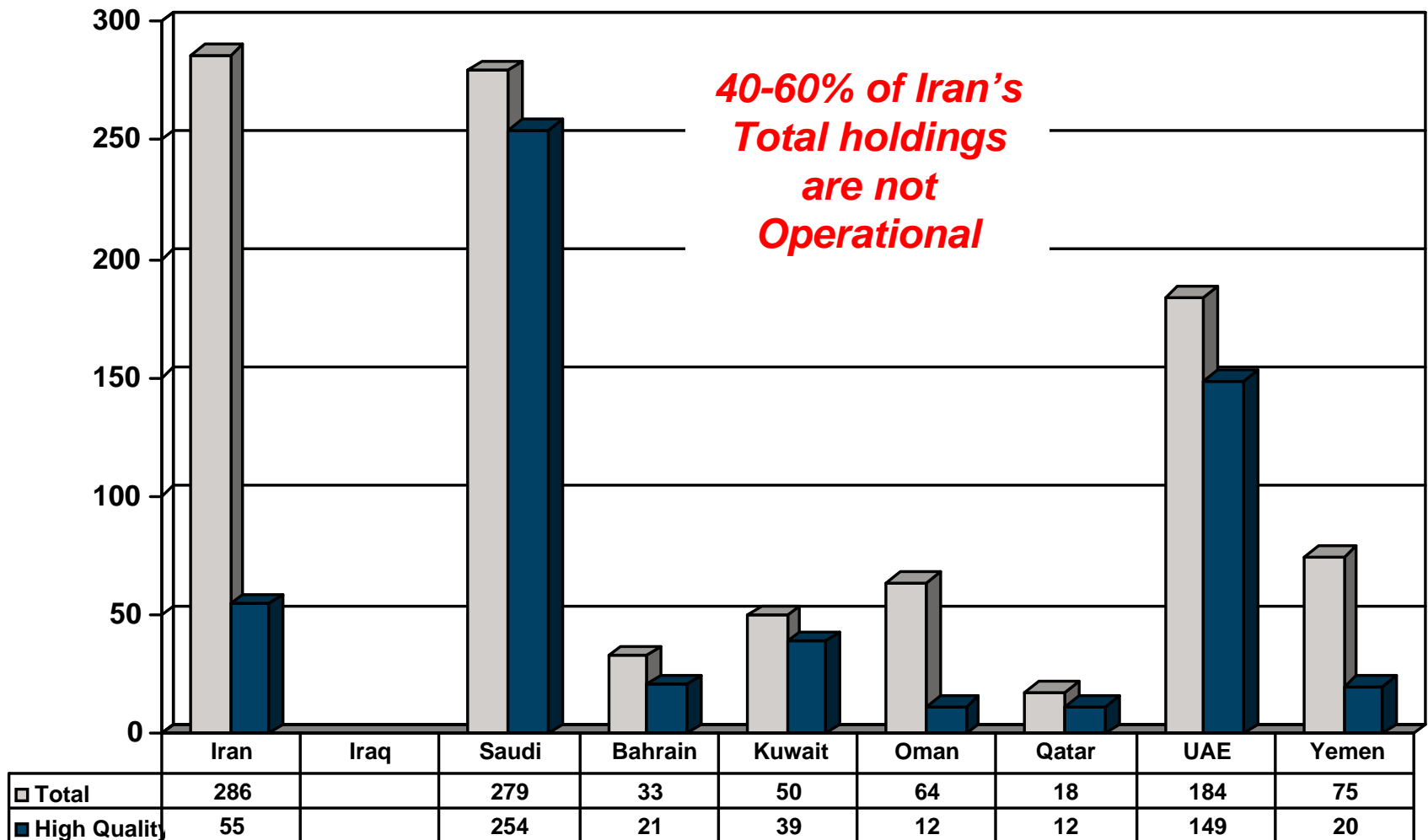
Air/Missile Threats

- Precision air strikes on critical facilities: Raid or mass attack.
- Terror missile strikes on area targets; some chance of smart, more accurate kills.
- Variation on 1987-1988 “Tanker War”
- Raids on offshore and critical shore facilities.
- Strikes against tankers or naval targets.
- Attacks on US-allied facilities

But:

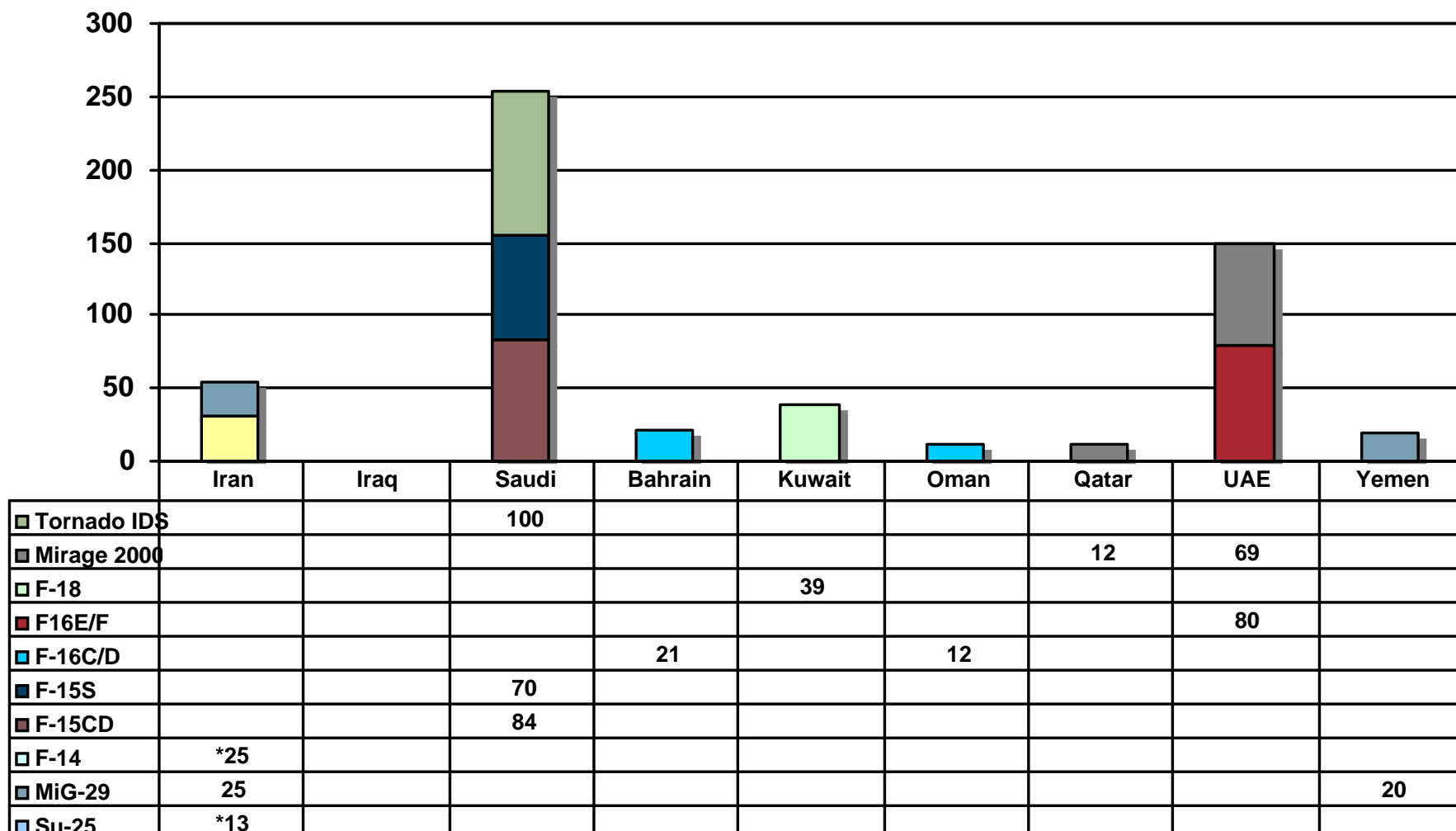
- *Low near-term probability.*
- *High risk of US and allied intervention.*
- *Limited threat power projection and sustainability.*
- *Unclear strategic goal.*

Comparative Gulf Total & High Quality Combat Air Strength By Type



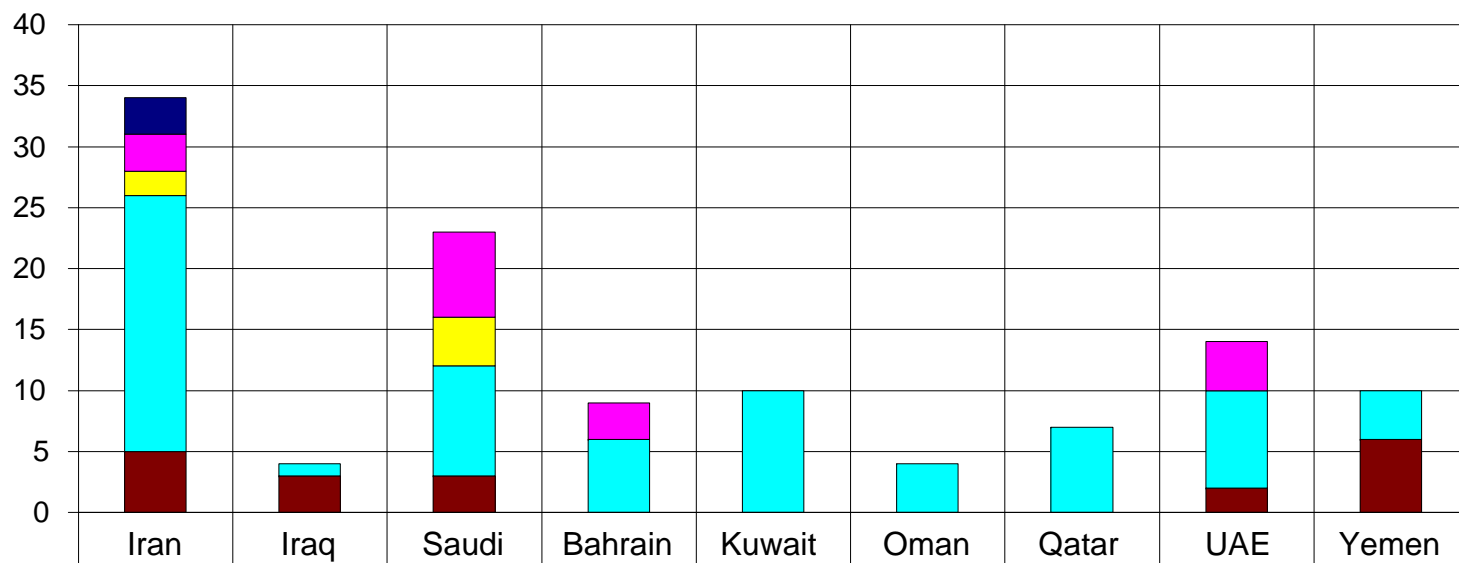
Source: IISS, Military Balance, 2008; Jane's Sentinel series; Saudi experts

Comparative High Quality Combat Air Strength By Type



Source: IISS, Military Balance, 2008; Jane's Sentinel series; Saudi experts

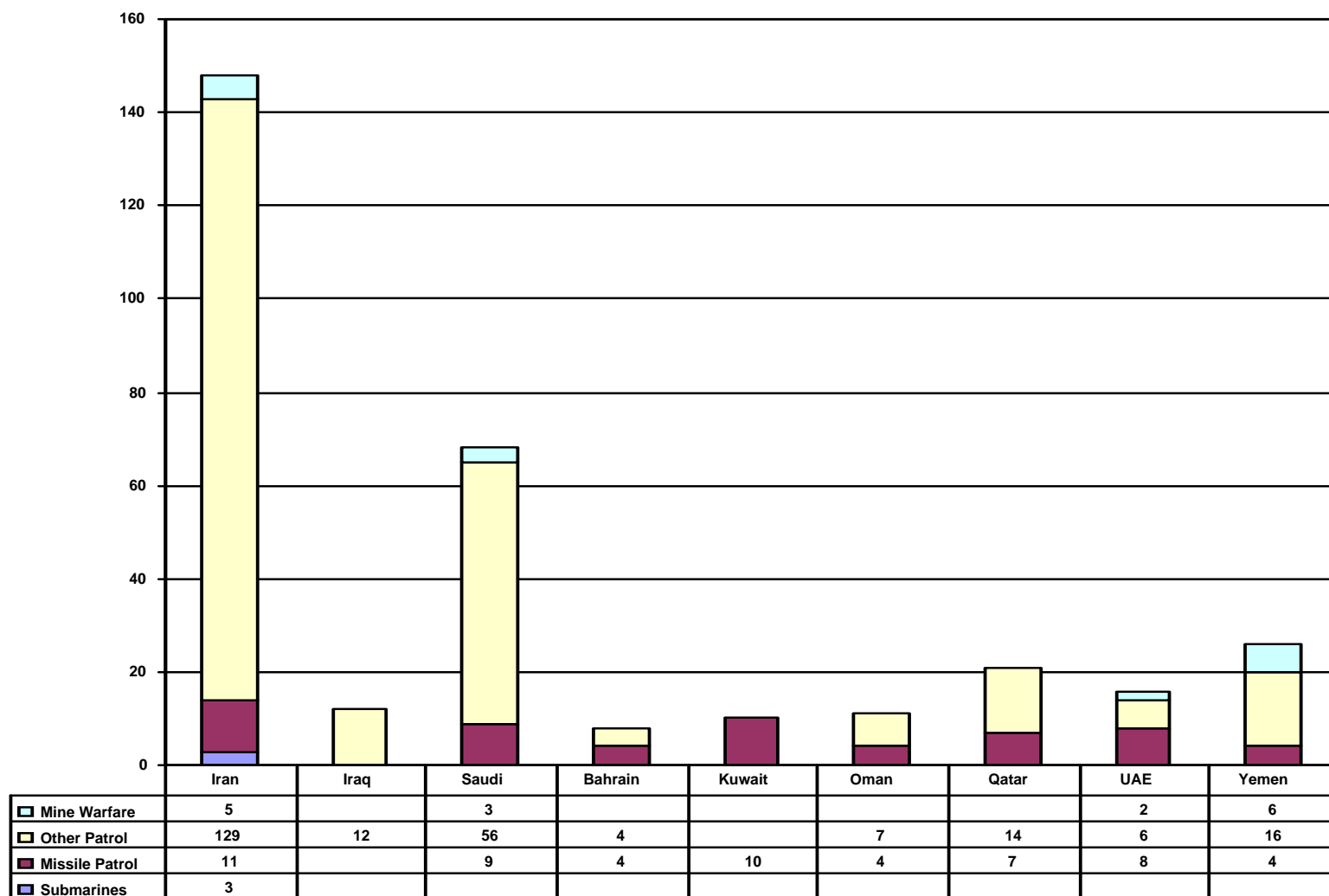
Comparative Major Naval Combat Ships



Submarines	3							
Major Missile Combat	3		7	3			4	
Major Other Combat	2		4					
Missile Patrol	21	1	9	6	10	4	7	8
Mine	5	3	3					2

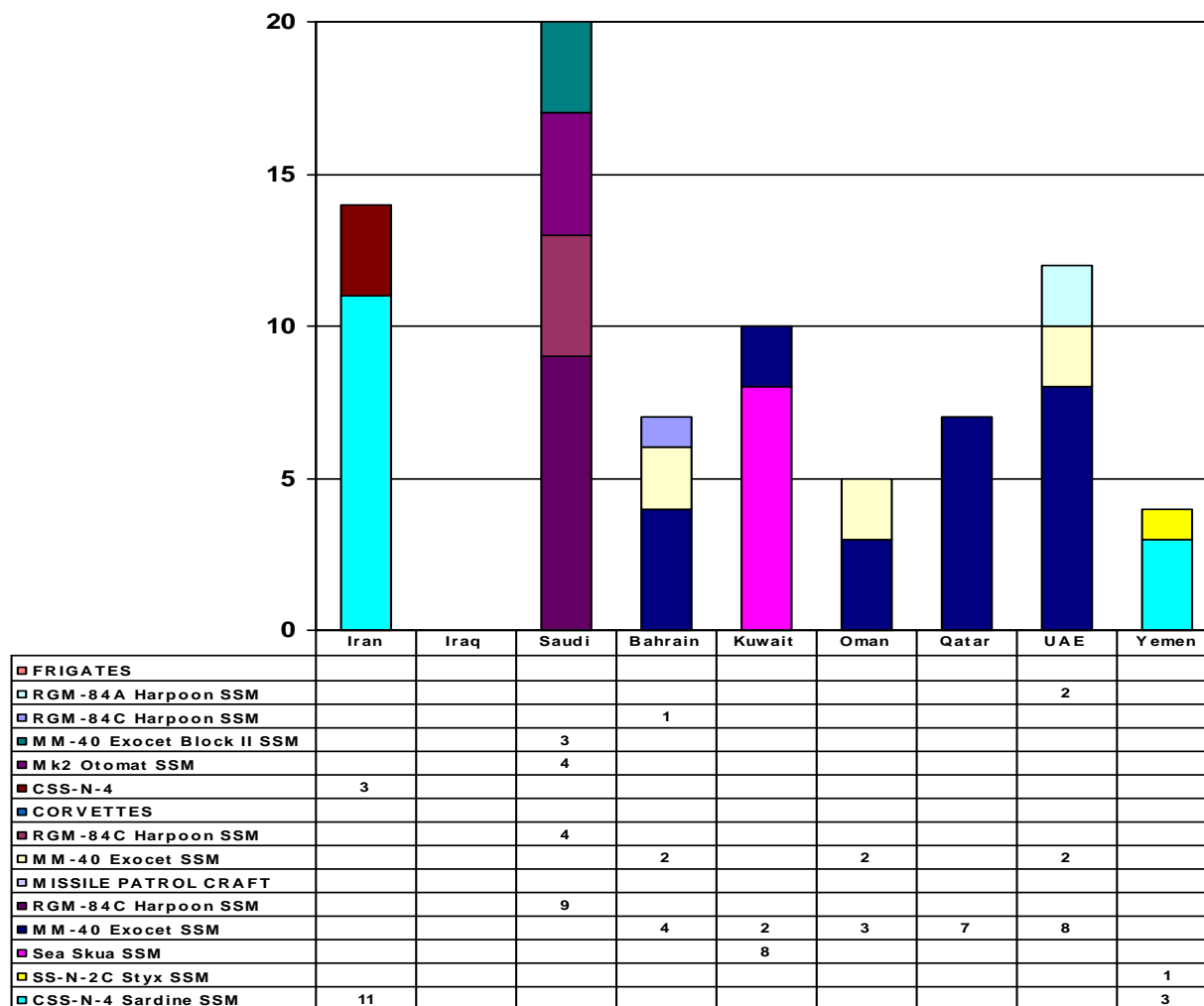
Source: IISS, Military Balance, 2008; Jane's Sentinel series; Saudi experts

Key Ships for Asymmetric Warfare



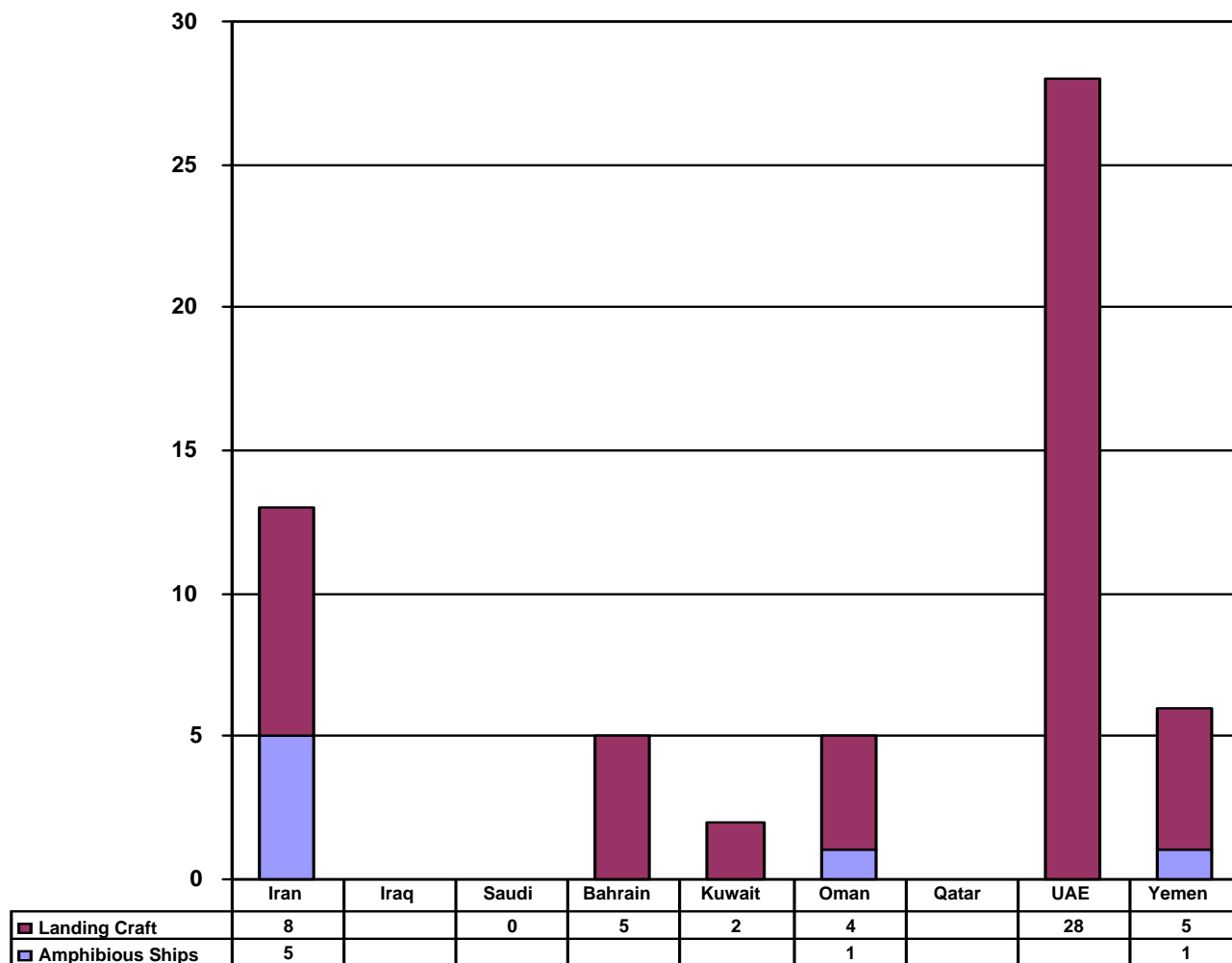
Source: IISS, Military Balance, 2008; Jane's Sentinel series; Saudi experts

Anti-Ship Missile Ships



Source: IISS, Military Balance, 2008; Jane's Sentinel series; Saudi experts

Amphibious Ships & Landing Craft



Source: IISS, Military Balance, 2008; Jane's Sentinel series; Saudi experts

How GCC Cooperation Could Reduce the Threat to the GCC

- **Vast lead in military spending and arms imports**
- **Support from US, Britain, France**
- ***But,***
- **Poor Mission Focus with Limited Coordination**
- **Lack of Integration, Standardization**
- **Problems in Large-Scale Exercises and Training; Military Realism**
- **Problems in Jointness – including security services, police, and intelligence – and combined arms.**
- **Lack of Balanced Force Development: Manpower Quality and Sustainability**

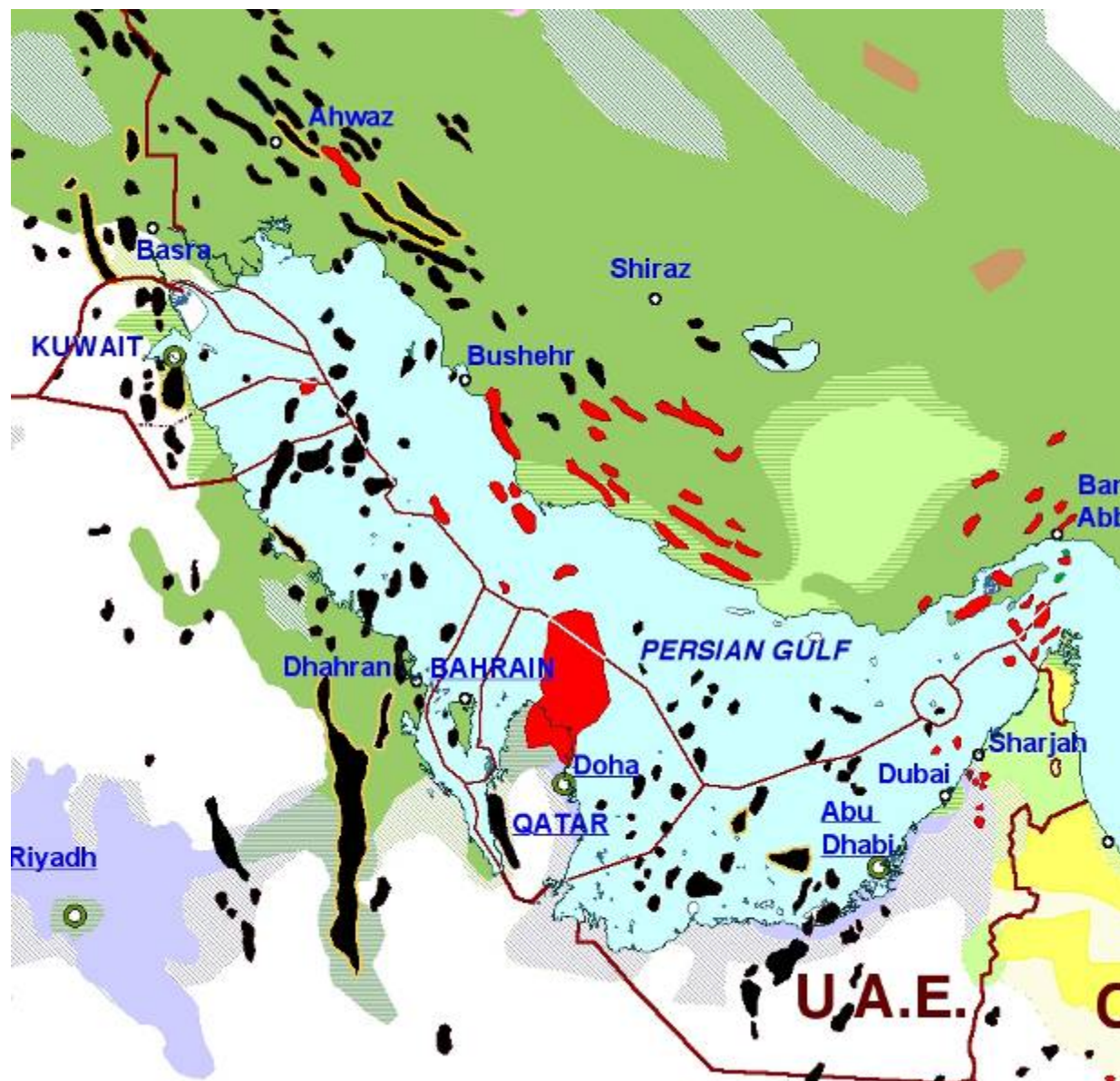
Key Gulf-Related Chokepoints - I

Important World Oil Transit Chokepoints						
Name	2006E oil flow (bbl/d)	Width at Narrowest Point	Oil Source Origin	Primary Destination	Past Disturbances	Alternative Routes
The Strait of Hormuz	16.5-17 million	21 miles	Persian Gulf Nations including Saudi Arabia, Iran, and UAE	Japan, The United States, Western Europe, other Asian countries	Sea mines were installed during the Iran-Iraq War in the 1980s. Terrorists threats post September 11, 2001.	745-mile long East-West Pipeline through Saudi Arabia to the Red Sea
The Suez Canal/ Sumed Pipeline	4.5 million	1,000 feet	Persian Gulf Nations, especially Saudi Arabia, and Asia	Europe and The United States	Suez Canal was closed for eight years after the Six-Day War in 1967. Two large oil tankers ran aground in 2007 suspending traffic.	Reroute around the southern tip of Africa (the Cape of Good Hope); additional 6,000 miles.

Key Gulf-Related Chokepoints - II

Important World Oil Transit Chokepoints						
Name	2006E oil flow (bbl/d)	Width at Narrowest Point	Oil Source Origin	Primary Destination	Past Disturbances	Alternative Routes
Bab el-Mandab	3.3 million	18 miles	The Persian Gulf	Europe and The United States	USS Cole attack in 2000; French oil tanker in 2002, both attacks off the coast of Aden, Yemen	Northbound traffic can use the East-West oil pipeline through Saudi Arabia; Reroute around the southern tip of Africa (the Cape of Good Hope), additional 6,000 miles.
The Turkish Straits	2.4 million	0.5 mile	Caspian Sea Region	Western and Southern Europe	Numerous past shipping accidents due to the straits sinuous geography. Some terrorist threats were made after September 11, 2001.	No clear alternative; potential pipelines discussed including a 173-mile pipeline between Russia, Bulgaria, and Greece.

Vulnerability of Gulf Oil Fields



Primary Oil and Gas Deposits in the Middle East and the Shia Majority Areas.

- A Major Oil field
- A Super-Giant Oil field
- A Major Gas field

Islam:

- Shiism (to include Alevis/Alawis)
- Sunnism (Hanafi, Shafi'i, Maliki)
- Hanbali
- Ibadism
- Christianity
- Judaism
- Other

- Mixed population areas
- Sparsely populated areas
- Uninhabited areas

Saudi Arabia



- 267 billion barrels of oil reserves
 - 9.7 MMBD production
 - Capacity 10.5-11 MMBD growing to 12.5 MMBD.
 - Exports 7/9-98.5 MBD, 52% to Asia
 - 2.3 MMBD used domestically.
 - Refinery throughput capacity of 2.1 MMBD
 - 100 major oil and gas fields
 - Ras Tanura complex has approximately 6 million bbl/d capacity; and the world's
 - largest offshore oil loading facility. Includes the 2.5-million bbl/d port at Ras Tanura.
- More
- than 75 percent of exports are loaded at Ras Tanura Facility.
 - 3 to 3.6-million bbl/d Ras al-Ju'aymah facility on the Persian Gulf.
 - Yanbu' terminal on the Red Sea, has loading capacity of approximately 4.5 million bbl/d crude and 2 million bbl/d
 - for NGL and products.

EIA, Country Briefs, "Saudi Arabia," August 2008

Energy Infrastructure is Critical, *But*

- Steadily rising global demand for Gulf crude, product, and gas
- Rising Asian demand (much exported indirectly to the West)
- *Heavy concentrations in facilities designed to economies of scale, not redundancy.*
- *Poor response planning, and long-lead time replacement for critical key components.*
- *Day-to-day use often near limits of capacity*
- *Lack of systems integration and bypass capability at national and GCC level*
- *Improving lethality and range of precision strike systems.*
- *Smarter saboteurs and terrorists.*

The Entire Gulf: Breaking the Bottle at Any Point



Hormuz: Breaking the Bottle at the Neck



- 280 km long, 50 km wide at narrowest point.
- Traffic lane 9.6 km wide, including two 3.2 km wide traffic lanes, one inbound and one outbound, separated by a 3.2 km wide separation median
- Antiship missiles now have ranges up to 150 km.
- Smart mines, guided/smart torpedoes,
- Floating mines, small boat raids, harassment.
- Covert as well as overt sensors.

Abu Musa, Tumbs, Hormuz - Traffic



- **16-18 MMBD per day with 25%+ growth over next decade.**
- **750 million tons of crude oil in 2006; 20% of world supply.**
- **Only 50% of traffic is oil. Containers are 20%; bulk cargo is 22%. 8% other.**
- **2.5 billion DWT of cargo in 2006.**
- **Gulf will export 40% of world's LNG by 2015.**

“Closing the Gulf”

- **3 Kilo (Type 877) and unknown number of midget (Qadr-SS-3) submarines; smart torpedoes, (anti-ship missiles?) and smart mine capability.**
- **Use of 5 minelayers, amphibious ships, small craft, commercial boats.**
- **Attacks on tankers, shipping, offshore facilities by naval guards.**
- **Raids with 8 P-3MP/P-3F Orion MPA and combat aircraft with anti-ship missiles:(C-801K (8-42 km), CSS-N-4, and others).**
- **Free-floating mines, smart and dumb mines, oil spills.**
- **Land-based, long-range anti-ship missiles based on land, islands (Seersucker HY-2, CSS-C-3), and ships (CSS-N-4, and others). **Sunburn?****
- **IRGC raids on key export facility(ties).**

Abu Musa, Tumbs, Hormuz: Factoids

- **34 miles (55 KM) wide at narrowest part.**
- **Channels consist of 2-mile (3.2 km) navigable channels for inbound and outbound traffic, separated by 2-mile wide buffer zone.**
- **40% of all globally traded oil supply.**
- **75%-plus of Japan's oil/**
- **13.4 MMBD of crude through Strait in May 2007**
- **Additional 2 MMBD of products and over 31 million tons of LNG.**
- **90% of all Gulf exports go through Strait.**
- **EIA predicts exports will double to 30-34 MMBD by 2020**
- **Gulf will export 40% of world's LNG by 2015.**

The Bab El Mandab



- **3.3 MMBD per day with 25%+ growth over next decade.**

- **2.1 MMBD flows northbound through Suez Complex.**

- **18 miles wide with two 2 mile channels going each way.**

- **Only major bypass is Saudi East-West pipeline at 4.4 MMBD, but now fully used.**

Source: EIA, Country Briefs, World Oil Transit Chokepoints, January 2008

Suez



Source: EIA, Country Briefs, World Oil Transit Chokepoints, January 2008

- An estimated 3.9 million bbl/d of oil flows northbound through the Suez Canal to the Mediterranean, while 0.6 million bbl/d travels southbound into the Red Sea.
- Over 3,000 oil tankers pass through the Suez Canal annually. With only 1,000 feet at its narrowest point, the Canal is unable to handle large tankers.
- Suez Canal Authority (SCA) has discussed widening and deepening to accommodate VLCCs and ULCCs.
- 200-mile long Sumed Pipeline, or Suez-Mediterranean Pipeline also provides a route by crossing the northern region of Egypt from the Ain Sukhna to the Sidi Kerir Terminal.
- The pipeline can transport 3.1 million bbl/d of crude oil., Nearly all of Saudi Arabia's northbound shipments (approximately 2.3 million bbl/d of crude) are transported through the Sumed pipeline.
- Closure would divert tankers around the southern tip of Africa, the Cape of Good Hope, adding 6,000 miles to transit time.

Missile Warfare and Weapons of Mass Destruction

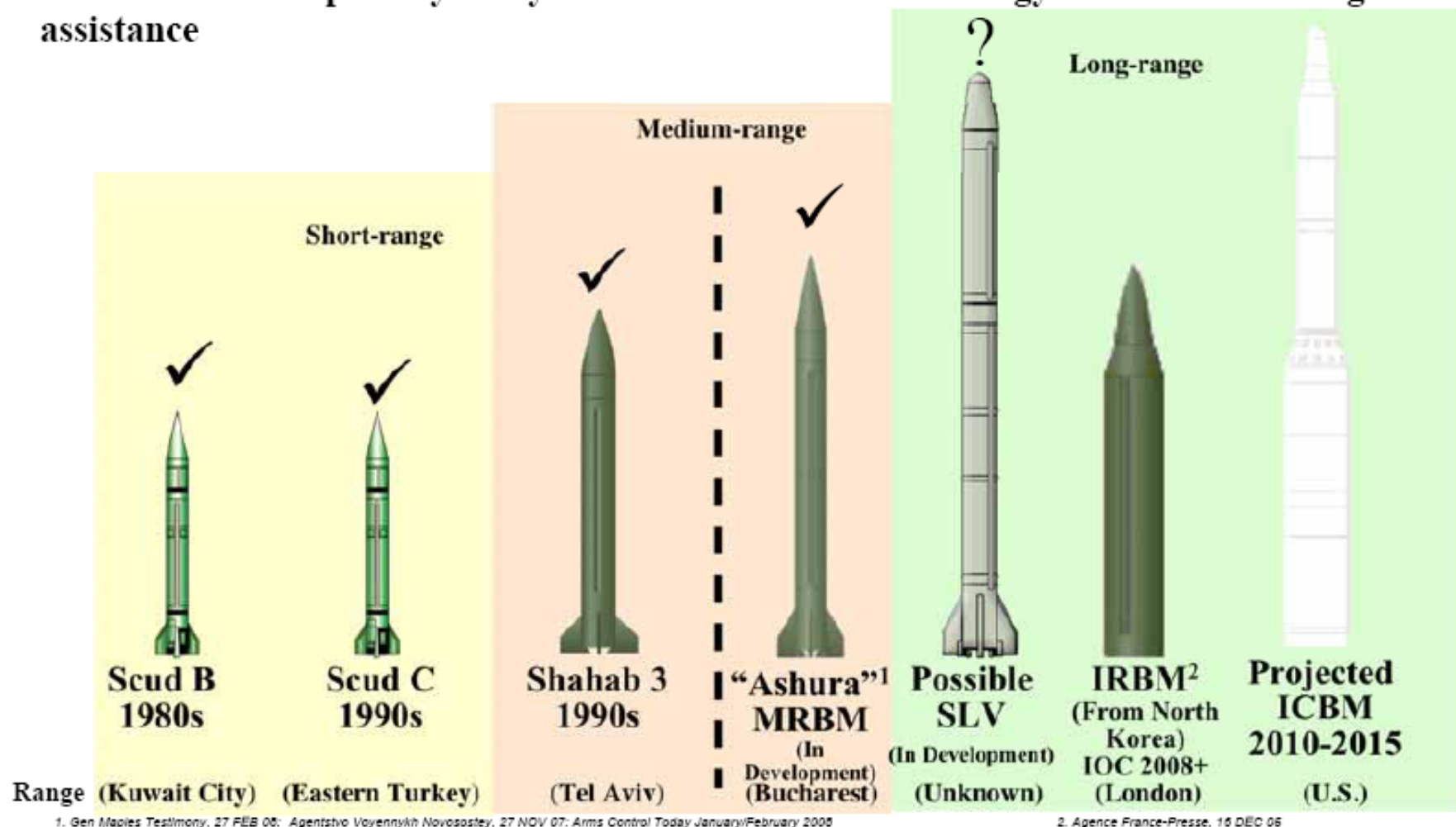
Recent Iranian Missile Developments

- **Iran working on extended-range variant of the Shahab-3 and a new, solid fueled, 2,000 km medium-range ballistic missile (the “Ashura”)**
- **In February 2008, Iran declared it had successfully launched an “exploratory” space rocket – analysis shows resemblance to Shahab-3 ballistic missile**
- **In November 2006 and July 2008, Iran orchestrated the launches of several short- and medium-range ballistic missiles capable of striking Israel and U.S. bases in the Middle East**
- **Status of July 2008 launch unclear. Iran claims new version of Shahab. Most experts disagree. Ranges reported of 1,090, 1,250, and 2,000 miles.**
- **Report 25-100 missiles in service. Claims Shahab A and Shahab B will be withdrawn from service and replaced with solid fueled missiles.**

Source: Lt Gen Trey Obering, USAF, Director, Missile Defense Agency , Missile Defense Program Overview, Pentagon News Briefing, 15 JUL 08

Iranian Missile Developments

- Iranian missile capability likely to accelerate due to technology transfer and foreign assistance



"Iran continues to develop and acquire ballistic missiles that can hit Israel and central Europe" – General Maples, Director of U.S. Defense Intelligence Agency

Iranian Delivery Options

- **Ballistic missiles are only one approach.**
- **Iran has acquired some Soviet KH-55 cruise missiles that were nuclear armed by FSU.**
- **In near-term, air strikes present major penetration problems but are more accurate and reliable and solve serious warhead design and weight problems.**
- **US and other countries build force postures on de facto one-way missions.**
- **Covert delivery will always be an option: Container, GPS, off-shore “rain out”.**

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.**
- **Chemical and biological options as well.**

Iran's Technology Base

- **Declared chemical weapons state; probable biological weapons program.**
- **Centrifuge (U-235) and Plutonium (Pu-239) enrichment, reactor, and processing.**
- **Uranium machining**
- **Polonium (neutron initiator) research.**
- **Work with high explosive lenses and imports of triggering devices/technology.**
- **Possible acquisition of advanced nuclear fissile weapons design data from AQ Khan and Swiss sources.**

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


MW Megawatts


 Uranium
processing facility

 Uranium mines

 Heavy-water facility

 Research reactors /
research facilities

 Uranium
enrichment facility

 Light-water reactor
(under construction)

KUWAIT



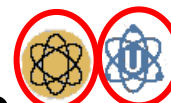
Bushehr

SAUDI
ARABIA

BAHRAIN

QATAR

Gachin



AFGHANISTAN

PAKISTAN

MIDDLE EAST

Gulf of Oman

State Actor: Covert Bioterrorism, Suitcase Nuclear

- **Bypasses defenses.**
- **Plausible deniability?**
- **Exploits special vulnerability of “one bomb” states.**
- **Psychological and political impacts as important as direct killing effects.**
- **False flag and proxy options clear.**
- **Buying time may limit risk of retaliation.**
- **Allows to exploit “slow kill” nature of biological strikes. Achieve “line source” effects**
- **Covert forces in place can restrike or escalate.**
- **Target potentially faces major weakening of conventional capabilities without ability to counter-escalate.**

Non-State Actor CBR(N?)

- **Independent, Proxy, False Flag, or Trigger Force?**
- **Access likely to be more critical in determining capability than ability to create own weapons, but highly lethal BW and genetic weapons may be becoming “off the shelf” option.**
- **Many of same twists as covert State Actor attacks:**
 - **Bypasses defenses.**
 - **Plausible deniability?**
 - **Exploits special vulnerability of “one bomb” states.**
 - **Psychological and political impacts as important as direct killing effects.**
 - **False flag and proxy options clear.**
 - **Buying time may limit risk of retaliation.**
 - **Allows to exploit “slow kill” nature of biological strikes. Achieve “line source” effects**
 - **Covert forces in place can restrike or escalate.**
- **Unclear Non-State Actors are deterrable by any form of retaliation.**

*Al Qa'ida in the Peninsula and the
Threat of Terrorism*

Global Mix of Hostile Movements

Abu Nidal Organization (ANO)

Abu Sayyaf Group (ASG)

A-Al qsa Martyrs Briga de Ansar a-Sunna (AS)

Armed Islamic Group (GIA)

Asbat al-Ansar

Gama'a a-Ilslamiyya (IG)

Harakat ul-Mujahedin (HUM)

Hizballah Islamic Jihad Union (IJU)

Islamic Movement of Uzbekistan (IMU)

Jaish-e-Mohammed (JEM)

Jemaah Islamiya Organization (JI)

Al-Jihad (AJ)

Kahane Chai (Kach)

Libyan Islamic Fighting Group (LIFG)

Moroccan Islamic Combatant Group (GICM)

Mujahedin-e Khalq Organization (MEK)

Al-Qaida in the Islamic Maghreb (AQIM) [Formerly Salafist Group] for

Call and Combat (GSPC)]

Al-Qaida (AQ)

Al-Qaida in Iraq (AQI)

Al-Qaida in the Peninsula

The Scale of the Threat

- **Attacks by Al Qa'ida in Peninsula have continued since they began in 2003.**
- **More than 2,200 suspects had been arrested, and more than 120 militants have been killed, in ongoing activity by During 2003-2008.**
- **As of May 2008, 18 of the 36 suspects on the most-wanted list issued by the Ministry of Interior on June 28, 2005 had been killed or captured as had 24 of the 26 suspects on the most-wanted list issued on December 6, 2003.**
- **In December 2007, Prince Nayef bin Abdulaziz announced that Saudi security forces foiled 180 planned terrorist plots within the Kingdom.**
- **During the past two years more than 90 security officers were killed and more than 200 wounded while carrying out their duties in terrorist-related incidents.**

Recent Developments - I

- **March 2008 Saudi authorities arrest 28 suspected Al-Qaeda militants of different nationalities. Evidence revealed the militants were attempting to rebuild the Al-Qaeda network and launch a terror campaign in Saudi Arabia.**
- **January 2008, new law states anyone convicted of setting up a website supporting terrorism will be sentenced to 10 years in prison and fined five million riyals (about \$1.3 million).**
- **December 2, 2007 press conference at King Saud University, Saudi Interior Minister Prince Naif bin 'Abd Al-'Aziz criticized mosque preachers who call for jihad, saying: "The efforts on the ideological front still leave much to be desired. Security measures in themselves are not sufficient [to stop terrorism] - it is mainly action on the ideological [front] that prevents extremist ideas from infiltrating the minds of the youth."**
- **November 2007 – Saudi security forces arrested 208 suspected militants planning a series of attacks within the Kingdom, the Ministry of Interior said. Of the 208 captured, eight were plotting an attack on an auxiliary oil installation in the Eastern Province, 22 promoted terrorism and had planned assassinations of Muslim scholars and security forces, 18 plotted to smuggle rockets into Saudi Arabia with the intention of carrying out terrorist operations, 112 were suspected of associating with terrorist cells abroad, 32 provided financial support to terrorists and 16 were arrested in Madinah for promoting and supporting terrorism.**
- **October 14, 2007 Saudi authorities arrested Abdullah Al-Mohammadi, the fourth and final suspect wanted in the April 27, 2007, Ministry of Interior announced the arrests of 172 militants who were planning major terrorist attacks both in Saudi Arabia and abroad. The massive security sweep resulted in the seizure of weapons, more than \$5 million in cash, documents and computers.**

Recent Developments - II

- **December 1, 2007** interview with the Saudi daily 'Okaz, published shortly after the terror cells were uncovered and arrested, Prince Naif stressed the important role of the 'ulama and journalists in the ideological struggle against terrorism.
- **December 1, 2007**, Saudi government issues announcement prohibiting Saudi youth from waging jihad, called on young Saudis inside the country and abroad who were planning to engage in jihad in areas of conflict to turn themselves in as soon as possible.
- **December 2007**, Saudi security forces capture another terrorist cell, which had planned to attack Muslim pilgrims during the Hajj.
- **November 2007**, the Saudi Interior Ministry announces that six terrorist cells, with a total of 208 members, were captured. Cells had planned operations including attacks on oil installations and assassinations of security personnel. Had targeted senior clerics who had come out against the terrorist organizations, including Saudi Mufti Sheikh 'Abd Al-'Aziz bin 'Abdallah Aal Al-Sheikh and Senior 'Ulama Council members such as Sheikh Saleh bin Fawzan Al-Fawzan.(
- **October 1, 2007**, Saudi Mufti Sheikh 'Abd Al-'Aziz bin 'Abdallah Aal Al-Sheikh issued a fatwa prohibiting Saudi youth from engaging in Jihad in Iraq.
- **February 26, 2007** killings of four French nationals in southwestern Saudi Arabia. Two other suspects were arrested earlier in the year – Majed al-Harbi on May 27, 2007 and Nasser Al-Balawi in July 2007. The suspected mastermind of the murders, Walid Al-Raddadi, was killed during a gun battle with Saudi security forces on April 6.

Source: Saudi Embassy,, The Kingdom of Saudi Arabia Initiatives and Actions to Combat Terrorism, May 2008; and E. Glass and Y. Yehoshua , “Saudi Arabia's Anti-Terror Campaign,” Inquiry & Analysis | No. 425 | February 28, 2008, Saudi Arabia/Reform Project, MEMRI

Past, Current, and Future Trends and Needs: National and National Security

Economics and Energy Exports

Saudi Economic Risks

- **Future oil/hydrocarbon prices and revenues;**
- **Cost/uncertainties in expanding and sustaining hydrocarbon production.**
- **Inflation: Officially over 8%, Now double digit;**
- **Food prices and supply;**
- **Poor income distribution, comparatively low per capita income**
- **Peg to dollar: *revenue impacts, inflation, food costs, etc..***
- **Need for Saudization; diversification, job creation:
Unemployment at least 12%, 25% for 20-29 age group.
Undereployment much higher.**
- **Capital cost imposed by expanding population, past underinvestment, demographics, and job creation.**

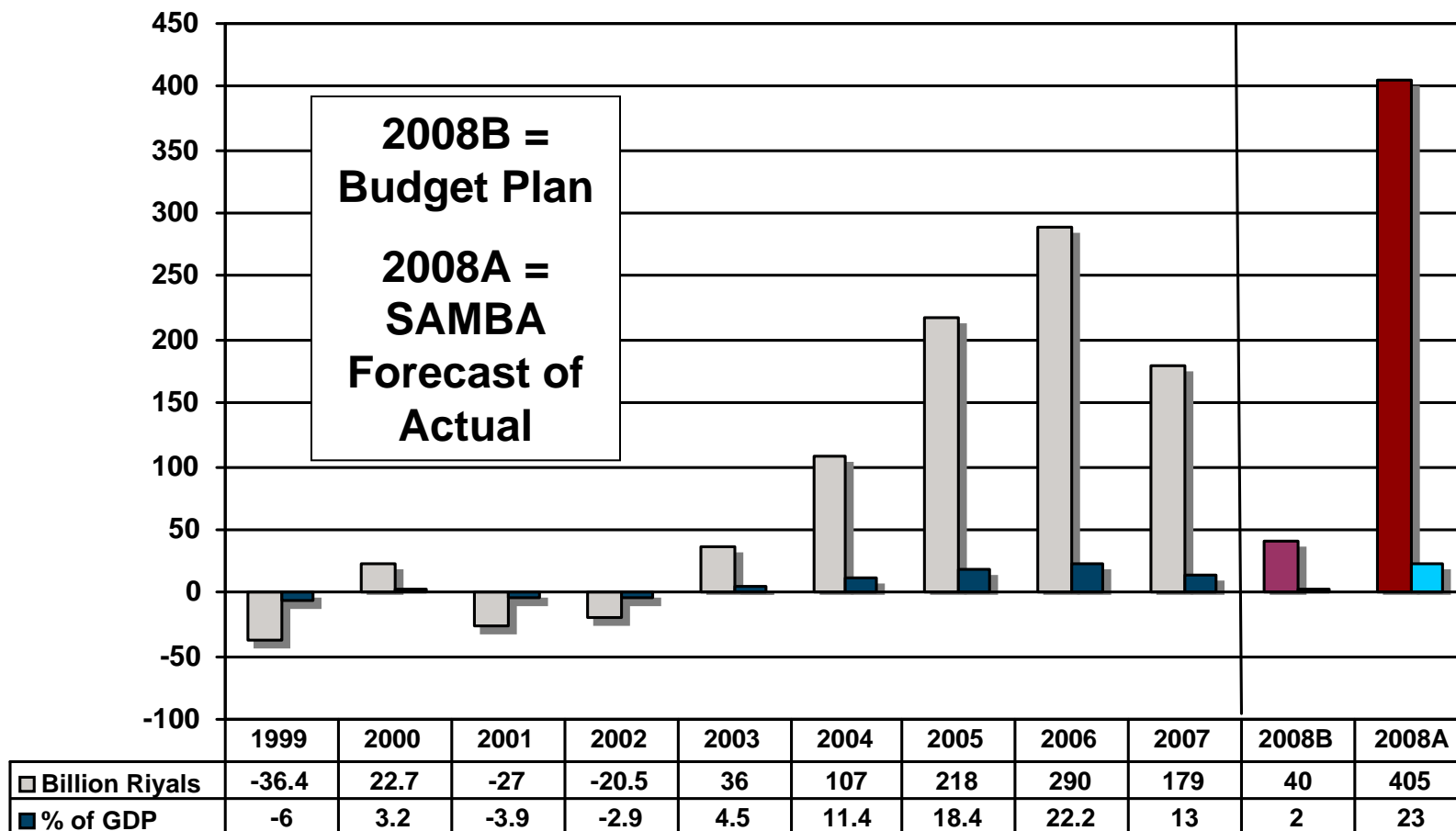
Basic Economic Realities Do Not Change. ***But Oil Revenues Do - I***

- **Oil-based economy with strong government controls over major economic activities.**
- **Possesses more than 20% of the world's proven petroleum reserves, ranks as the largest exporter of petroleum, and plays a leading role in OPEC.**
- **Petroleum sector accounts for roughly 75% of budget revenues, 45% of GDP, and 90% of export earnings**
- **High oil prices have boosted growth, government revenues, and Saudi ownership of foreign assets, while enabling Riyadh to pay down domestic debt.**
- **Organization of the Petroleum Exporting Countries (OPEC) earned \$671 billion in net oil export revenues in 2007, a 10 percent increase from 2006. Saudi Arabia earned the largest share of these earnings, \$194 billion, representing 29 percent of total OPEC revenues. Saudi Arabia earned \$192 billion in first six months of 2008.**

Basic Economic Realities Do Not Change. *But Oil Revenues Do - II*

- **40% of GDP comes from the private sector.**
- **Roughly 5.5 million foreign workers**
- **Encouraging private sector growth - especially in power generation, telecommunications, natural gas exploration, and petrochemicals - to lessen the kingdom's dependence on oil exports and to increase employment opportunities for the swelling Saudi population,**
- **Nearly 40% of which are youths under 15 years old.**
- **Unemployment is high, and the large youth population generally lacks the education and technical skills the private sector needs. Riyadh has substantially boosted spending on job training and education, infrastructure development, and government salaries.**
- **Government has announced plans to establish six "economic cities" in different regions of the country to promote development and diversification.**

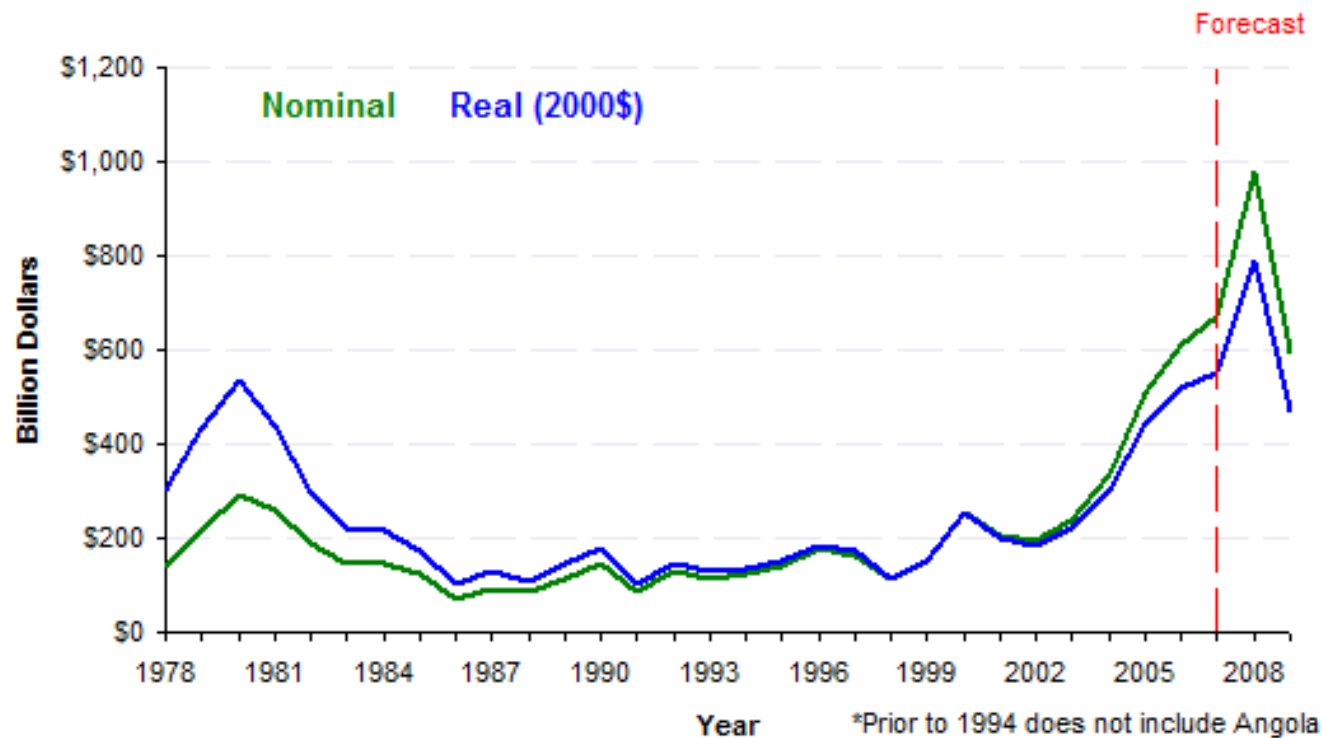
Trend in Saudi Budget Surplus - Deficit: 1999-2006



Source: SAMA, Saudi Ministry of Finance, SAMBA

Gulf Net Oil Export Revenues

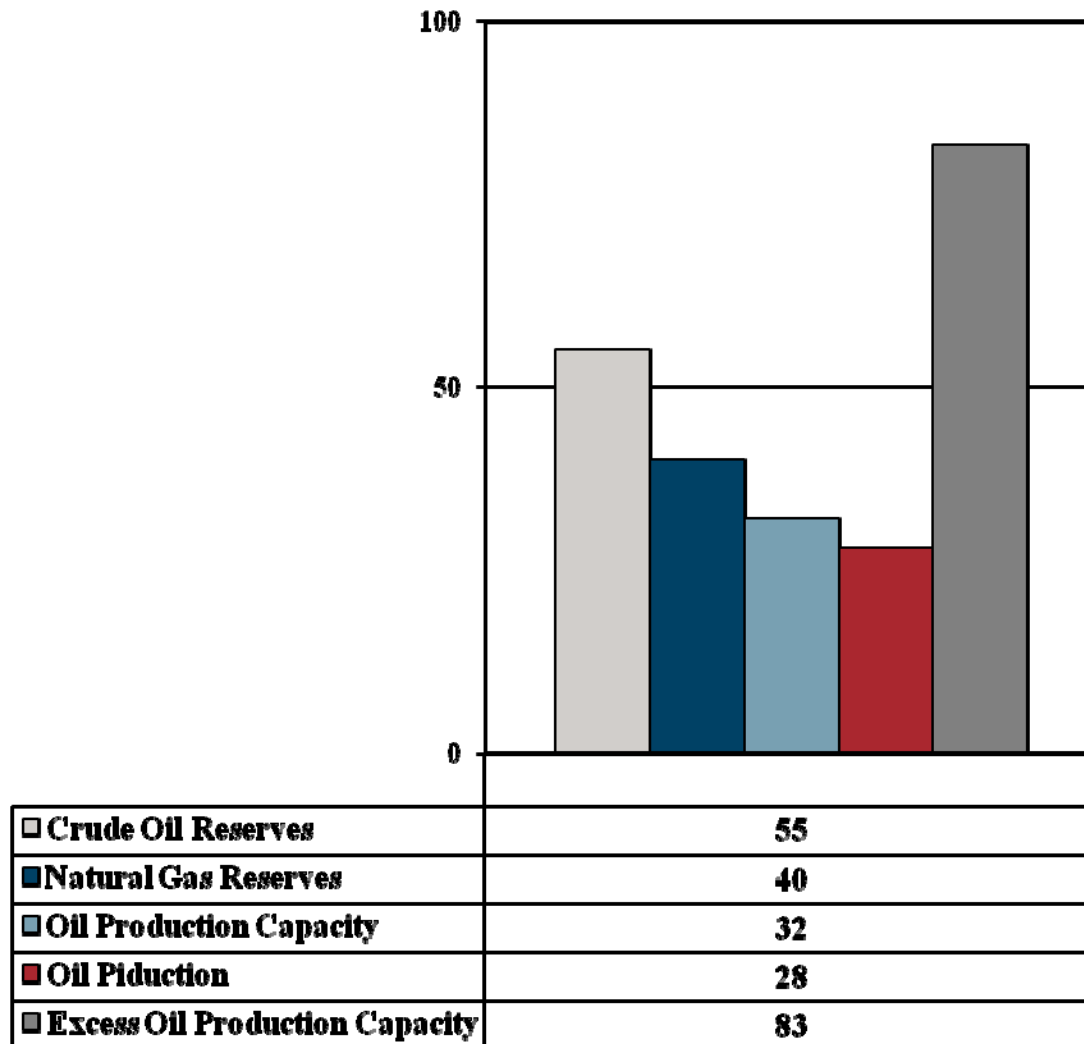
OPEC Net Oil Export Revenues*



Actual in CY2007

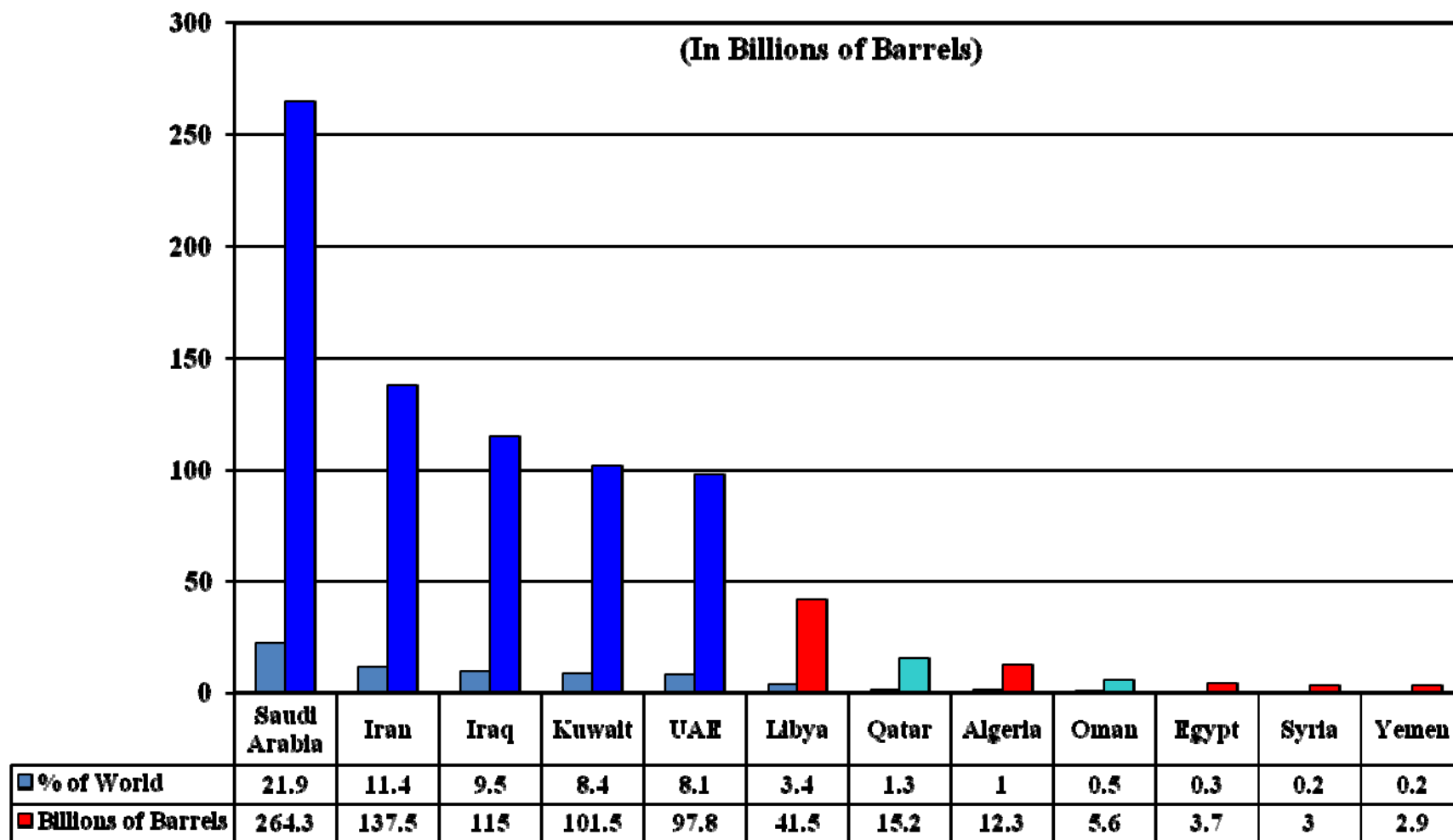
Country	Total	Per Capita
Iran	\$57B	\$873
Iraq	\$38B	\$1,361
Kuwait	\$55B	\$21,858
Qatar	\$26B	\$28,357
Saudi	\$194B	\$7,031
UAE	\$63B	\$14,150

Gulf Energy as Percent of World in 2007

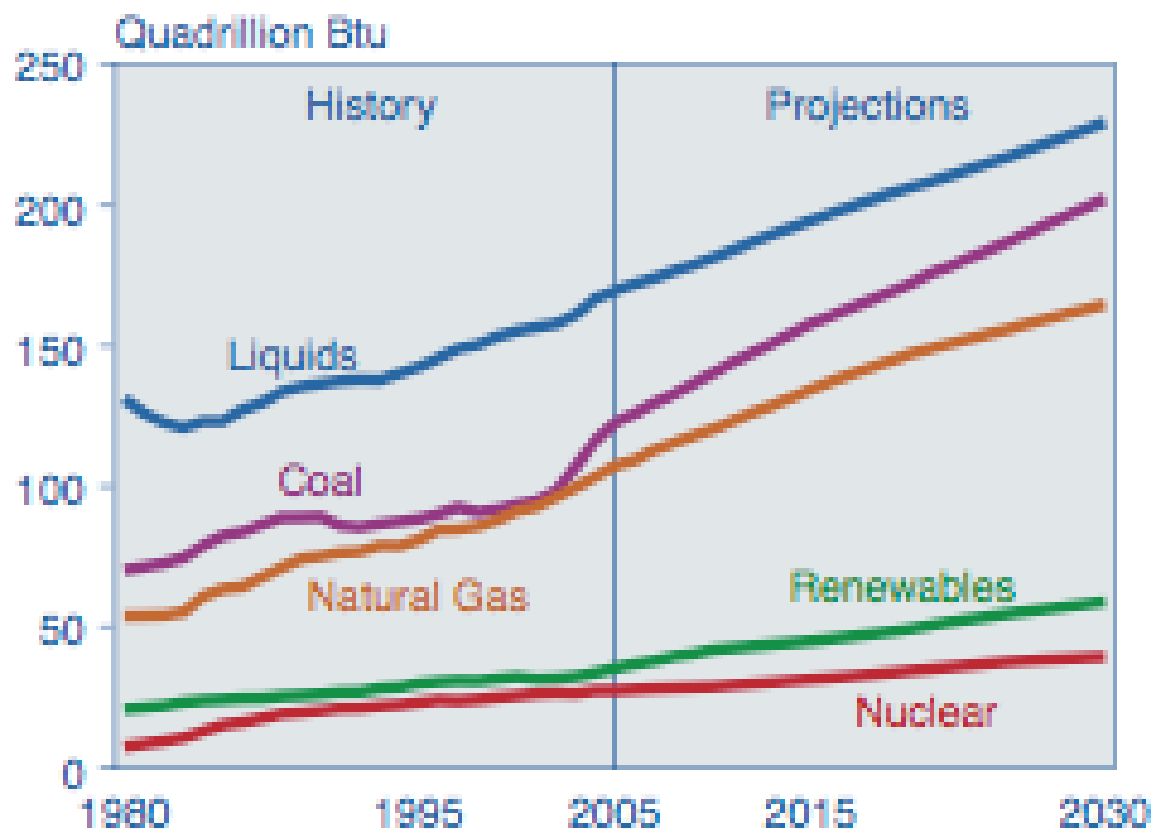


World Dependence on Gulf

Proven Conventional Oil Reserves



World Energy Use: 1980-2030

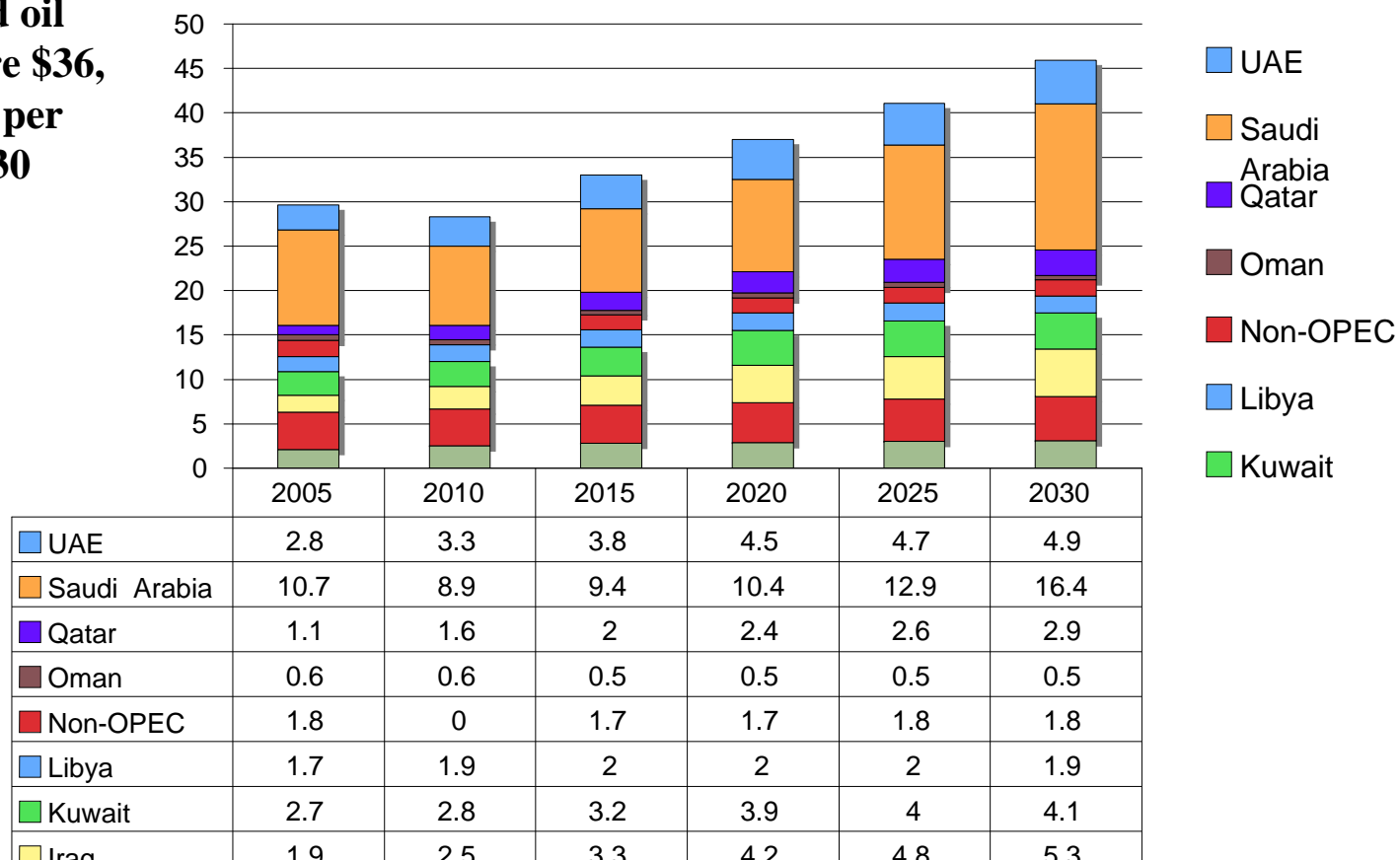


Sources: 2005: Energy Information Administration (EIA), *International Energy Annual 2005* (June-October 2007), web site www.eia.doe.gov/iea. Projections: EIA, *World Energy Projections Plus* (2008).

Rising Output From Gulf Oil Producers: 2005-2030

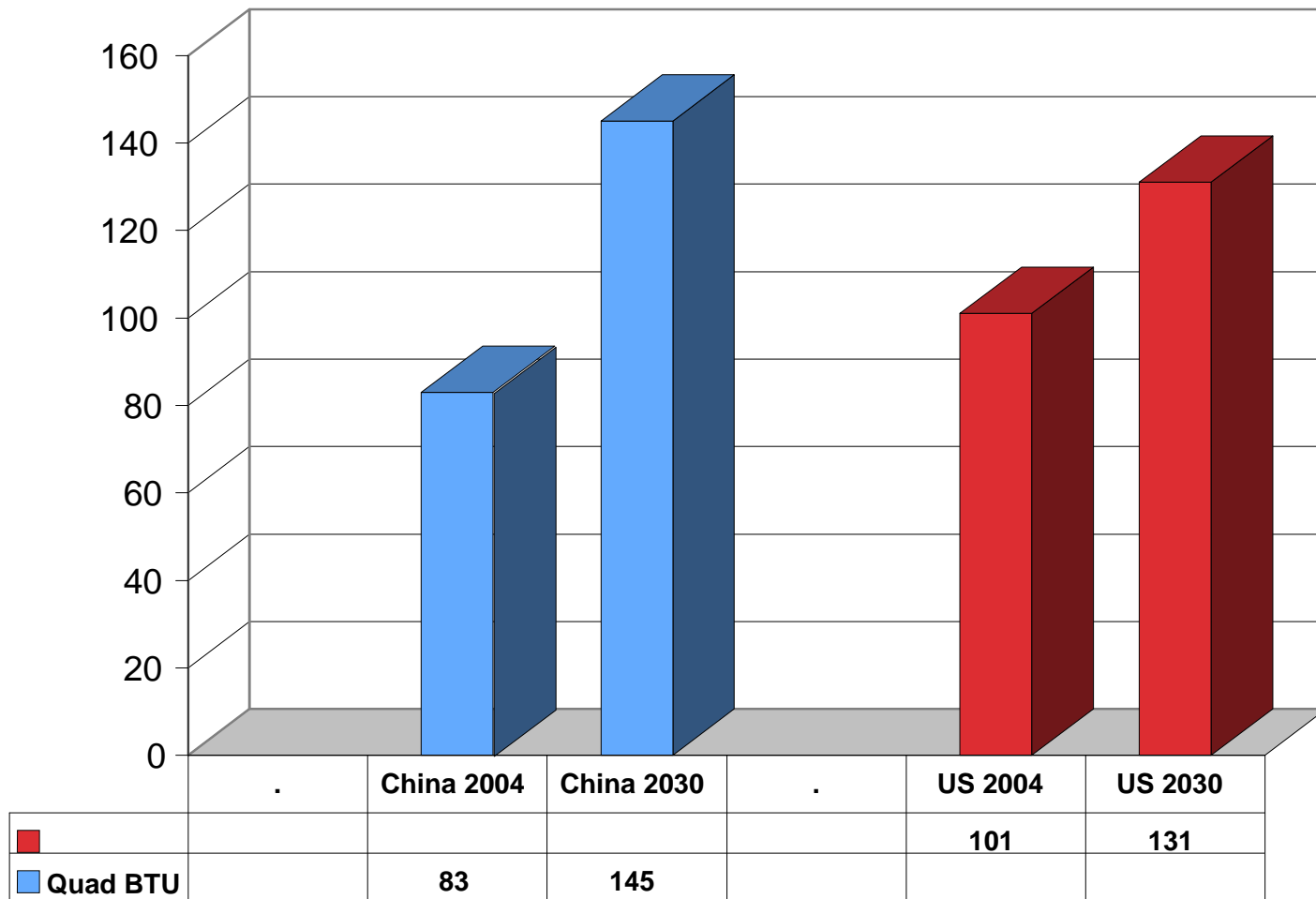
(In MMBD in EIA/DOE reference case in IE0 2007)

Average world oil prices in 2030 are \$36, \$59, and \$100 per barrel in 2030

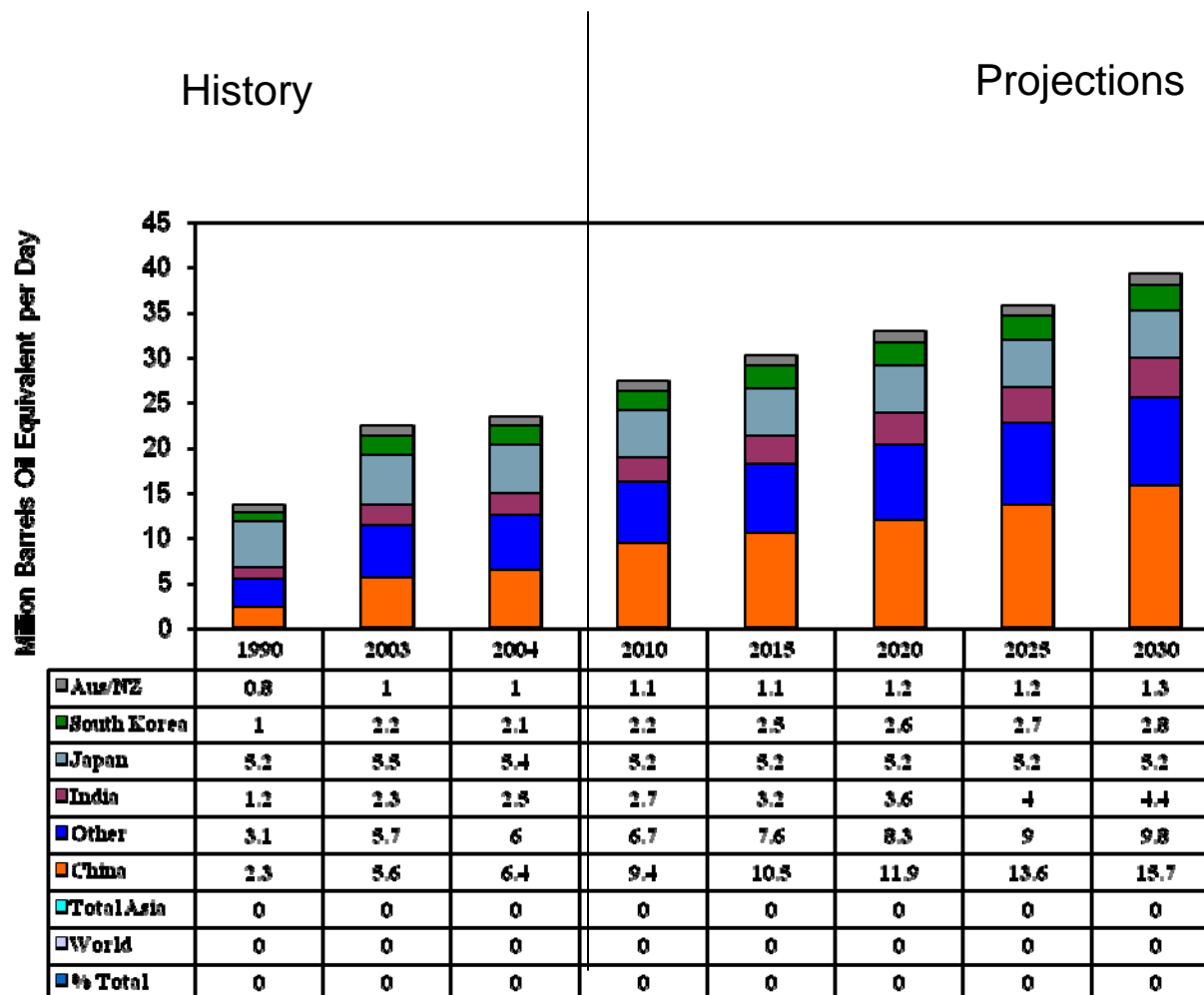


Growth of China and US Energy Demand

Consumption of Energy in Quadrillion BTUs: 2004 vs. 2030



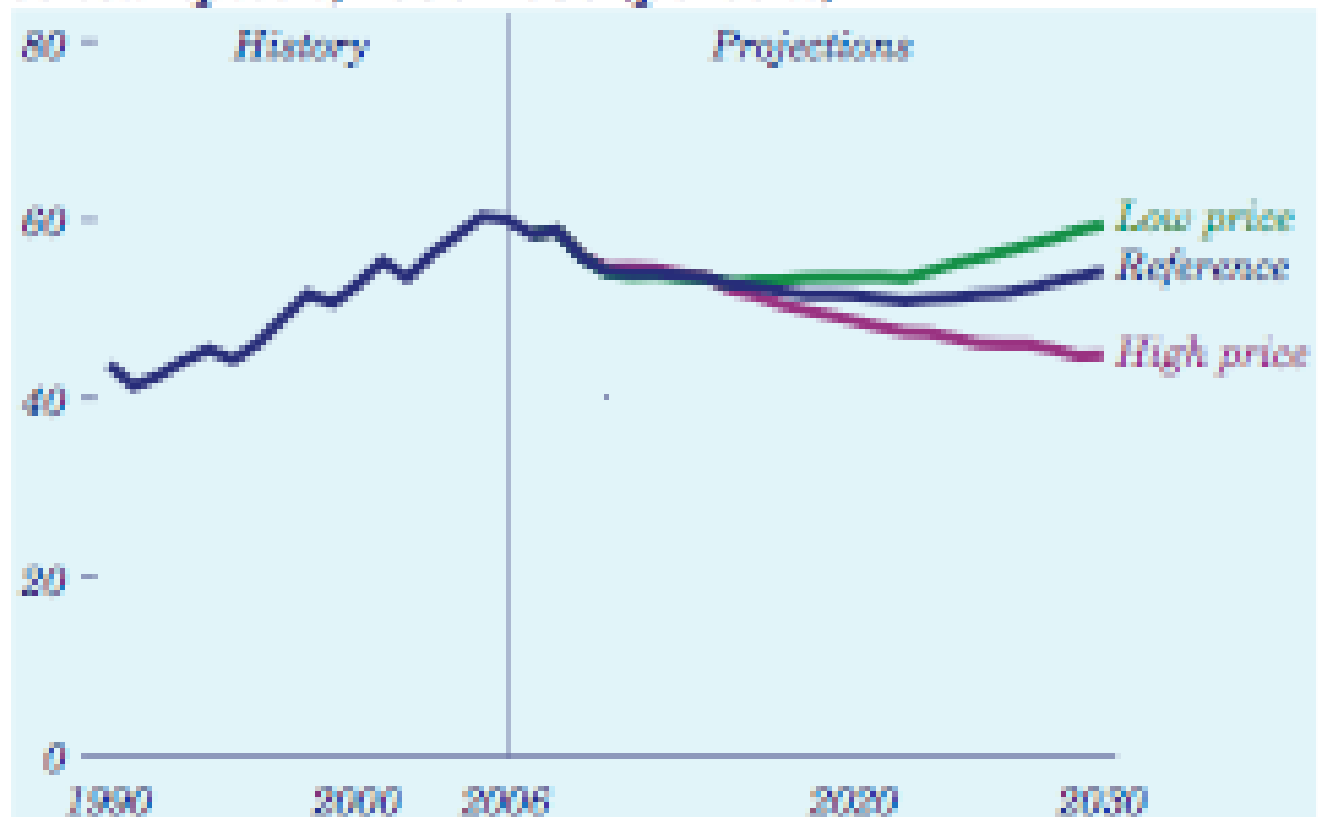
Impact of Rising Asian Liquids Consumption in the EIA Reference Case, 1990-2030



Source: EIA, IEO2007, Appendix A, p. 88

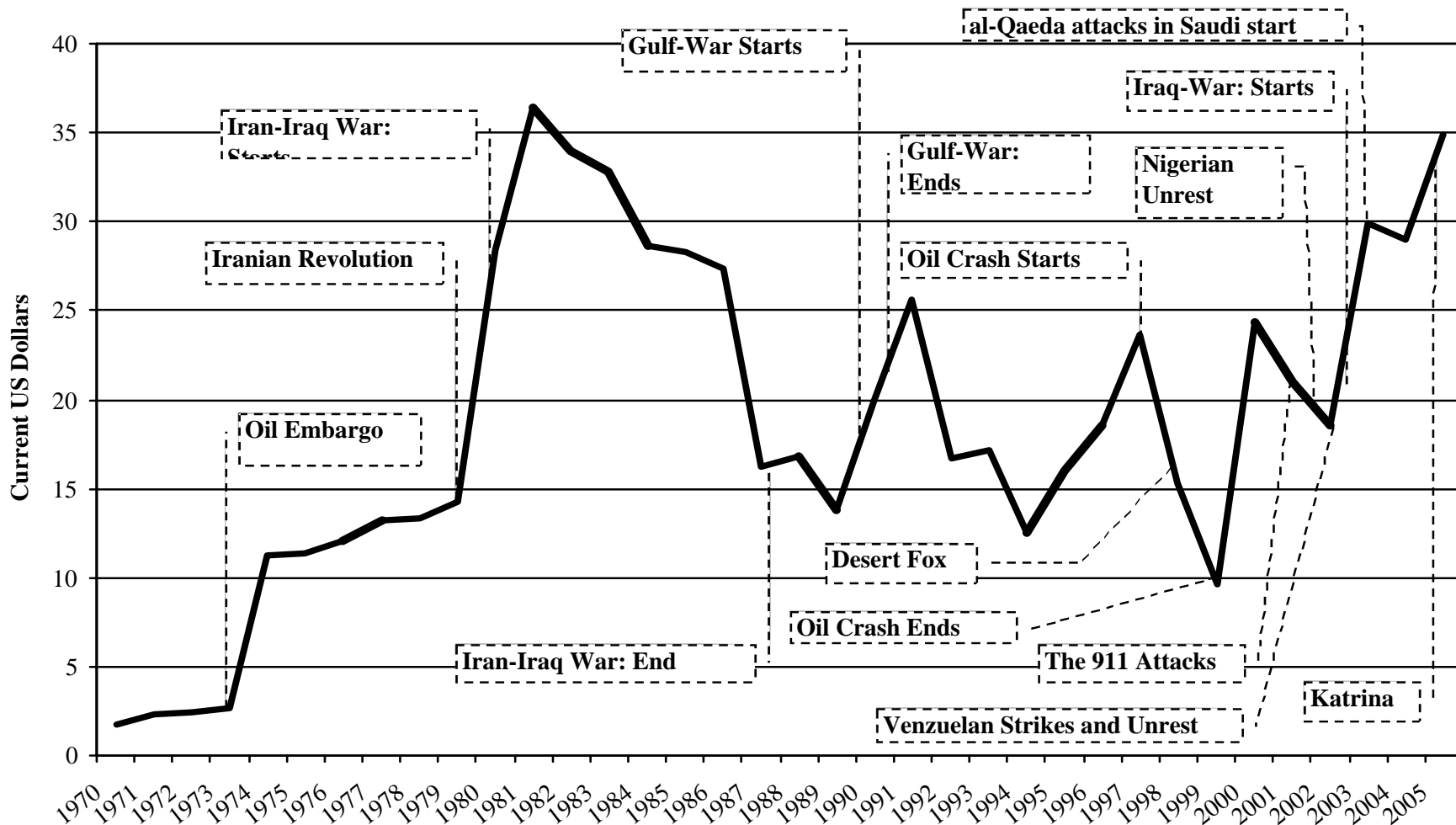
Net Import Share of U.S. Liquid Fuels Consumption, 1990-2030 – 2008 Estimate

Figure 90. Net import share of U.S. liquid fuels consumption, 1990-2030 (percent)



History of Oil Shocks: Pre-\$100 Oil

Overtimes: more incidents, more frequent volatility, higher risk of asymmetric attacks, and more geopolitical uncertainties.

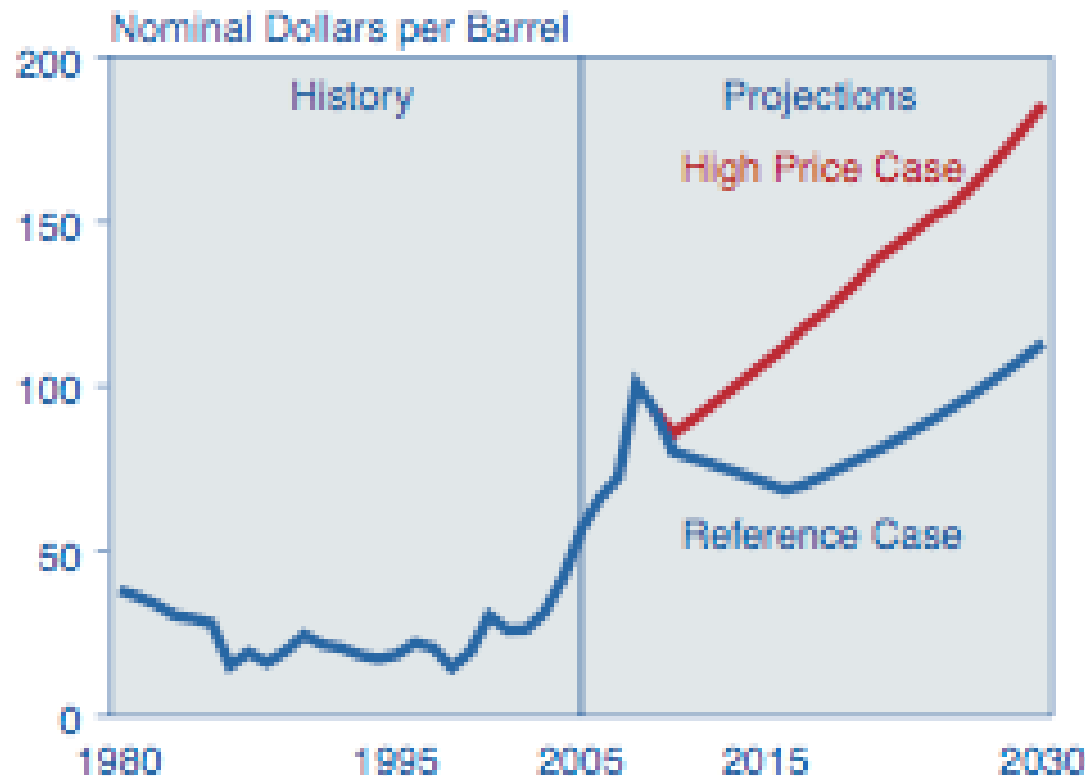


Source: EIA, "Crude Prices by Selected Type 1970-2005," <http://www.eia.doe.gov/emeu/aer/txt/ptb1107.html>.

Note: These prices are averages of several types: Saudi Light, Iranian Light, Libyan Es Sider, Nigerian Bonny Light, Indonesian Minas, Venezuelan Tia Juana light Mexico Maya, and UK Brent blend

None

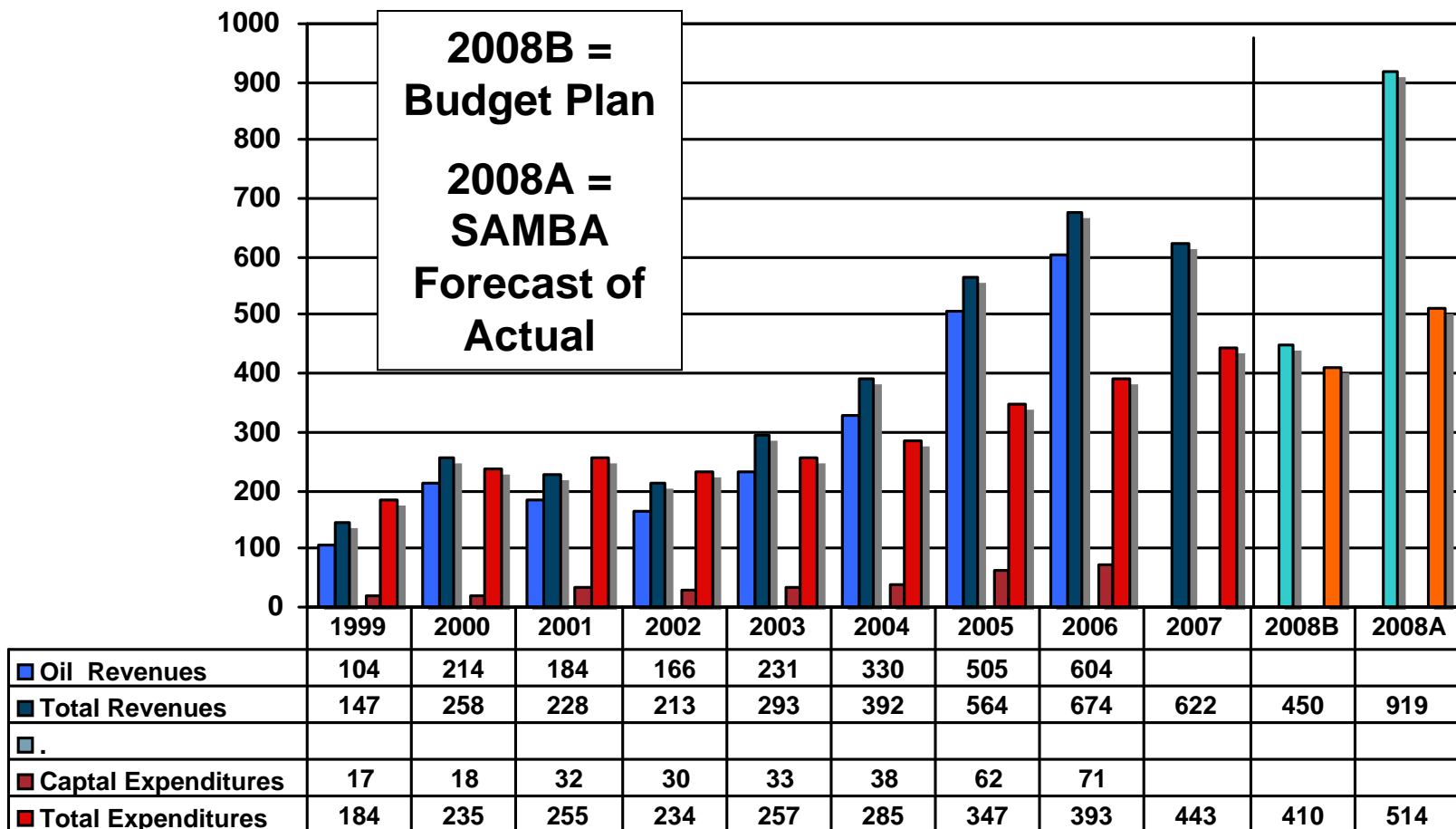
US IEA Estimate of Future Oil Prices



Sources: **History:** Energy Information Administration (EIA), *International Energy Annual 2005* (June-October 2007), web site www.eia.doe.gov/iea. **Projections:** *Annual Energy Outlook 2008*, DOE/EIA-0383(2008) (Washington, DC, June 2008), web site www.eia.doe.gov/oiaf/aeo.

Changing Impact of Oil Revenues 1999-2008

(In Billions of Current Riyals: Pre-Financial Crisis)

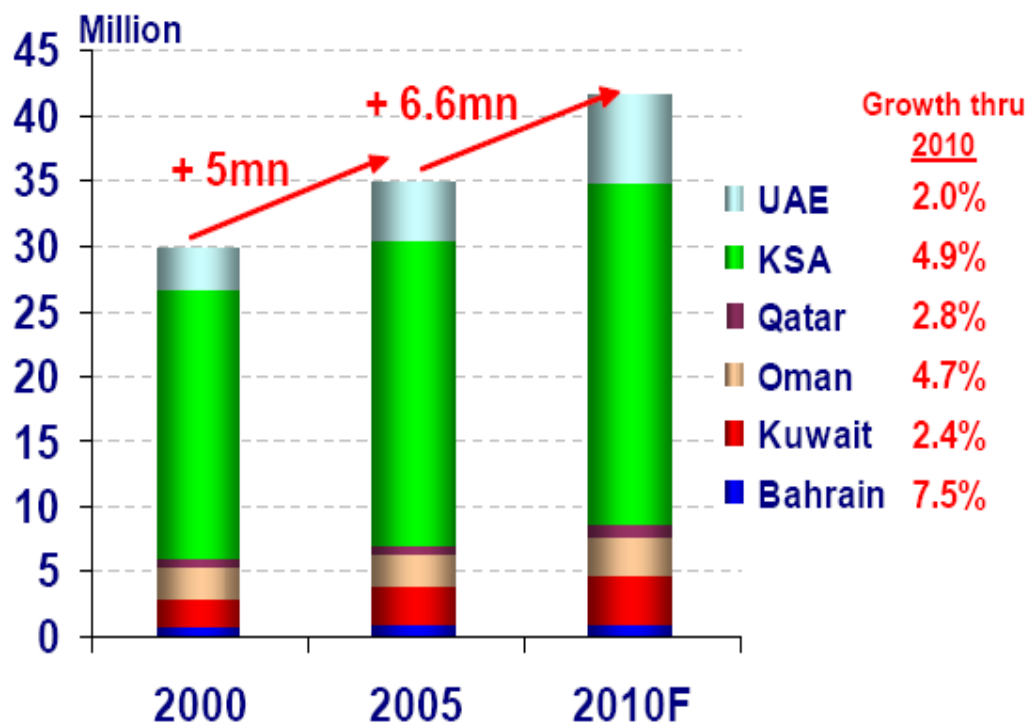


Source: SAMA, Saudi Ministry of Finance, SAMBA

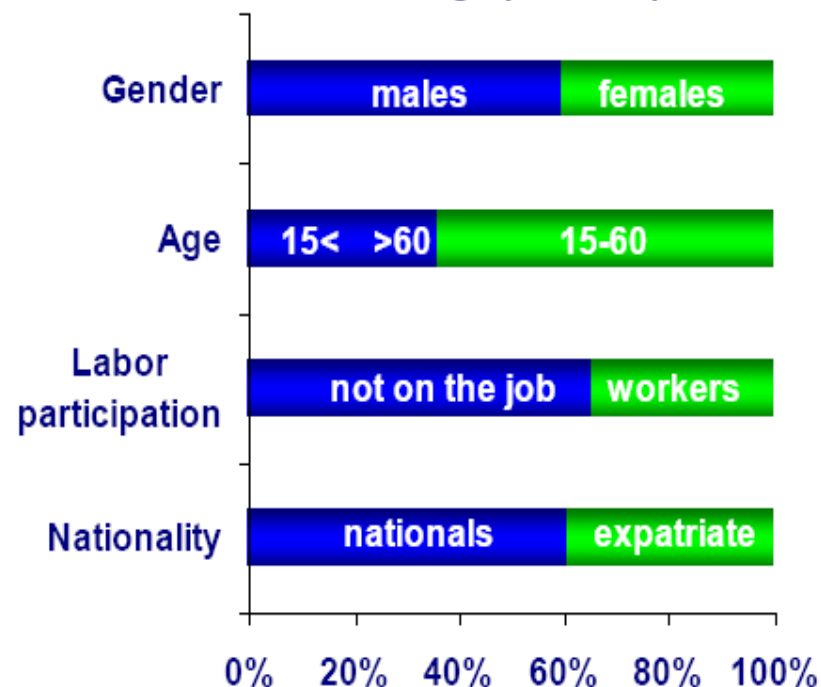
Demographics and Income

Overall Population Pressure in GCC

GCC population



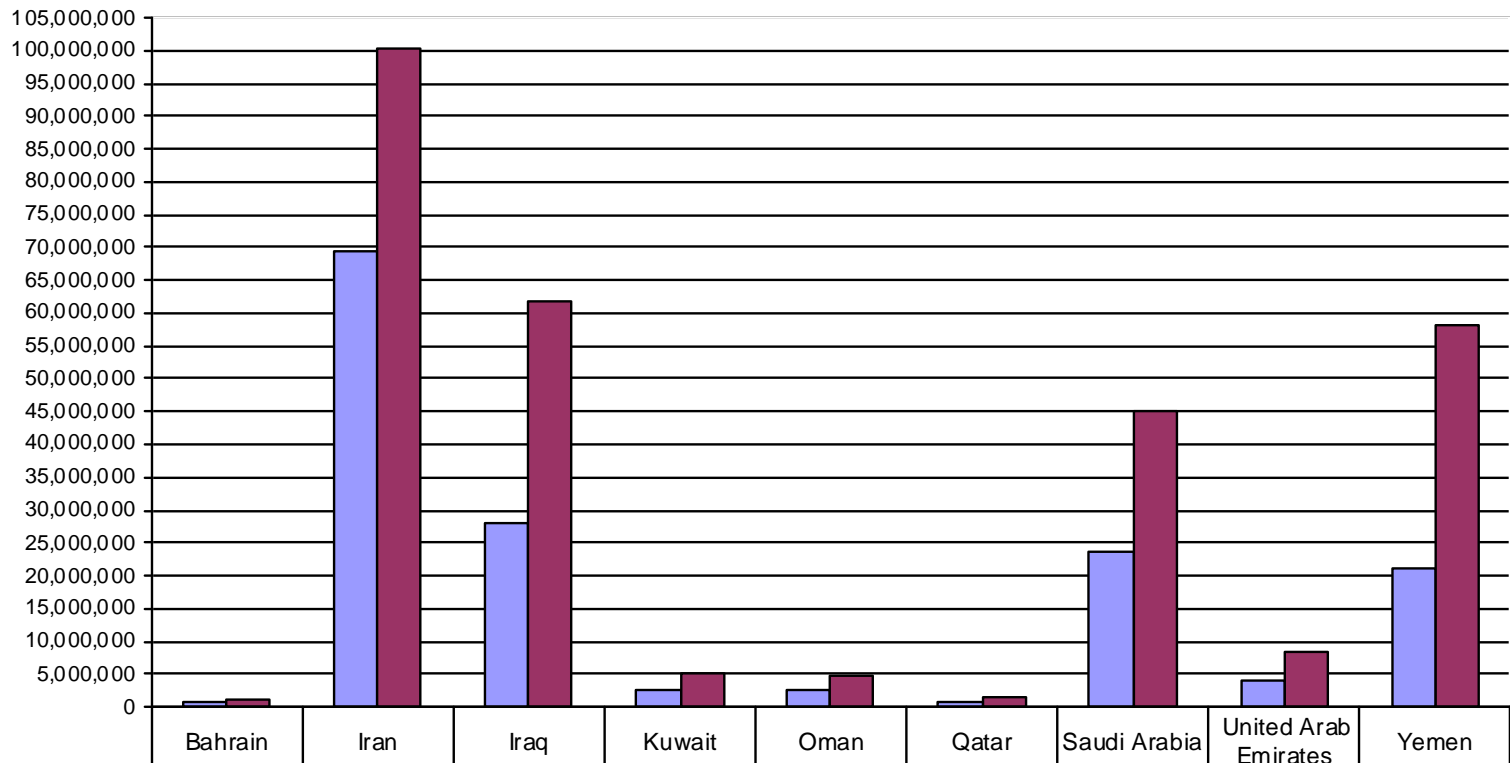
GCC demographic footprint



Source: NBK GCC Economic Outlook, 2008. Pg. 9.

Total Population of Gulf States: 2005 vs 2050

(UN Data)



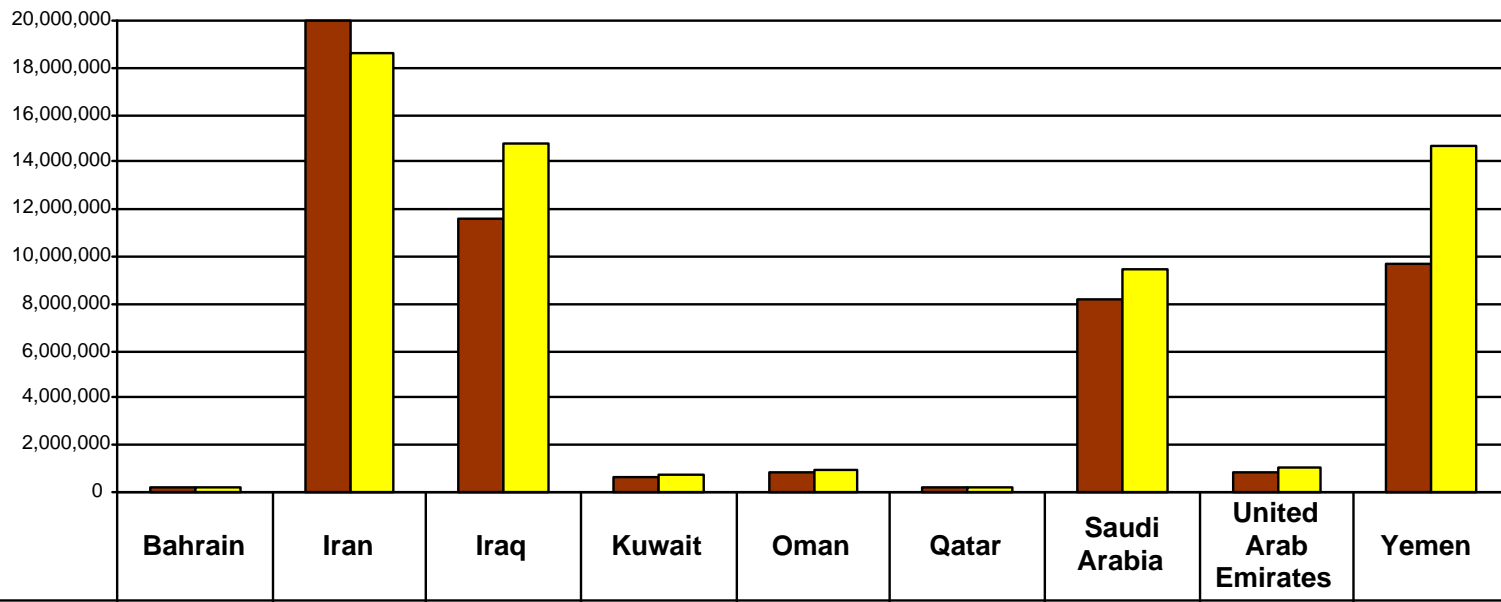
Population 2005	724,788	69,420,607	27,995,984	2,700,000	2,507,042	796,186	23,612,360	4,104,291	21,095,679
Estimated Population 2050	1,173,037	100,173,596	61,941,632	5,240,174	4,638,971	1,333,342	45,030,295	8,520,789	58,008,932

Note: Estimates for 2030 and 2050 are based on median variant projections

Source: Adapted by Anthony H. Cordesman from the United Nations Population Division's annual estimates and projections

Population of Gulf States Ages 0-14 Years: 2005 vs 2050

(UN Data)

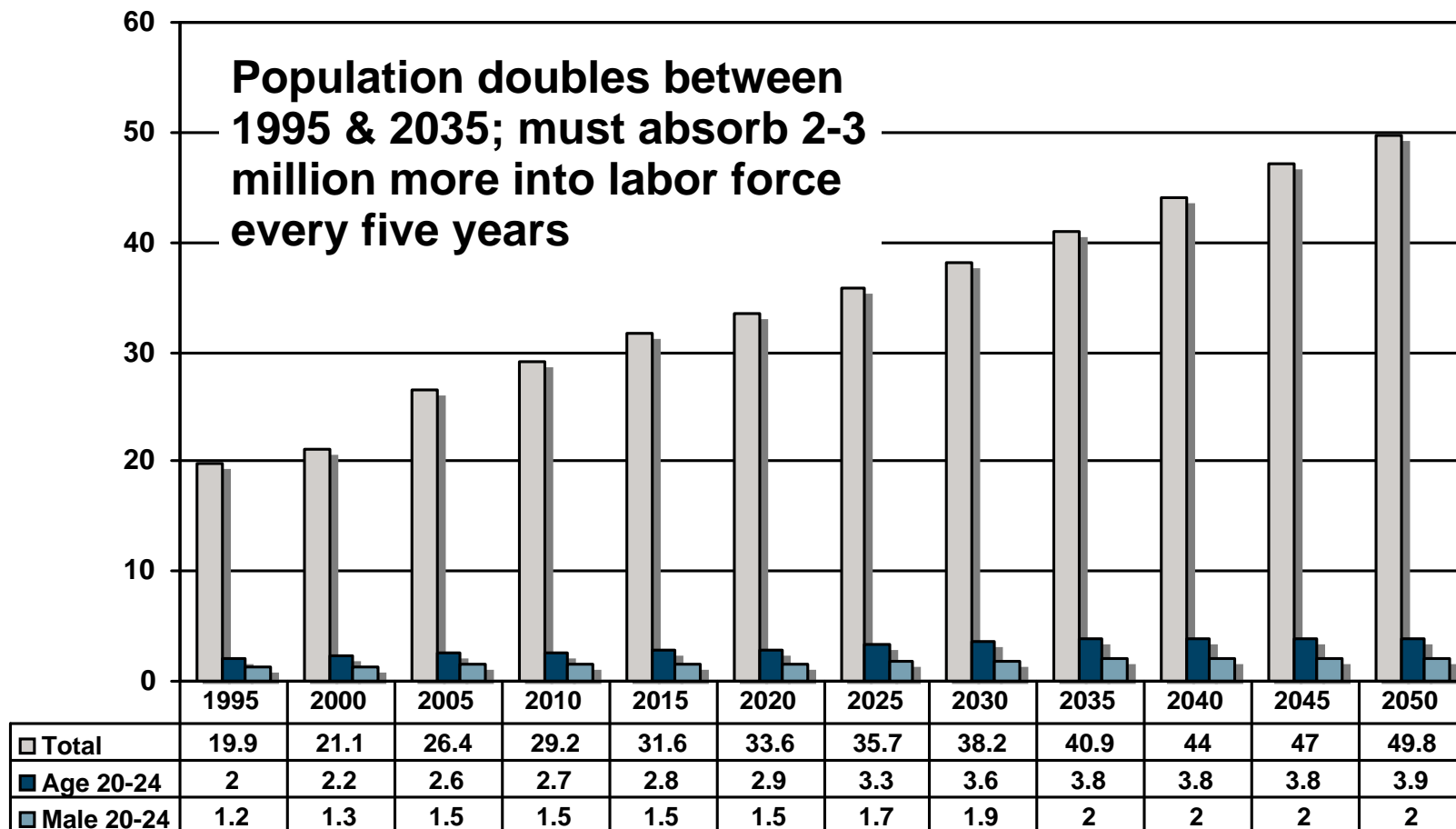


2005 0-14 Years	190,282	19,961,111	11,606,097	641,476	847,128	173,122	8,153,785	814,637	9,678,072
2030 0-14 years	184,402	18,611,541	14,809,245	784,342	967,926	205,625	9,415,064	1,074,180	14,691,100

Note: Estimates for 2030 and 2050 are based on median variant projections

Source: Adapted by Anthony H. Cordesman from the United Nations Population Division's annual estimates and projections

Saudi Population Pressure: 1995-2050



Source: US Census Bureau, IDB data base

Shi'ite Demographics & Foreign Labor

TOTAL POPULATION : 23,118,994 (Native Saudi : 16,854,157, Foreign : 6,264,837)

EASTERN PROVINCE : Total Population : 3,360,157

Native Sunni : 1,541,379

Native Shi'a : 914,765

Foreign : 944,013

The two main regions in the Eastern Province where there are the largest concentrations of native Twelvers Shi'as are the governorship of Qatif and Al Hassa.

- In Qatif, with a population of 474,573 in 2005, there is an estimated 87% Shi'a majority. There is a small community of mainly foreign workers that make up 59,808 of the registered inhabitants of the governorship. The Qatif governorship includes all the overwhelming Shi'a major urban cities such as Qatif city, Saihat, Safwa, Awamiyah and Tarut.
- In Hasa, with a population of 908,366 in 2005, there is an estimated 40% to 45% Shi'a minority. The capital and the largest city by far of the governorship is Hufuf with a population of over 302,841 in 2005. It is a predominantly Sunni city. There is also a small community of foreign workers.
- In the urban triangle of Dammam (the capital of the Eastern Province), Al Khobar and Dhahran, there is also a small Shi'a community that is estimated to have grown to just over 100,000 in 2005 between the three cities.

NAJHRAN PROVINCE : Total Population : 419,457

Native Sunni : 124,457

Native Ismaeli : 224,776

Foreign : 70,224

In Southern Province of Najran, with a population of 419,457 inhabitants in 2005, there is an estimated 55% Ismaeli majority. Although a small community with a distinct history revolving around a tribe (Bani Yam), the Ismaelis form a clear majority in Najran.

MADINAH PROVINCE : Total Population : 1,512,076

Native Sunni : 1,207,690 (Minimum Estimate)

Native Shi'a : 80,000 (Average Estimate)

Foreign : 224,386

In the Province of Madinah, with a population of 1,512,076 inhabitants in 2006, there is an estimated 90% Sunni majority. There is a sizeable community of foreign workers that make up 224,386 of the registered inhabitants of the Province. There is a small native Shi'a Twelvers Community in Madinah city that numbers between 50,000 to 75,000. There is also a village outside Madinah city that is populated by a 5,000 to 7,500 native Shi'a twelvers community.

TOTAL SHI'ITE POPULATION :

1) Eastern Province = 914,765

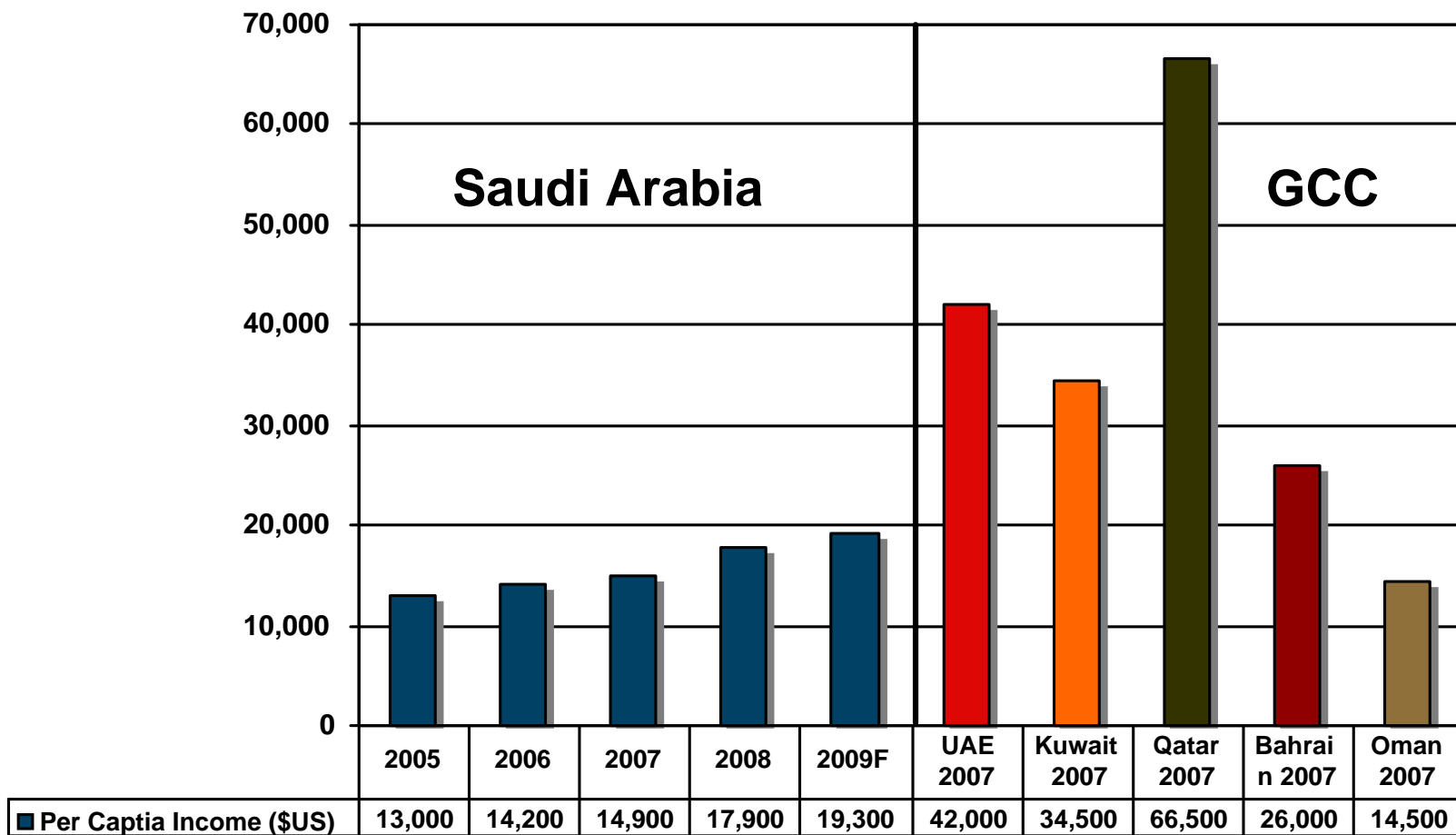
2) Najran Province = 224,776

3) Madinah Province = 80,000 (Average Estimate)

4) Other = 100,000 (Average for small displaced Shi'a communities around Kingdom)

TOTAL 1,319,541 (represent 8% of the native Saudi population base, and 6% of the total population base in the Kingdom for the year 2005-2006.

The Per Capita Income Challenge: 2005-2009 (Pre-Financial Crisis)



Source: SAMBA, June 2008

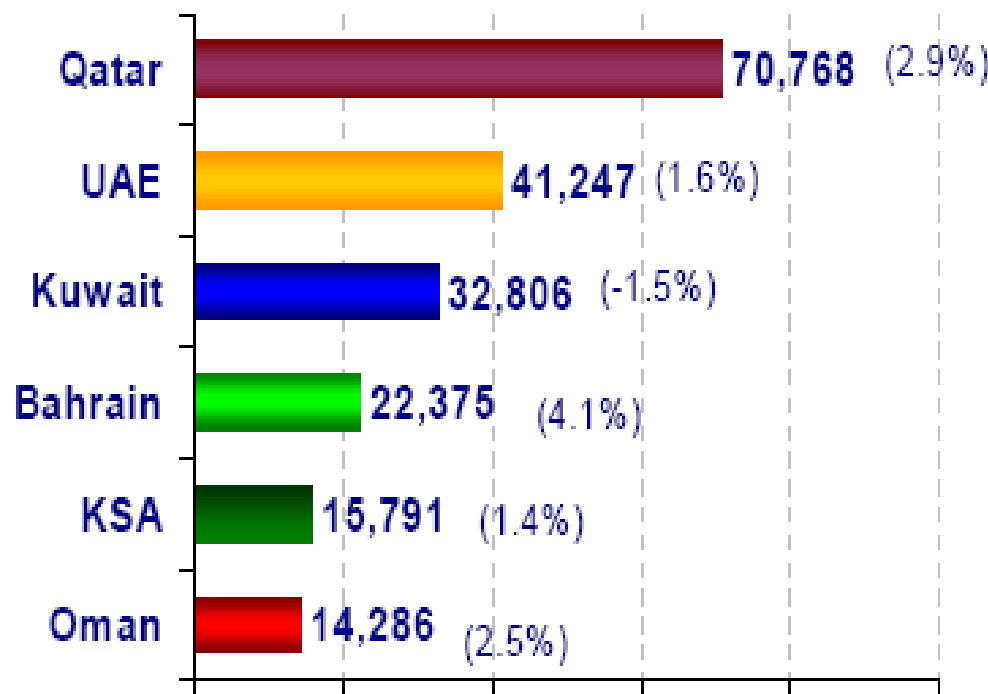
Key Disparities in the GCC States

Increase in oil wealth is matched by major growth in non-oil sector, but major problems remain:

- Income distribution
- Differences in per capita income
- Dependence on foreign labor

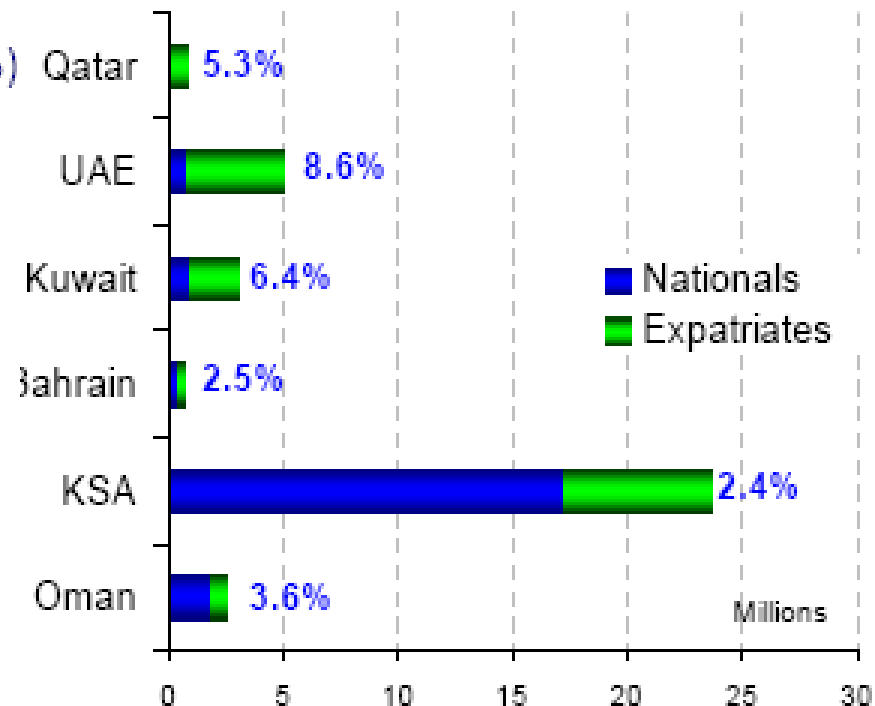
Per Capita GDP (\$) - 2007

(real growth of per capita GDP in paranthesis)



Population by nationality in 2006

(in million, growth shown as %)

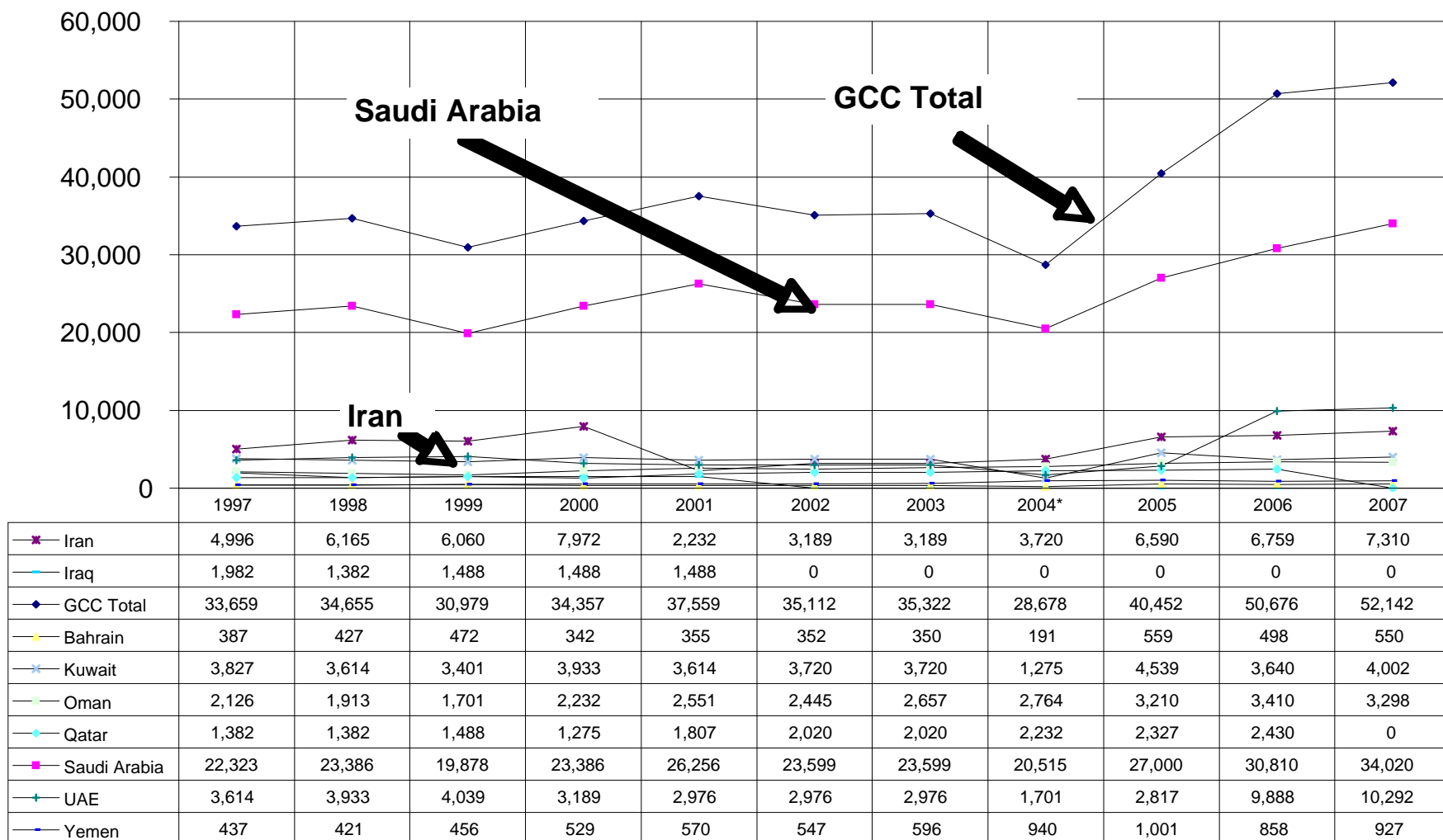


National Security

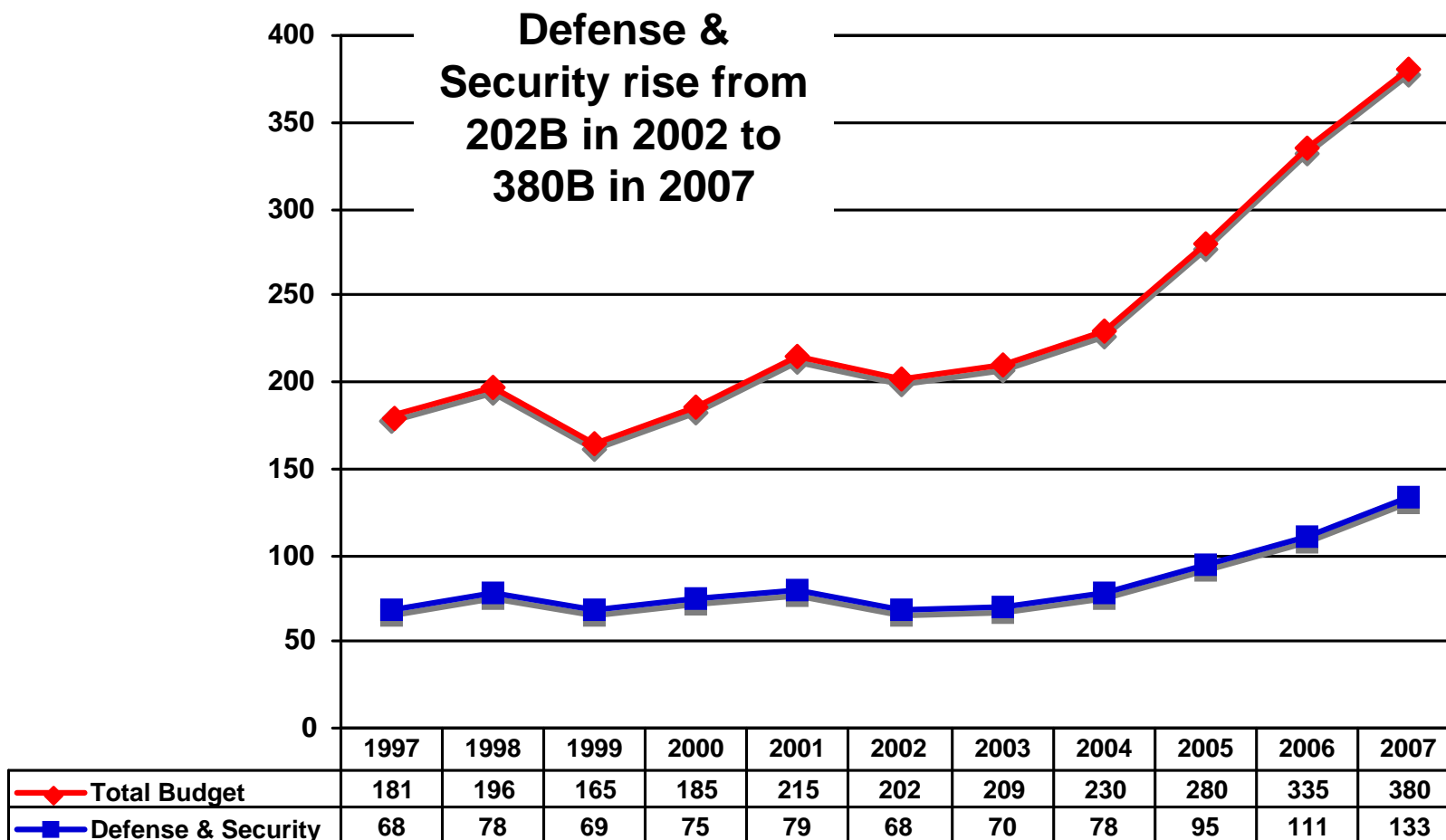
Past, Current, and Future Trends and Needs

- **Effective internal security forces;**
- **Military forces that are loyal and do not threaten system of government;**
- **Defense of borders and Gulf and Red Sea coasts;**
- **Secure exports and lines of communication.**
- **Technology and advanced arms to reinforce and compensate for evolving forces, limited manpower skills.**
- **Airpower to defend country and provide capability to retaliate; ground based-air defense (and missile defense) to supplement airpower.**
- **Slow creation of Gulf and Red Sea naval forces.**
- **Balance dependence on foreign allied forces like US against political and security risks.**

Comparative Military Spending: 1988-2007



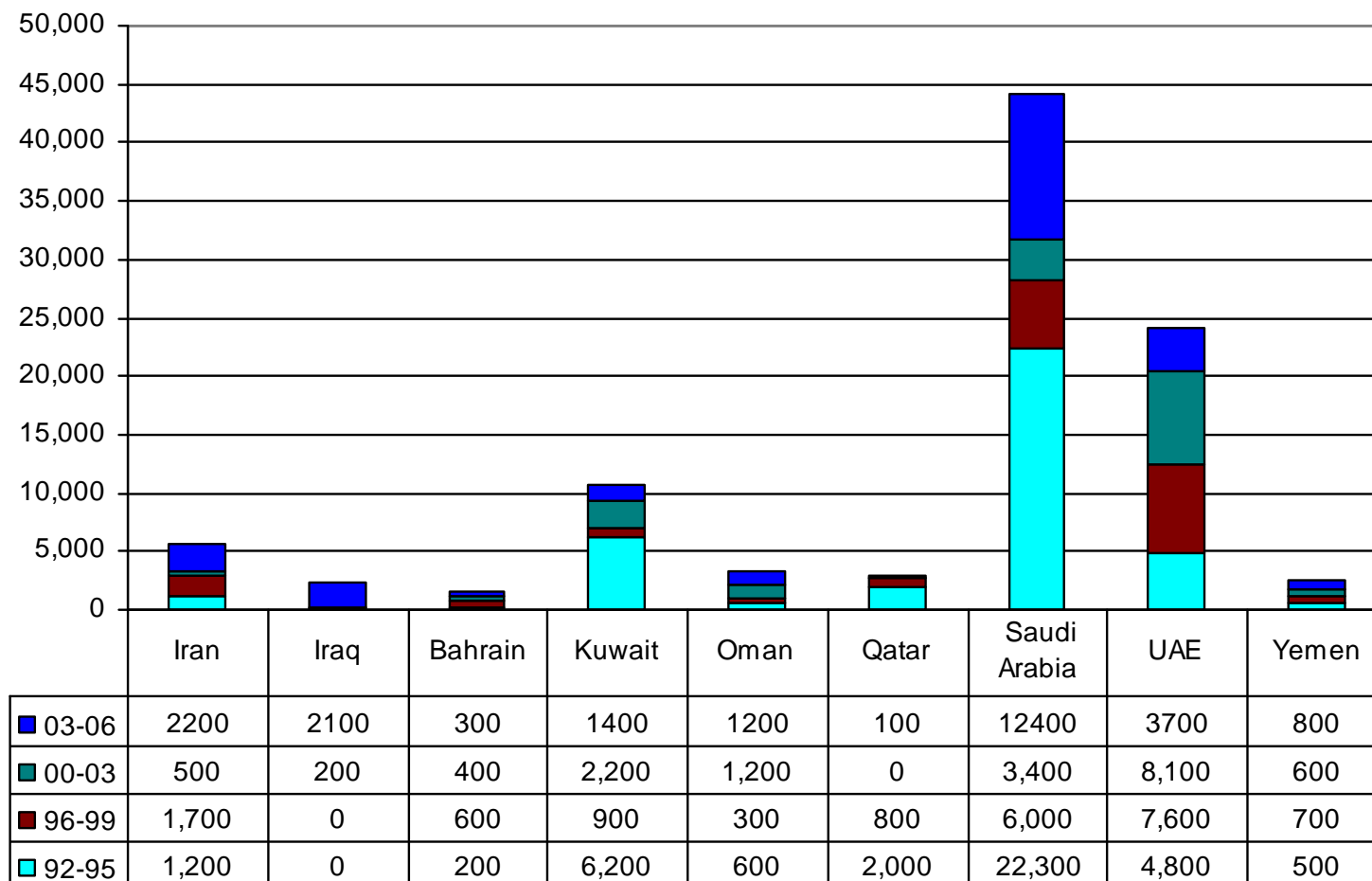
Saudi Budget Projections: National Security vs. Total (In Billions of Current Riyals)



Source: SAMA, 2008

Comparative New Arms Orders: 1988-2007

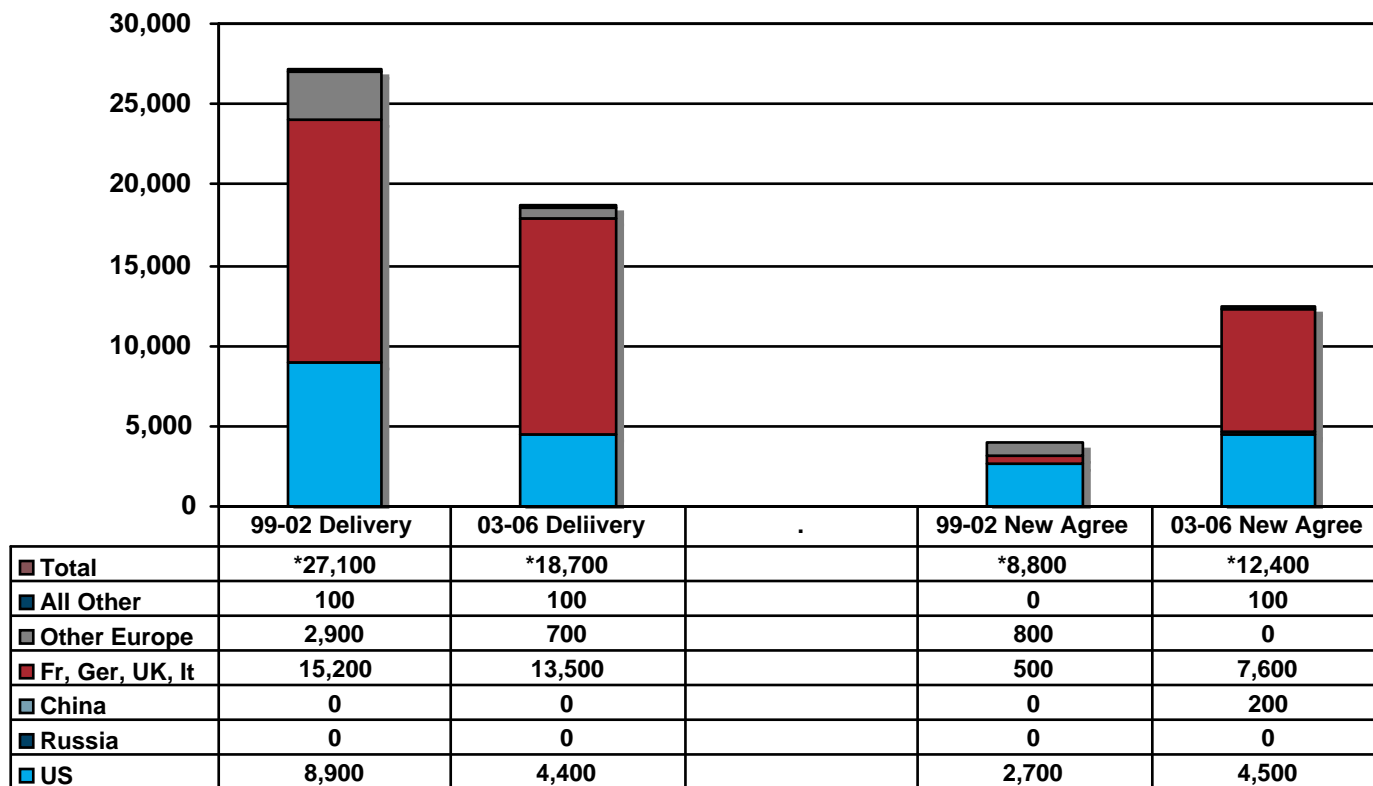
(in \$US Current Millions)



0 = Data less than \$50 million or nil. All data rounded to the nearest \$100 million.

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

Trend in Saudi Arms Sales - 1999-2006



Source: Richard F. Grimmett, CRS

Army/National Guard Needs

- **Improved “jointness” with air force, coast guard, and army/national guard in variety of local defense missions.**
- **Refocus force development to improve irregular warfare capabilities, expand special forces and air mobility.**
- **Develop true interoperability with other Southern Gulf forces.**
- **Standardize equipment; remove older types.**
- **Develop sustainability and maneuver capability away from bases, military cities.**
- **Manpower quality.**
- **CPX, FTX, and more realistic exercise capability.**

Saudi Army

- **75,000 nominal strength**
- **3 armored brigades, 5 mechanized brigades, 1 airborne brigade, 1 artillery brigade, one Royal Guard regiment, and 1 aviation command.**
- **910 Main battle tanks: 115 M1A2, (200 in store?), 450 M-60A3, 145 AMX-30 in store.**
- **430 armored recce: 300 AML-60/AML-90, LAV-AG 130; buying 32 Fuchs 2 NBC vehicles.**
- **780 AIFV: 380 AMX10P, 400 M-21 Bradley with TOW.**
- **2,240 APCs.**
- **868 artillery weapons: 170 155mm self-propelled; 238 105mm and 155mm towed; 60 ASTROS II MRLs.**
- **400 mortars.**
- **280 armored ATGM systems with HOT and TOW/TOW-2A; 1000 Dragon, 750 TOW/TOW2, HOT crew served ATGMs..**
- **Crotale, 500 Redeye, 500 Stinger.**
- **12 AH-64.**

Key Military Cities

- **King Faisal Military City (KFMC) in Tabuk area: 12th Armoured Brigade and 6th Mechanised Brigade. Protect against threat from Israel, Syria or Jordan.**
- **King Abd al-Aziz Military City (KAAMC) in the Khamis Mushayt area: 4th Armored Brigade and 11th Mechaniszd Brigade. Protect against threat from Yemen.**
- **King Khaled Military City (KKMC) near Hafr al-Batin . in north-central Saudi Arabia, close to the Iraqi and Kuwaiti borders: Formations may include 45th Armored Brigade, the 8th Mechanized Brigade and 20th Mechanized Brigade, Was location of GCC Peninsula Shield. Force, revived in 2008 GCC meeting. Protected against threat from Iraq but now covers border and potential move on Kuwait by Iran. Largest of the military cities, and complex, is was built near the strategic Trans-Arabian Pipeline (Tapline) road connecting Ad-Dammam with Jordan, features underground command bunkers and surface-to-air missile sites.**
- **Building a fourth military city at Jizan, on the Red Sea, near Yemen. Facilities will include a naval base and air base.**

The King's Force? The National Guard

De facto commander is son of King Abdullah, Prince Mitiab. Large US advisory and contract effort.

In recent years the SANG (120,000: 95,000 active and 25,000 part time) has received new priority in terms of building up its capabilities and strength. Now has nine brigades formed or in the course of formation (three-four mechanised and five light infantry brigades plus ceremonial cavalry unit and other elements, including a security force. Current goal is five mechanised brigades and six light infantry brigades, as well as an aviation command. Has a Eastern Region HQ and the Western Region HQ, and is establishing a Central Region HQ.

Originally organized primarily to keep the army in check, to reinforce internal security, and to provide a fighting force based on Islamic teachings and tribal values and traditions. It is drawn from Bedouin tribes who are regarded as being particularly loyal to the crown.

In 2002, the SANG was estimated to have a strength of 75,000, in addition to about 25,000 tribal levies or militia. It was reported in 2005 that its active strength had been US personnel are involved in providing training and support to the SANG as part of the SANG Modernization Programme, which was set up under the terms of a 1973 Memorandum of Understanding (MOU.

Growing mechanized force, re-equipped with 440-720 Piranha armored fighting vehicles, but reports plans to equip it with tanks have not been implement.. As part of an effort to create to develop rapid reaction capabilities, has acquired 1,117 IFV-25 Coyote light attack vehicles and 450 LAV-25 recce vehicles in 10 variants, manufactured by General Motors, Canada, under a US Foreign Military Sales program. These have replaced most V-150 Commando APCs, but 290 still seem active and 810 in storage.

Has 105mm and 155mm toward artillery, TOW-2A and Dragon. 20mm AA guns and 90mm “AA” guns.

In May 2007, was reported to have ordered hundreds of armored vehicles and a network-centric warfare (NCW) command system from BAE Systems in May 2007 because of concerns over Iran, more sophisticated terrorist attacks..

Air Force Needs

- **Improved “jointness” with air defense force, navy, coast guard, and army/national guard in variety of defense missions.**
- **Improve Combined Air Operations Center capability in EW, joint warfare.**
- **Develop true interoperability with GCC air forces.**
- **Maintain edge in standoff/BVR air-to-air combat.**
- **Create standoff precision strike capability; near real time targeting capability and inflight retargeting.**
- **Upgrade AWACS for better jointness, better ELINT/EW, MPA functions.**
- **Improve Netting and IFF with RSAF USAF, USN, GCC air forces, and Saudi and GCC land-based air defenses.**
- **Develop SEAD mission capabilities.**
- **Readiness**
- **Manpower quality.**
- **Replace phased out Tornado ADV and F-5s with Typhoon**

Saudi Air Force - I

- **239 active combat aircraft; 30,000 men.**
- **121 fighters: 66 F-15C, 18 F-15D,**
- **155 Strike/attack fighters: 70 F-15S, 75 Tornado IDS, 10 Tornado IDS recce. Typhoon in delivery**
- **5 EA-3A AWACS.**
- **7 KE-3A, 8 KC-130H tankers.**
- **45 transports: 7 C-130E, 29 C-130H.**
- **123 trainers: 25 Hawk MK65, 18 Hawk MK65A, 45 PC-9.**
- **78 utility helicopters.**
- **12 AH-64 and 55 utility & support helicopters in Army**

Saudi Air Force - II

RSAF operates USD8.4 billion 'Peace Shield' system.

Completed in 1995. Jane's reports that has 17 AN/FPS-117(V)3 long-range, 3-D radar systems linked to AN/TPS-43 and AN/TPS-72 short- and medium-range radars.

A command operations center in Riyadh controls five sector command centers at Dhahran in the east, Al Kharj in the central zone, Khamis Mushait in the south near the Yemen border, Taif in the west, and Tabuk in the northwest.

Each major air base has a sector operations centre and the system integrates the RSAF's E-3A Sentry AWACS aircraft as well as air defence fighters, SAM batteries and some AAA pieces.

Tornado Upgrades, Trainer, Eurofighter

On 10 September 2006 BAE won a £2.5bn (€3.7bn, \$4.6bn) contract for the upgrade of 80 RSAF Tornado IDSs, similar to the RAF's Tornado GR4 standard. Three RSAF Tornado IDSs arrived at their Warton facility for design evaluation tests with the ultimate aim being "to improve serviceability, address obsolescence, and enhance and sustain the capability of the aircraft".

“Project Salem: ” In September 2007, BAE and Saudi Arabia sign a 4.43-billion-pound contract for 72 Eurofighter Typhoon and substantial training and support, plus munitions. Will replace Tornado ADV and F-5Es

Meteor, Brimstone, Storm, and advanced AAMs from MBDA?

AFP/FT report on 11-8-08 Saudi Arabia has begun discussions to buy a second batch of Eurofighter Typhoon jets from British group BAE Systems and could double its fleet to 144, "The Gulf kingdom could buy up to 40-72 more of the multi-role aircraft, an adviser to the Saudi government confirmed last night (Sunday)," (FT)

Buys of French Helicopters?

- **French say in August 2006 that Saudi Arabia will buy 142 helicopters from France:, as well as tanker aircraft and other weapons in the largest arms export deal ever signed by France. IISS reports initial buy was 10 NH-90 and 30 Fennec helicopters, ans 2 A330 MRT tankers.**
- **The deal is reported to eventually cover 64 NH-90 battlefield helicopters; 20 Eurocopter Cougar utility helicopters in Combat Search and Rescue version; 42 Eurocopter Fennec light helicopters; four Panther navalSearch and Rescue helicopters; and an initial batch of 12 Tiger attack helicopters.**
- **The contract also includes the provision of weapons, spare parts,training services and support equipment, as well as the construction ofseveral helicopter bases, boosting its total value to well over 7billion euros, sources say. It is the largest single arms export dealever signed by France.**
- **The NH-90 order includes 10 naval NFH-90s for the Saudi navy; 42 TTH-90 battlefield helicopters for the Saudi Army and 12 more for the Saudi Arabian National Guard, while the Fennec order comprises 30 helicopters for the Saudi air force and 12 for the national guard.**
- **A separate contract will cover an unspecified number of Airbus A33 0aerial tankers, similar to the KC-30 that EADS, the corporate parent of both Airbus and Eurocopter, has offered to the US Air Force.**

Air Defense Force Needs

- **Improved “jointness” with air force, navy, coast guard, and army/national guard in variety of defense missions.**
- **Clear plan ahead and architecture for future IHawk, Patriot, and TMD force.**
- **Modernize SHORADS, integrate better into layered defense and with army air defense capability.**
- **Improve Netting and IFF with RSAF USAF, USN, GCC air forces, and Saudi and GCC land-based air defenses.**
- **Readiness**
- **Manpower quality.**

Air Defense Forces - I

RSADF established in 1984. In time of war, becomes subordinate to the air force's Command, Control, Communications, Computers, & Intelligence (C4I) system.

Estimated strength of the RSADF is 16,000 personnel. Has an inventory of gun systems, self-propelled SHORAD systems, and HIMAD missile systems.

RSADF has an Air defense Operations Center (ADOC) located in each of the six group commands, which is turn linked to the main air defense command centre in Riyadh.

RSADF's AA guns are used in support of maneuver units and other air defense operations. Close-in, as well as medium range, systems can be found within all Group commands.

RSADF deploys 16 batteries with I-Hawk III SAMs (128 launchers). It is also equipped with the French Crotale SAM system, possessing 16 acquisition units and 40-48 firing units; IISS reports 141 Shahine, and 68 Crotale/Shahine. In addition, the RSADF deploys Anti-Aircraft Artillery (AAA) pieces.

Raytheon Patriot SAMs form part of the Kingdom's theatre anti-ballistic missile defenses although the exact numbers in service are unclear. The Saudis bought two batches of Patriot equipment and missiles. The first batch was ordered in September 1990 just after Iraqi forces invaded Kuwait. Jane's reports export application to Congress included the purchase of 48 launchers and 384 missiles in a package worth some USD984 million, although IISS reports 96

Air Defense Forces - II

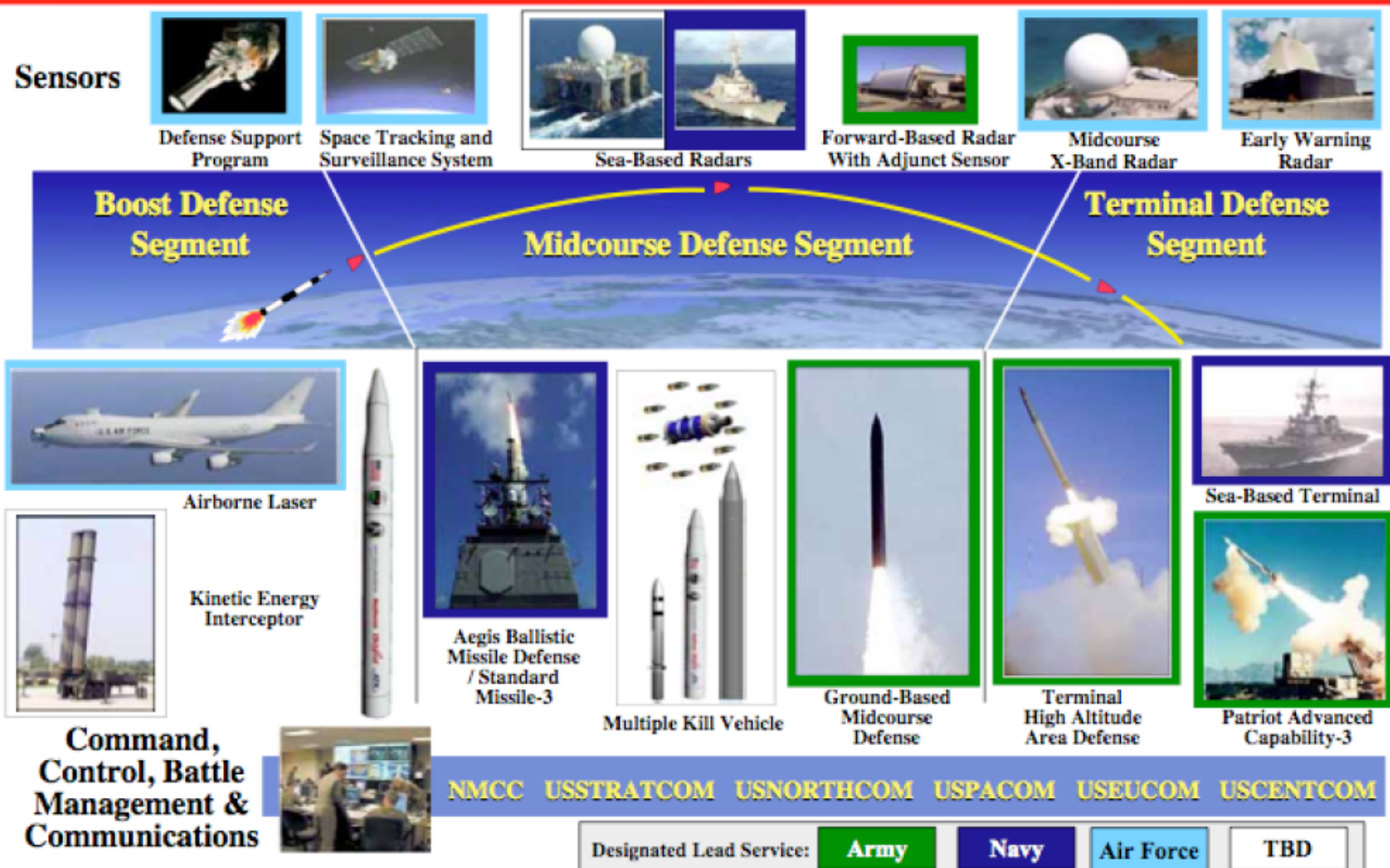
launchers and some reports suggest only eight launchers or two batteries worth was actually delivered.

In December 1992, Jane's reports placed second order for a further 13 launcher units and 761 PAC-2 missiles was placed for \$1.03 billion. Suggests RSADF has ability to establish Patriot firing sites to protect between 10 and 12 locations. Commercial satellite imagery from 2007 located two Saudi Patriot sites near Riyadh and six in Eastern Province.

Raytheon awarded a USD300 million training and support contract for the Saudi Patriot force, in June 2000. Got a USD100 million support contract in followed in October 2007. US Army maintained a Patriot task force in Saudi Arabia until 2003, and the US Army and RSADF continue to maintain close links. A US and contractor training and advisor team remain in Kingdom.

RSADF operates CSS-2 surface-to-surface ballistic missiles obtained from China in the 1980s.

Options for Missile Defense



US Test Developments - I

35 Of 43 Terminal And Midcourse Hit-To-Kill Intercepts In The Atmosphere And Space Since 2001

Hit-To-Kill Since 2001

Since September 2005

**Terminal High Altitude Area Defense
(5 of 5)**



July 12, 2006
January 26, 2007
April 5, 2007
October 27, 2007
June 25, 2008

VM313

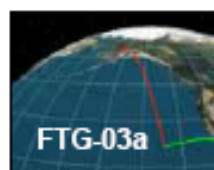
**Aegis Ballistic Missile Defense
(13 of 15)**



November 11, 2005
December 7, 2006
June 22, 2006
April 26, 2007
June 22, 2007
August 31, 2007
November 6, 2007
December 17, 2007

VM339C

**Ground-based Midcourse Defense
(6 of 9)**



September 1, 2006
September 28, 2007

VM348C

Note: Patriot PAC-3 (11 of 14)

Blast Fragmentation

**Aegis Sea-Based Terminal
(2 of 2)**

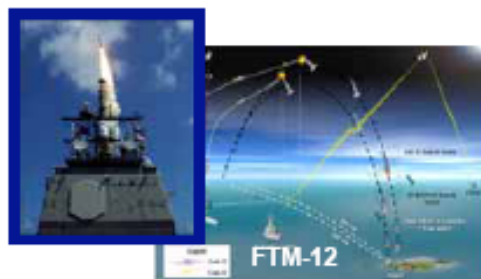


May 24, 2006
June 5, 2008

VM377

US Test Developments - II

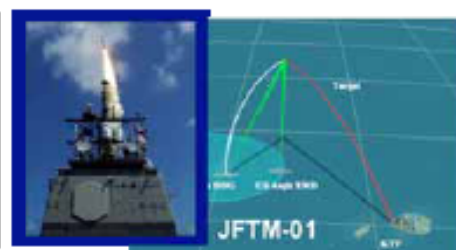
- 11 of 11 successful hit-to-kill intercepts in 2007 and 2008 to date against medium- and short-range missiles using land- and sea-based defenses, including
 - Ground-based midcourse defense intercept of long-range target in operationally realistic conditions
 - First intercept of separating warhead – THAAD
 - First simultaneous destruction of two short-range ballistic missiles at sea
 - First sea-based intercept by an ally



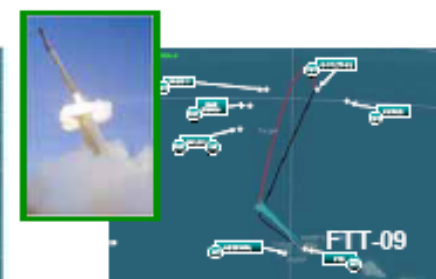
June 22, 2007



September 28, 2007



December 17, 2007



June 25, 2008

CSS-2

- Acquired 50 conventionally-armed Chinese [CSS-2](#) (Dong Feng 'East Wind' 3) missiles in a multi-billion dollar deal. The missiles were upgraded version of the Dong Feng 3, designated as the [DF-3A](#), with range of 2,400 km with a 2,500 kg payload and improved accuracy of 1,000 m Circular Error of Probability (CEP). Large 70-ton systems, and have a special, large conventional warhead.
- Semi-mobile, and one-third are supposed to be kept armed and near-launch-ready on transporters, one-third are kept half fueled, and one-third are normally empty and being serviced. Actual readiness rates are normally far lower. Pre-launch preparation is believed to take two or three hours
- Deployed in two battalions. One at the As-Sulayyil Oasis, roughly 475 kilometers south to southwest of Riyadh. As-Sulayyil is also the site of one of Saudi Arabia's new air bases for its Tornado fighter-bombers.
- Second battalion is located at Al-Juaifer near the Al-Kharj air base south of Riyadh. Further training facility that may have a launch capability, seems to exist in southwestern Saudi Arabia at al-Liddam.ⁱ
- None now armed with weapons of mass destruction.
- Reports is seeking to replace these Chinese-built IRBMs.

Naval Needs

- **Improved “jointness” with air force, air defense force, coast guard, and army/national guard in variety of defense missions.**
- **Higher training and readiness standards.**
- **Develop true interoperability with US, UK, France, GCC naval forces.**
- **Improved mine warfare, counter infiltration, coastal defense capability.**
- **Better training of East (Gulf) fleet.**
- **Make Red Sea (West) fleet fully operational.**
- **Higher naval helicopter readiness.**
- **Clear mission concept for 3,000 man marine force.**
- **Upgrade AWACS for better jointness, better ELINT/EW, MPA functions.**
- **Improve Netting and IFF with RSAF USAF, USN, GCC air forces, and Saudi and GCC land-based air defenses.**
- **Readiness**
- **Manpower quality.**

Naval Forces

Western (Red Sea) Fleet

- **3 x La Fayette Type F-3000S frigates (One damaged when run aground)**
- **4 xAl -Madina class frigates**
- **2 xAs -Siddiq class fast attack craft (missile)**
- **Halter class patrol craft**
- **Simmoneau 51 class inshore patrol craft**
- **2 xDurrance class replenishment ships**

Eastern (Gulf) Fleet

- **4 xBadr class missile corvettes**
- **7 xAs -Siddiq class fast attack craft (missile)**
- **3 xAl -Jawf class (UK Sandown) coastal minesweepers**
- **Halter class patrol craft**
- **Simmoneau 51 inshore patrol craft**
- **4 xLCU 1610 class landing craft**

Study Buys of More Ships

- **Study expansion of Eastern fleet. No specific types of ships are yet determined.**
- **Replace older coastal defense vessels (four Badr-class corvettes and nine Al Siddiq-class patrol boats) with much larger missile corvettes, displacing around 2,000 tons. France's DCN has offered its Gowind design for this requirement.**
- **French propose future purchase of four to six French-Italian FREMM new-generation multi-purpose frigates to replace French-supplied Medina-class (Sawari I project) frigates. These frigates are valued at 3 billion euros. No RSN studies as yet.**
- **Royal Saudi Navy would like to introduce a submarine flotilla comprising about six conventionally-powered attack submarines. DCN is offering its Marlin design, derived from the Scorpene submarine it developed jointly with Spain's Navantia shipyards group. But, studies only; no current purchase plans.**

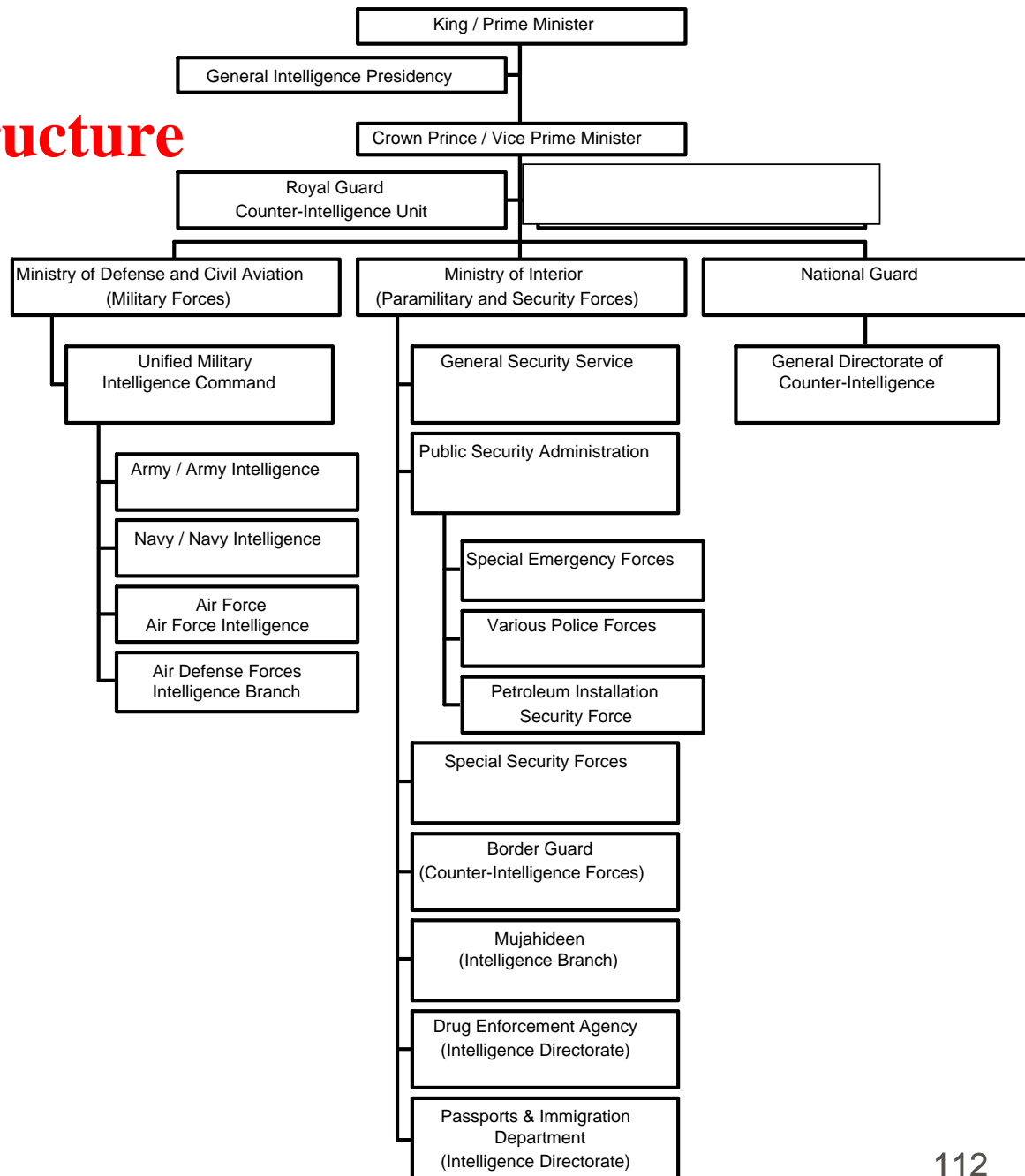
Source: IISS, Military Balance, 2008; Jane's Sentinel series; Saudi experts

Internal Security Needs

- **Keep as much of threat as possible external.**
- **“Jointness” in MODA. MOI, MOJ operations**
- **Combine facility security, border and coastal security, counterterrorism, intelligence, and military support in integrated defense in depth.**
- **Expand facilities security force.**
- **Cooperation in counterterrorism with GCC, UN, US, UK, and France.**
- **Find better defenses for border with Yemen,**
- **Create Iraqi border defenses.**
- **Use technology to compensate for manpower quality problems.**

Source: IISS, Military Balance, 2008;
Jane's Sentinel series; Saudi experts

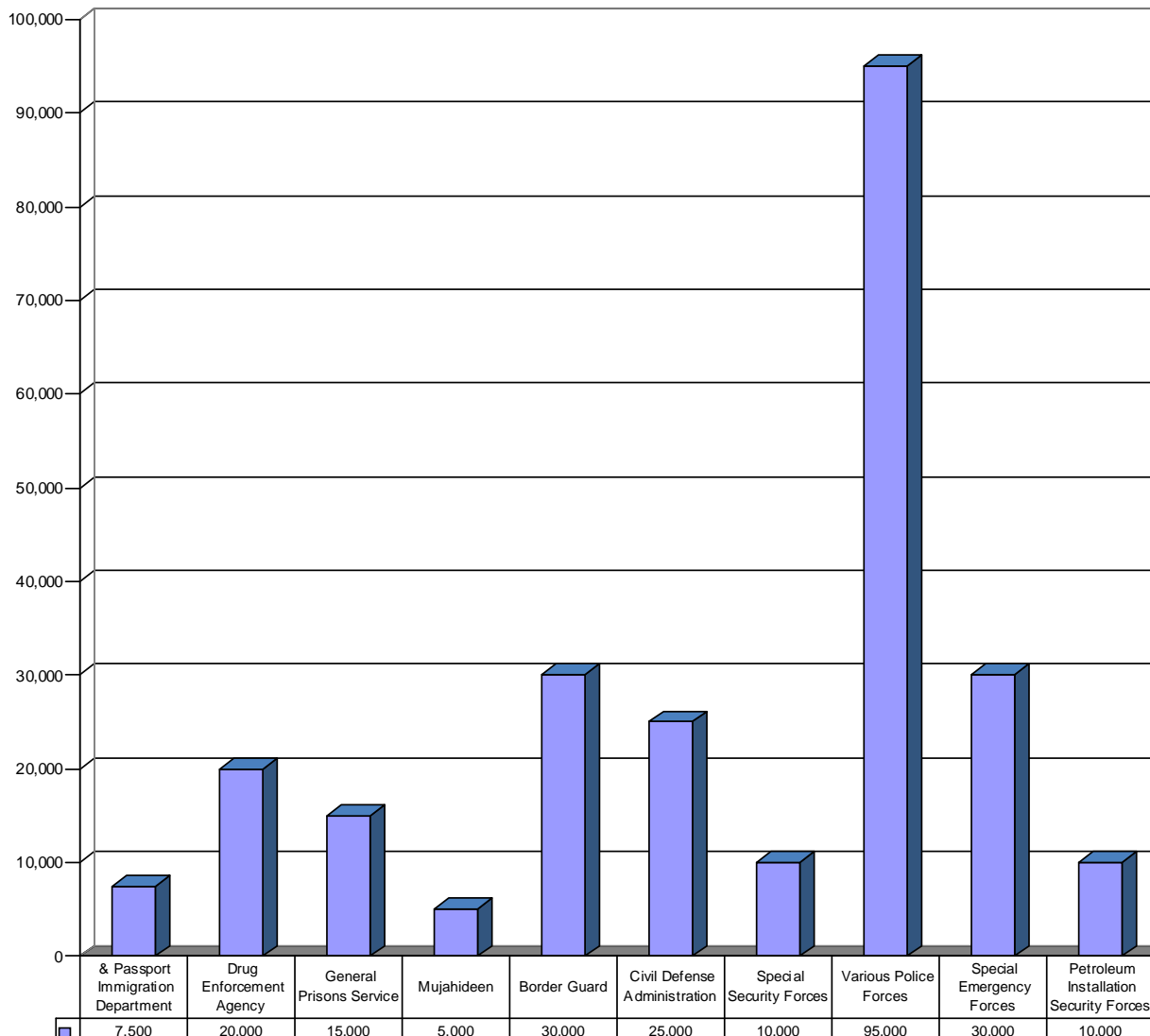
Internal Security Structure



Internal Security: Key Elements

- **The Public Security Directorate (PSD):** This directorate controls the regular police forces, which carry out security in the Kingdom's cities and villages. The control of the PSD is under the director-general of the PSD in the Ministry of Interior, but it is also true the governors exercise considerable control over the PSD in their provinces.
- **The Special Emergency Forces (SEF):** This was created after the takeover of the Grand Mosque in Mecca in 1979, and it is under the control of the PSD. The SEF have been a leading force in the Saudi counterterrorism strategy since May 2003. It is estimated to have a total strength of 10,000 men (although other estimates put it as high as 30,000), and controls a fleet of helicopters. This force is considered to be one of the most mobile and capable of deploying throughout the Kingdom to lead the fight against terrorism.
- **The General Directorate of Investigation (GDI):** This directorate controls the Saudi domestic intelligence the General Security Service (GSS), *Mabahit*. It is in charge of domestic intelligence gathering and analysis, counterintelligence operations, criminal investigations, and lately as a counterterrorism force that tracks Al Qa'ida and other affiliated groups.
- **National Information Center:** This center is considered to have one of the most sophisticated systems in the world. This agency was created by the Ministry of Interior in Riyadh, and MoI is estimated to have a separate budget of approximately \$500 billion to conduct its own military intelligence. The center links more than 1,000 terminals, and maintains comprehensive information on Saudi citizens and residents of the Kingdom. It also tracks intelligence provided by intelligence agents, informants, as well as electronic intercepts.
- **Al Haya:** This is an independent paramilitary organization based in Riyadh and is under the control of the Assistant Minister of Interior for Security Affairs. It is estimated to have 3,000–5,000 men, which conduct patrols (largely at night) and lately it has been employed as part of the Saudi counterterrorism forces apparatus. The training levels and professionalism of this force are unknown.
- **Other agencies under MoI:** The ministry also has several other agencies that are indirectly responsible for maintaining internal security including the Special Security Forces, the Coast Guard, the Drug Enforcement Agency, the General Prisons Service, the Petroleum Installation Security Forces, and the Civil Defense Force. In addition, the MoI also has established a Financial Intelligence Unit (FIU) that is part of the Security and Drug Control Department, which also coordinates with the Saudi Arabian Monetary Agency (SAMA), the Saudi central bank.

Internal Security: Manning of MoI Forces



- Numbers do not include those of the General Security Service (*Mabahith*), since those numbers are classified.
- Border guard forces include the coast guards.
- Various police forces, the special emergency forces, and the petroleum installations security forces fall under what is called the Public Security Administration under the command of the Ministry of Interior, and it totals 135,000 men

Growing Role of Security/ Paramilitary Forces - I

Public Security Directorate (PSD) (135,000) controls the regular police who are uniformed and carry out routine duties. While in theory PSD units come under the control of the PSD director general, in practice provincial governors exercise considerable control over PSD personnel based in their areas. The PSD can call on the National Guard for support or, in extreme cases, the regular armed forces

Following the takeover of the Grand Mosque in 1979, the **Special Emergency Forces (SEF)** was created takeover of the Grand Mosque in 1979. The SEF has strength of about 30,000 and, with a fleet of helicopters at its disposal, is highly mobile and capable of deploying throughout the kingdom. An ongoing modernization program aims to enhance its capabilities further.

The **Petroleum Installation Security Force (PISF)** comes under the aegis of the PSD, and its strength is counted as part of the police strength. (Has approximately 20,000 men, in addition to the 5000 guards employed directly by Aramco. Supplemented by specialized brigades of the National Guard)

General Directorate of Investigation (GDI) controls the Saudi domestic intelligence agency, the General Security Service (GSS), also known as the *Mubahith al-Amma*, or secret police. GSS has been active in counter-terrorism operations. Maintains surveillance on terrorist suspects, using HUMINT and advanced high-tech systems, has enhanced its command and control structure, enabling the GSS to produce a rapid reaction response to an emergency. No details are available as to the strength of the GSS.

Police security forces c under Ministry of the Interior maintaining order and dealing with routine crime and internal security matters across the country. The forces are equipped with small arms and are organized on a provincial and local level, with the relevant provincial governor responsible to the Minister of the Interior for public order. The police security forces are divided into two main directorates: the Public Security Directorate (PSD) and the General Directorate of Investigation (GDI).

National Information Centre in the Ministry of the Interior maintains a sophisticated centralized computer system at the National Information Centre (NIC) in Riyadh, linked to more than 1,000 terminals installed in more than 250 centers nationwide. The NIC, which has eight regional branches, maintains records on citizens' identity numbers and passports, foreigners' residence and work permits, visas for foreigners visiting the kingdom - including those making the *hajj* pilgrimage, vehicle registrations and criminal records. Operating through Arabic and English, the center's computer

Source: IISS, Military Balance, 2008;
Jane's Sentinel series; Saudi experts

Growing Role of Security/ Paramilitary Forces - II

system is linked to civil status departments (which maintain records about citizens, covering such data as birth details and identity card details), border control centers, traffic departments and other centers. The centre also records intelligence data from agents and the large number of informants employed by the security services.

Petroleum Installation Security Force (PISF) specializes in protecting the oil pipelines and installations. Has a reported strength of 10,000. under Ministry of the Interior's Public Security administration. A special unit exists within Ministry of Interior to oversee and co-ordinate the work of the PISF.

A range of other security agencies and forces are also deployed on oil industry protection duties. Elements of Special Security Forces; Special Emergency Forces; General Security Service; regular forces of the Public Security administration; and specialized units of the National Guard, the Navy and the Coast Guard the following agencies and forces have been deployed on oil security duties:

Coordinates with Army, Air Force, and Navy. Protection of oil infrastructure was one of the focal points of a joint naval exercise, Nautical Union, carried out in summer 2007 by US and Saudi naval forces.

Oil industry sources reported in August 2007 that the US defense concern Lockheed Martin was training about 5,000 Saudi personnel to work on oil industry security.

Other security agencies under the Ministry of Interior include Special Security Forces (10,000); Mujahideen (5,000); Drug Enforcement Agency (20,000); General Prisons Service (15,000); Passport and Immigration Department (7,500), Border Guard (22,500); Coast Guard (7,500) and Civil Defense Administration (25,000). It is understood that the latter three agencies, the Border Guard, Coast Guard and Civil Defense, come under the same chain of command within the Ministry of the Interior.

Civil Defense structure includes a rapid reaction force to deal with terrorist attacks and natural disasters. Civil Defense maintains its own helicopter fleet, supported by a number of helicopter bases around the kingdom.

A specialized Financial Intelligence Unit (FIU) exists in the Security and Drug Control Department of the Ministry of the Interior.

A liaison group specializing in the detection of terrorist finances co-ordinates activities between the Ministry of the Interior and the Saudi Arabian Monetary Agency (SAMA).

Growing Role of Security/ Paramilitary Forces - III

Commission for the Promotion of Virtue and Prevention of Vices, or religious police, ensures the public observance of religious requirements, May number around 20,000. Most members are salaried and are regarded as government employees.

Al Haya is an independent paramilitary organization based in Riyadh with a strength of about 5,000. The force comes under the Minister of the Interior for administrative reasons, but is under the operational control of the Assistant Minister for Security Affairs. The force, which largely patrols at night, has taken part in counter-terrorism operations and fulfils some of the roles of a religious police, but is seen as more professional than the Commission for the Promotion of Virtue and Prevention of Vices.

Customs service, is under the control of the Ministry of Finance, is responsible for customs inspections at airports, seaports and land frontier crossings. There are 32 customs posts throughout the kingdom.

Border Guard (22,500) is responsible for patrolling the country's extensive land borders. Headed by Lit. Gen Talal Bin Mohsin Ali-Al Angawi, is equipped with light arms, four-wheel-drive vehicles, a fleet of helicopters and employs an extensive range of surveillance equipment. Installed new surveillance systems along the land and sea borders, including thermal cameras and radar, in 2002.

Improving security along borders, especially the frontiers with Yemen and Iraq, under a border surveillance program known as the Saudi Border Guard Development Program. In May 2006 the Saudis invited international defense contractors to tender for a contract estimated to be worth USD8 billion involving the supply of 225 radars to detect incursions along its borders. Also involved in the deal are sensors, surveillance aircraft, about 20 helicopters, unmanned aerial vehicles (UAVs), patrol boats and a communications network.

In 2007 the Saudis invited tenders for the construction of a double-lined razor wire fence along the 900 km border with Iraq, complete with thermal imaging and radar equipment, to support the Border Guard in its efforts to prevent terrorists infiltrating into the kingdom.

Coast Guard (7,500) is a branch of the Border Guard that patrols the territorial waters, and has a base at Azizam, and units operating out of ports in the Gulf and Red Sea. Operates large patrol craft (based at Jiddah and Al-Dammam) and coastal patrol craft, as well as several hundred inshore patrol craft. There are also hovercraft and one Bell 206B helicopter.

Source: IISS, Military Balance, 2008;
Jane's Sentinel series; Saudi experts

Political Influences on Saudi Arabian Defense Decisions and Reactions

Political Influences

- **Royal family politics and pecking order.**
- **Internal stability and balancing act.**
- **Security structure, business, leading families, clerics (Al Shaikhs), business.**
- **Majlis As Shura**
- **Educated elite.**
- **Gulf politics: Southern Gulf tensions, Iraq, Iran.**
- **Relations with US, European states, and outliers like Russia and China.**
- **Pan-Arab and Islamic issues**
- **Islamic legitimacy and great world of Islam.**
- **Arab-Israeli**
- **OPEC and oil/gas/product export revenues.**
- **Yemen and Red Sea security**

Defense Policy Decision- Making Process

Defense Policy Decisions

- **King Abdullah and Royal Court.**
- **Prince Sultan, Sons, and MODA.**
- **National Guard and Abdullah's son.**
- **Prince Saud and Foreign Ministry.**
- **Prince Bander and National Security Council.**
- **Prince Naif, Ministry of Interior, and son..**
- **External partners: US, Britain, France**
- **Crisis-driven needs**
- **Formal decision-making structure and military/defense hierarchy.**
- **End run by key personality.**

“Military Chain of Command”

Head of State, Prime Minister and Commander of the <u>National Guard</u>	King Abdullah al-Aziz al Saud
Crown Prince, First Deputy Prime Minister and Minister of Defence and Aviation	H.R.H Prince Sultan bin Abdul al-Aziz al Saud
Chief of General Staff	General Saleh Ibn Ali al-Muhaya
Commander of the Army	Lt. Gen. Hussain al-Qwial
Commander of the Air Force	Lt. Gen. Abda-Rahman ibn Fahd al-Faisal
Commander of the Navy	Vice-Admiral Prince Fahd bin Abdullah Bin Mohammed

Key Saudi Officials

Prime Minister and Commander of the National Guard:	King Abdullah bin Abd al-Aziz al-Saud
First Deputy Prime Minister and Minister of Defence and Aviation:	Crown Prince Sultan bin Abd al-Aziz al-Saud
Minister of Foreign Affairs:	Prince Saud al-Faisal bin Abd al-Aziz al-Saud
Minister of Interior:	Prince Nayef bin Abd al-Aziz al-Saud
Minister of Justice:	Dr Abdullah bin Muhammad bin Ibrahim al-Sheikh
Minister of Petroleum and Mineral Resources:	Ali Ibrahim Naimi
Minister of Transport:	Dr Jabara bin Aid al-Suraisri
Minister of State for Shura Council Affairs:	Dr Saud bin Said bin Abd al-Aziz al-Mutahammi
Minister of State:	Prince Abd al-Aziz bin Fahd al-Saud
Minister of State for Foreign Affairs:	Dr Nizar Madani
Minister of State and President, Higher Council of Ulama:	Abd al Aziz al-Sheik
Director of Commission for the Prevention of Vice and Promotion of Virtue:	Sheikh Ibrahim bin Abdullah al-Gaith
Director for General Intelligence:	Prince Muqrin bin Abd al-Aziz al-Saud
Head of National Security Council:	Prince Bandar bin Sultan bin Abd al-Aziz al-Saud
Ambassador to the United States:	Adel Al-Jubeir

Key Decision Makers - I

- The Saudi National Guard remains under a separate chain of command. King **Abdullah bin Abdul Aziz** has commanded the National Guard since 1962.
- **Prince Mitiab**, the Assistant Vice Commander for Military Affairs, has long help shaped the development of the Saudi National Guard and acts as the de facto commander of the National Guard for his father.
- **Prince Sultan bin Abdul Aziz Al Saud** makes most decisions affecting the regular armed forces. He has been the Minister of Defense and Aviation since 1963, and the Second Vice Prime Minister since 1982. Prior to these positions, Prince Sultan held numerous government posts including: Governor of Riyadh, Minister of Agriculture and Minister of Communications. He has now spent four decades shaping and modernizing Saudi Arabia's armed forces, shaped most critical policy decisions relating to military procurement, and supervised the construction of modern military bases and cities throughout the Kingdom.ⁱ
- His son, **Prince Khalid bin Sultan**, led the Arab coalition forces in the Gulf War and is Assistant Minister of Defense. He now plays a leading role in shaping defense policy, and in managing the day-to-day decisions of the Ministry of Defense and Aviation (MODA).
- **Prince Abdul Rahman ibn Fahd Al-Faisal**, Deputy Defense Minister, is a highly experienced officer and former commander of the RSAF.

Key Decision Makers - II

- **Prince Nayef bin Abdul Aziz Al Saud** has been the Minister of Interior (MOI) since 1975. He controls the General Security Services (internal intelligence services), the Public Security Administration Forces (the police), the Civil Defense Forces (fire service), the Border Guard, the Coast Guard, the Passport & Immigration Division, the Mujahideen Forces, the Drug Enforcement Forces, the Special Security Forces, and the General Investigative Bureau. Like the other senior princes, Prince Nayef has held prior gubernatorial and ministerial posts such as: Governor of Riyadh, Vice Minister of Interior, and Minister of State for Security Affairs.
- **His son, Prince Muhammed**, acts as his deputy. He has helped shape the reform and expansion of Saudi internal security forces and has played a key role in leading the fight against terrorism.

General Intelligence Presidency

Also known as the Saudi Intelligence Service, or General Intelligence, reports directly to King.

Responsible for external intelligence activities and co-ordinating the intelligence collecting and reporting of Saudi Arabia's other intelligence services, including the intelligence branches of the Army, Air Force, Navy and National Guard, and the intelligence services that come under the interior ministry. Also responsible for liason with foreign intelligence services.

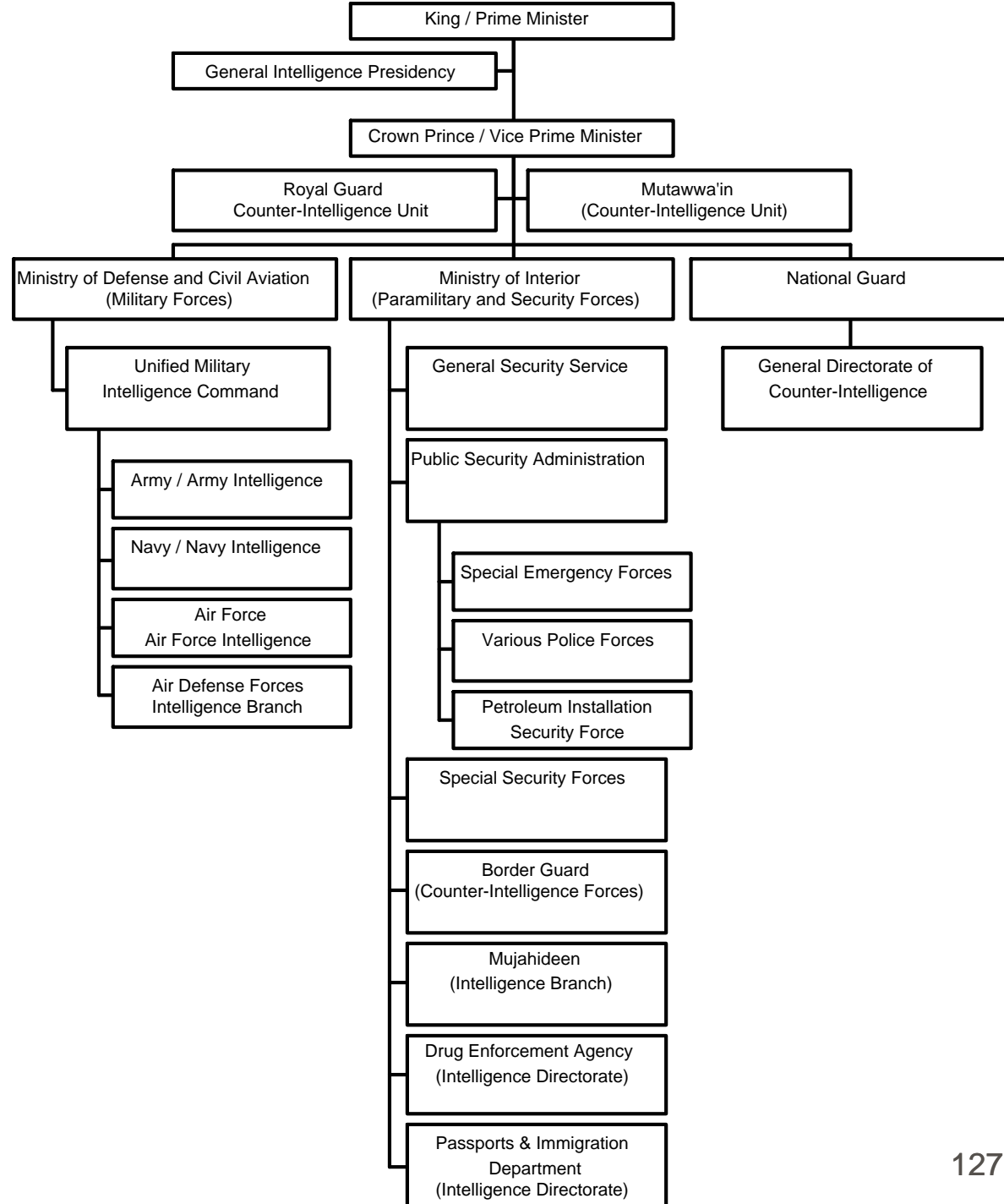
Al Qai'ida in Peninsula and terrorism is a key focus, and are potential dissidents in pilgrimage and stability of Shi'ite minority.

In October 2005, King Abdullah made his half-brother Prince Muqrin bin Abdel Aziz as head of the intelligence service. Post had been vacant since January 2005, when Prince Nawaf bin Abdul-Aziz stood down.

In November 2007, Prince Muqrin announced plans to develop and restructure the service. The plans include building of a new headquarters for the GIP in the Al-Nakhil area of north Riyadh. Prince talked of efforts to limit the activities of Western concerns that hosted internet sites used by Al-Qa'ida and announced that the intelligence service was to set up its own internet site, with a link enabling citizens to provide information to the GIP about threats to Saudi security.

Prince Abdel Aziz Bin Bandar Bin Abdel Aziz, who holds the title assistant chief of general intelligence. His tenure was extended in December 2007 for four years by royal decree.

Intelligence Organization



Source: Nawaf Obaid

US Engagement with Saudi Arabian Defense Departments and Adjunct Government Organizations

US-Saudi Strategic Partnership

- **US withdrawal from Iraq makes even more critical partner in the Gulf and region**
- **Key Partner in any effort to contain Iran and Iranian influence, deal with Iranian threats.**
- **Has emerged as major partner in counter terrorism intelligence.**
- **Smaller Gulf states too small to play major role, have no strategic depth.**
- **US academics, media, think tanks, etc.**
- **Critical to integrated efforts at maritime operations and surveillance, missile defense, air defense.**
- **Key air power in Gulf.**
- **Two fleet Navy: One in Gulf, one in Red Sea.**
- **Saudi petroleum facilities and critical infrastructure are critical to US and global economy.**
- **Saudi peace plan, sponsorship of inter faith dialog, attacks on religious terrorism serve Saudi, regional, and US strategic interests.**

US Engagement with Saudi Arabia

- **White House, NSC, Department of Defense, State, Treasury,**
- **Interagency forum.**
- **US intelligence community: CIA, attaches, DIA, etc.**
- **US law enforcement and counterterrorism;**
- **Defense Security Cooperation Agency for FMS and other arms sales in Department of Defense, subject to review through – State – NSC -- Congress**
- **Congress**
- **US Embassy**
- **Military advisory teams; Pol-Mil section; USMTM for Air Force, Army, Navy, Marines**
- **Office of the Program Manager-Saudi Arabian National Guard (OPM-SANG)**
- **Office of the Program Manager-FSF (MOI) Critical Infrastructure Protection**
- **US academics, media, think tanks, etc.**

Key Areas for Strengthening Engagement

Education

- **Sustain JMPE**
- **Begin War College**
- **Increase English language training and school seats.**
- **Develop Near East Special Training at Master's Degree level**

Training & Exercises

- **Green Flag, 2010**
- **Friendship One, 2009**
- **Bright Star, 2009.**
- **Eagle Resolve**
- **Combined Arms Training Teams (CATT)**
- **TRADOC Type Functions**

Capabilities

- **Deliver shared early warning (SEW) capability data**
- **Complete AMD Working Group**
- **Patriot Configuration 3 Upgrade**
- **Combined naval capabilities analysis - SNEP II**
- **Begin CTF 150**
- **Increase IS&R/C2 interoperability.**
- **Transform logistics with DLA, AMC like structures & capabilities.**
- **Develop integrated defense strategy.**

Saudi-US Relationship

- **Increase US manning**
- **Full return of families in 2009**
- **Increase tour length well beyond one year**
- **Provide same type 5 year visa for Saudi military give Saudi tourists**
- **Make FMS quick and efficient**
- **Improve weapons release --- F-15SA**
- **Security and Defense Forum.**

12 Key Areas for Strengthening Engagement

- 1. Expand exercise program and resources, leverage components to support strategic engagement**
- 2. Change MTT progress to make quick, responsive, and flexible.**
- 3. Expand educational opportunities for US officer education in region and English language education for SAAF.**
- 4. Increase US training manning quantity and quality: Grow skills, longer tours, region-wide.**
- 5. Expand and rest LNO and exchange officer numbers and skills to match requirements.**
- 6. Adapt SAAF institutions to shift culture to make them effective**
- 7. Transform FMS - Law, policy, timeliness, thresholds, “tax,” resources**
- 8. Provide Saudis with full capability and increase interoperability**
- 9. Synch and grow industrial capacity**
- 10. Eliminate friction over visas. More rapid response. 5 year multiple entry military visa**
- 11. Adjust to new Saudi security levels: Return families, provide appropriate incentives. Shift from FOBS to installations**
- 12. Increase Congressional delegation and staff visits.**

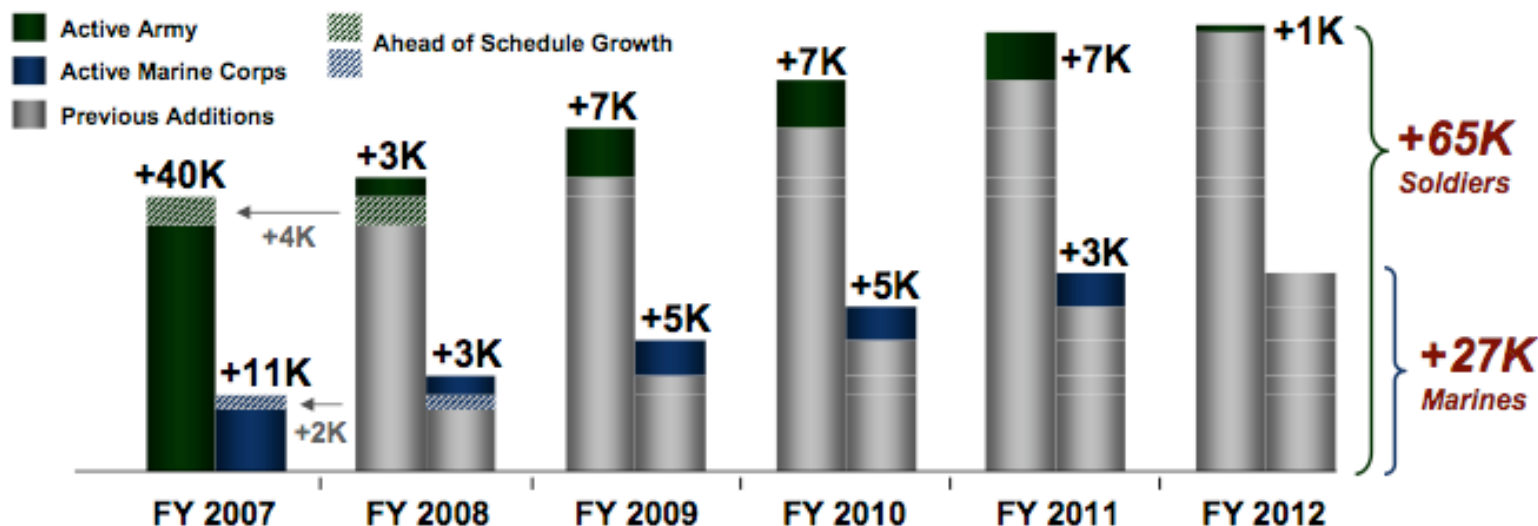
Keeping a Decisive US Qualitative Edge in US Forces and Future Arms Transfers to the Gulf (\$10.5B in FY087 & FY09)

Joint Ground Capabilities	Joint Maritime Capabilities	Joint Air Capabilities	Space-based Capabilities
<ul style="list-style-type: none"> – Future Combat Systems: <ul style="list-style-type: none"> • Ground and air systems – 119 Stryker Vehicles – 5,249 High Mobility Multi-purpose Wheeled Vehicles – 1,061 Heavy Tactical Vehicles – 3,187 Medium Tactical Vehicles – 29 M1A1 Abrams Tank Upgrades – Chemical Weapons Demilitarization 	<ul style="list-style-type: none"> – CVN 21 Carrier Replacement – 1 Virginia Class Submarine – 1 DDG-1000 Destroyer – 2 Littoral Combat Ships – 2 T-AKE Auxiliary Dry Cargo Ships – CVN Refueling Complex Overhaul – 2 Joint High Speed Vessels 	<ul style="list-style-type: none"> – 16 F-35 Joint Strike Fighters – 20 F-22A Raptors – 36 V-22 Ospreys – 23 F/A-18 Hornets – 22 E/A-18G Growlers – 16 CH-47 Chinooks – VH-71 Helicopter – KC-X Aerial Refueling Tanker – 59 Predators, Reapers and Warriors 	<ul style="list-style-type: none"> – 2 Space Based Infrared Systems – 4 Expendable Launch Vehicles – GPS Satellite – 1 Mobile User Objective System – Transformational Satellite – Advanced Extremely High Frequency Satellite – Wideband Global SATCOM – Ballistic Missile Defense
<i>Basic Research +\$0.3B in FY 2009 (+\$1.4B FY09-FY13)</i>			

Increase US Reinforcement Capabilities

+\$8.7B
FY08 - FY09

Army Active	42	Brigade Combat Teams (482.4K Soldiers)	➔	48	Brigade Combat Teams (547.4K Soldiers)
	12/12	Months Home Station / Months Deployed		24/12	Months Home Station / Months Deployed
Marine Corps Active	2.5	Marine Expeditionary Forces (175K Marines)	➔	3	Marine Expeditionary Forces (202K Marines)
	7/7	Months Home Station / Months Deployed		14/7	Months Home Station / Months Deployed



Source: FY 2009 DoD Budget Request; FY 2008 Budget; FY 2007 Supplemental

Numbers may not add due to rounding

USMTM

United States Military Training Mission (USMTM) is the primary liaison between U.S. Armed Forces and the Saudi Arabian Ministry of Defense and Aviation (MODA), the Saudi counterpart to the American Joint Chiefs of Staff. It is a joint training mission under the command of Headquarters, United States Central Command (USCENTCOM), MacDill Air Force Base, Florida. The Chief of USMTM also serves as the United States Department of Defense Representative for Saudi Arabia.

Organized in 1953 under the terms of the Mutual Defense Assistance Agreement between the United States and Saudi Arabia. Specifically, it was agreed that USMTM would administer assistance furnished by the United States Government to the Saudi Arabian Government under the terms of the Defense Assistance Act of 1949 and the Mutual Security Act of 1951.

Chartered to assist and advise the Saudi Arabian Armed Forces with respect to the building of military equipment, plans, organization, administrative procedures, training methods, and the conduct of such training as agreed to between the Saudi Arabia Minister of Defense and Aviation (MODA) and the Chief, USMTM.

Day-to-day relationship between USMTM and MODA is governed by the Memorandum of Understanding of February 1977 signed between the two governments.

Within USMTM there are six divisions, each of which interfaces with a Saudi counterpart:

- * Joint Advisory Division (JAD): interfaces with the Ministry of Defense and Aviation (MODA).
 - * Land Forces Division (LFD): interfaces with the Royal Saudi Land Forces (RSLF).
 - * Naval Forces Division (NFD): interfaces with the Royal Saudi Naval Forces (RSNF).
 - * Air Force Division (AFD): interfaces with the Royal Saudi Air Force (RSAF).
 - * Marine Forces Division (MFD): interfaces with the Royal Saudi Marine Forces (RSFMF) component of the Royal Saudi Naval Forces.

OPM SANG

Office of the Program Manager (OPM) created as a result of the 1973 Memorandum of Understanding (MOU) between the United States and Saudi Arabian governments in response to a request from then King Faisal bin Abdul Aziz to modernize the National Guard.

Approximately 215 U.S. Government personnel and 500 contractor representatives. Principal contractor is Vinnell Arabia Corporation of Herndon, VA.

For over 33 years, OPM-SANG has had the mission to maintain and enhance the special relationship between the Kingdom of Saudi Arabia and the United States of America.

OPM does this by assisting the Saudi Arabian National Guard to achieve its vision for the future through a modernization program that includes modernizing their equipment, training and educating their soldiers, and constructing new facilities and other quality of life initiatives.

Since September 11, 2001, this relationship has become even more important as OPM continues to support SANG in their government's effort against terrorism—accomplished primarily through training methodologies focused on preparation and execution of internal security missions.

Five-year contract, awarded in 1998, has an estimated value of \$831 million and involves 280 US government personnel and 1,400 Vinnell staff at various locations.

In 1998, the Carlyle Group sold its controlling interest in BDM, including Vinnell, to TRW International. With the 2002 TRW acquisition, Northrop Grumman Corporation

US Arms Sales

- **\$68.9 billion in new FMS agreements from FY1950 to FY2006.**
 - *\$653M in 2000, \$670M in 2001, 848\$M in 2002; \$650M in 2003, \$1,784M in 2004, \$748M in 2005, and \$796M in 2006.*
- **\$62.7 billion in new FMS deliveries from FY1950 to FY2006.**
 - *\$1,975M in 2000, \$1,891 in 2001, 1,308\$M in 2002; \$1,011M in 2003, \$1,223M in 2004, \$992M in 2005, and \$999M in 2006.*
- **\$2.4 billion in commercial sales from FY1950 to FY2006.**
 - *\$1.9M in 2000, \$0.9M in 2001, 0.5\$M in 2002; \$36M in 2003, \$46M in 2004, 85M in 2005, and \$124M in 2006.*

Major DSCA Sales Notifications: 2006-2008 - I

July 18, 2008 –possible Foreign Military Sale for the continuation effort to modernize the SANG by providing: training, professional military advice and assistance, management assistance, contract administration, construction oversight, transportation of equipment, personnel training and training equipment, light armored vehicle training, spare and repair parts, management of repair and return of components, automation program support, and other related elements of logistics support. These support services would be for the period 1 January 2009 through 31 December 2013. Estimated cost is \$1.8 billion.

January 14, 2008 - possible sale of 900 Joint Direct Attack Munitions (JDAM) tail kits (which include 550 GBU-38 for MK-82, 250 GBU-31 for MK-84, 100 GBU-31 for BLU-109). Also included are bomb components, mission planning, aircraft integration, publications and technical manuals, spare and repair parts, support equipment, contractor engineering and technical support, and other related elements of program support. The estimated cost is \$123 million.

December 7, 2007 - possible sale of 40 AN/AAQ-33 SNIPER Advanced Targeting Pods, aircraft installation and checkout, digital data recorders/cartridges, pylons, spare and repair parts, support equipment, publications and technical documentation, contractor engineering and technical support, and other related elements of program support. The estimated cost is \$220 million.

December 7, 2007 –possible sale of five sets of Airborne Early Warning (AEW) and Command, Control and Communications (C3) mission equipment/Radar System Improvement Program (RSIP) Group B kits for subsequent installation and checkout in five E-3 Airborne Warning and Control Systems (AWACS). In addition, this proposed sale will include spare and repair parts, support equipment, publications and technical documentation, contractor engineering and technical support, and other related elements of program support. The estimated cost is \$400 million.

October 4, 2007 –possible Foreign Military Sale to Saudi Arabia of Light Armored Vehicles and High Mobility Multi-Purpose Wheeled Vehicles as well as associated equipment and services. The total value, if all options are exercised, could be as high as \$631 million.

37 Light Armored Vehicles - Assault Gun (LAV-AG)

26 LAV-25 mm

48 LAV Personnel Carriers

5 Reconnaissance LAVs

5 LAV Ambulances

3 LAV Recovery Vehicles

25 M1165A1 High Mobility Multi-purpose Wheeled Vehicles (HMMWV)

25 M1165A1 HMMWV with winch

124 M240 7.62mm Machine Guns

525 AN/PVS-7D Night Vision Goggles (NVGs);

various M978A2 and M984A2 Heavy Expanded Mobility Tactical Trucks, family of Medium Tactical Vehicles, 120mm Mortar Towed, M242 25mm guns, spare and repair parts; sets, kits, and outfits; support equipment; publications and technical data; personnel training and training equipment; contractor engineering and technical support services and other related elements of logistics support. The estimated cost is \$631 million.

Major DSCA Sales Notifications: 2006-2008 - II

September 27, 2006 - possible sale to modernize the SANG by providing Major Defense Equipment (MDE) and non-MDE items: 552 AN/VRC-90E Single Channel Ground and Airborne Radio Systems (SINCGARS) Vehicular Single Long-Range Radio Systems; 225 AN/VRC-92E SINCGARS Vehicular Single Long-Range Radio Systems Dual Long Range; 1,214 AN/PRC-119 E SINCGARS Man-pack Single Long-Range Radio Systems Man-pack and vehicular installation kits, communications management system computers, antennas, programmable fill devices, support equipment; publications and technical data; personnel training and training equipment; contractor engineering and technical support services and other related elements of logistics support. The estimated cost is \$84 million.

July 28, 2006 - possible sale of the remanufacture and upgrade of 12 AH-64A APACHE attack helicopters to AH-64D configuration, 10 spare T-700-GE-701A engines converted to T-700-GE-701D models, Modernized Targeting Acquisition and Designation Systems, spare and repair parts, communications equipment, support equipment, simulators, quality assurance teams, chemical masks, tools and test sets, chaff dispensers, Integrated Helmet and Display Sight Systems, electronic equipment, test facility spares, publications, Quality Assurance Teams service, personnel training and training equipment, U.S. Government and contractor technical support and other related elements of logistics support. The estimated cost is \$400 million.

July 20, 2006 - possible sale for the continuation of the United States supported effort to modernize the SANG by providing Major Defense Equipment (MDE) and non-MDE items:

724 LAV-25, LAV-AG, LAV-M, LAV-AT, LAV-CC, LAV-PC, LAV-A, LAV-AC LAV-E and LAV-R Light Armored Vehicles (LAV);
1,160 AN/VRC-90E Single Channel Ground and Airborne Radio Systems (SINCGARS) Vehicular Single Long-Range Radio Systems;
627 AN/VRC-92E SINCGARS Vehicular Single Long-Range Radio Systems;
518 AN/VRC-119 E SINCGARS Vehicular Single Long-Range Radio Systems;
2,198 SINCGARS Spearhead Handheld;
1,700 AN/AVS-7D Night Vision Goggles (NVG);
432 AN/PVS-14 NVG;
630 AN/PAS-13 Thermal Weapon Sight;
162 84mm Recoilless Rifle; and Harris Corporation Commercial High Frequency Radios; various commercial vehicles; fixed facilities and ranges; simulations; generators; battery chargers; protective clothing; shop equipment; training devices; spare and repair parts; sets, kits, and outfits; support equipment; publications and technical data; personnel training and training equipment; contractor engineering and technical support services and other related elements of logistics support. The estimated cost is \$5.8 billion.

July 28, 2006 - possible sale and reconfiguration for 58 M1A1 Abrams tanks, which, together with 315 M1A2 Abrams tanks already in Saudi Arabia's inventory, will be modified and upgraded to the M1A2S (Saudi) Abrams configuration, kits, spare and repair parts, communications and support equipment, publications and technical data, personnel training and training equipment, contractor engineering and technical support services and other related elements of logistics support. The estimated cost is \$2.9 billion.

July 20, 2006 - possible sale of 24 UH-60L Utility/Assault Black Hawk helicopters, spare and repair parts, communications and support equipment, publications and technical data, personnel training and training equipment, contractor engineering and technical support services and other related elements of logistics support. The estimated cost is \$350 million.

July 21, 2006 - possible sale for a Foreign Military Sales Order (FMSO) to provide funds for blanket order requisitions FMSO II, under the CLSSA for spare parts in support of M1A2 Abrams Tanks, M2 Bradley Fighting Vehicles, High Mobility Multipurpose Wheeled Vehicles (HMMWVs), construction equipment, and support vehicles and equipment in the inventory of the Royal Saudi Land Forces Ordnance Corps. The estimated cost is \$276 million.

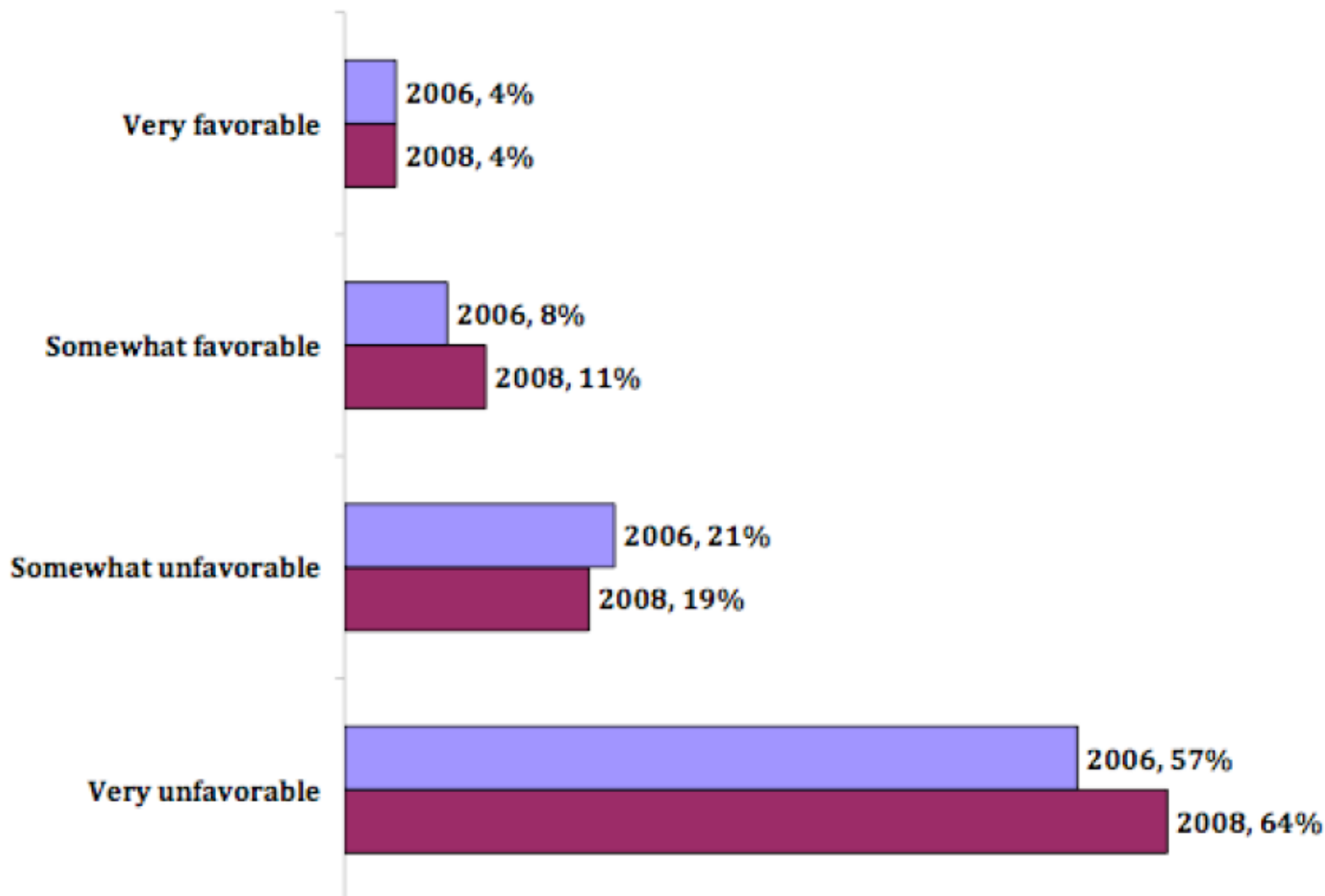
***But, Must Restore US Image,
Mutual Confidence***

Fair or Not, Need to Understand Broad Regional Anger Against US

- **Perception of “Dual Standards, ” Driven By Ties to Israel**
- **Anger over Palestinian suffering.**
- **Iraq War simply weakened Arab world, made Iraqis suffer, empowered Iran.**
- **Mixed signals and war scares over Iran.**
- **Feeling US counterterrorism campaign is anti-Islam and anti-Arab.**
- **US has no serious interest in reform or democracy, simply seeking to expand its influence.**
- **US acts unilaterally, does not listen.**
- **US wants military control and arms sales, not real military partnership.**
- **Visa reforms still grossly inadequate to visit or study; Europe much easier and more competitive.**
- **FMS and military sales political, delayed, have major overhead expenses – No major competitor has any of these drawbacks.**
- **US public diplomacy and information efforts have shrunk to vanishing point, American stay in fortress embassies, no longer stay long enough for meaningful relationships.**

Arab Public Opinion on the US

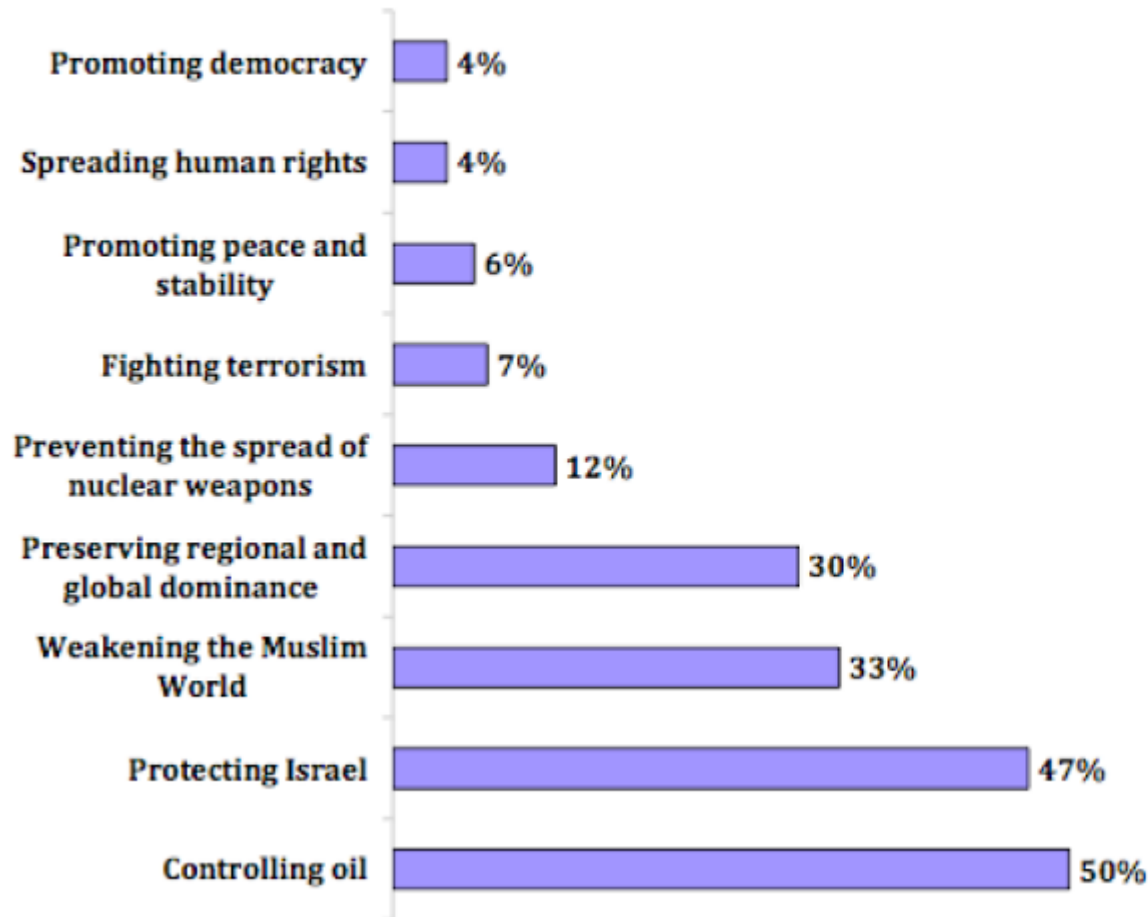
Generally speaking, is your attitude towards the United States:



Source: Smiley Teinani, 2008 Annual Arab Public Opinion Poll Poll Survey of the Survey of the Anwar Anwar Sadat Chair for Peace and Sadat Chair for Peace and Development at the University of Maryland Development at the University of Maryland (with Zogby International) International) Conducted March 2008 in Egypt, Jordan, Survey conducted March 2008 in Egypt, Jordan, Lebanon, Morocco, Saudi Arabia (KSA) and the Lebanon, Morocco, Saudi Arabia (KSA) and the UAE UAE

Arab Public Opinion of US Goals in the MENA Region

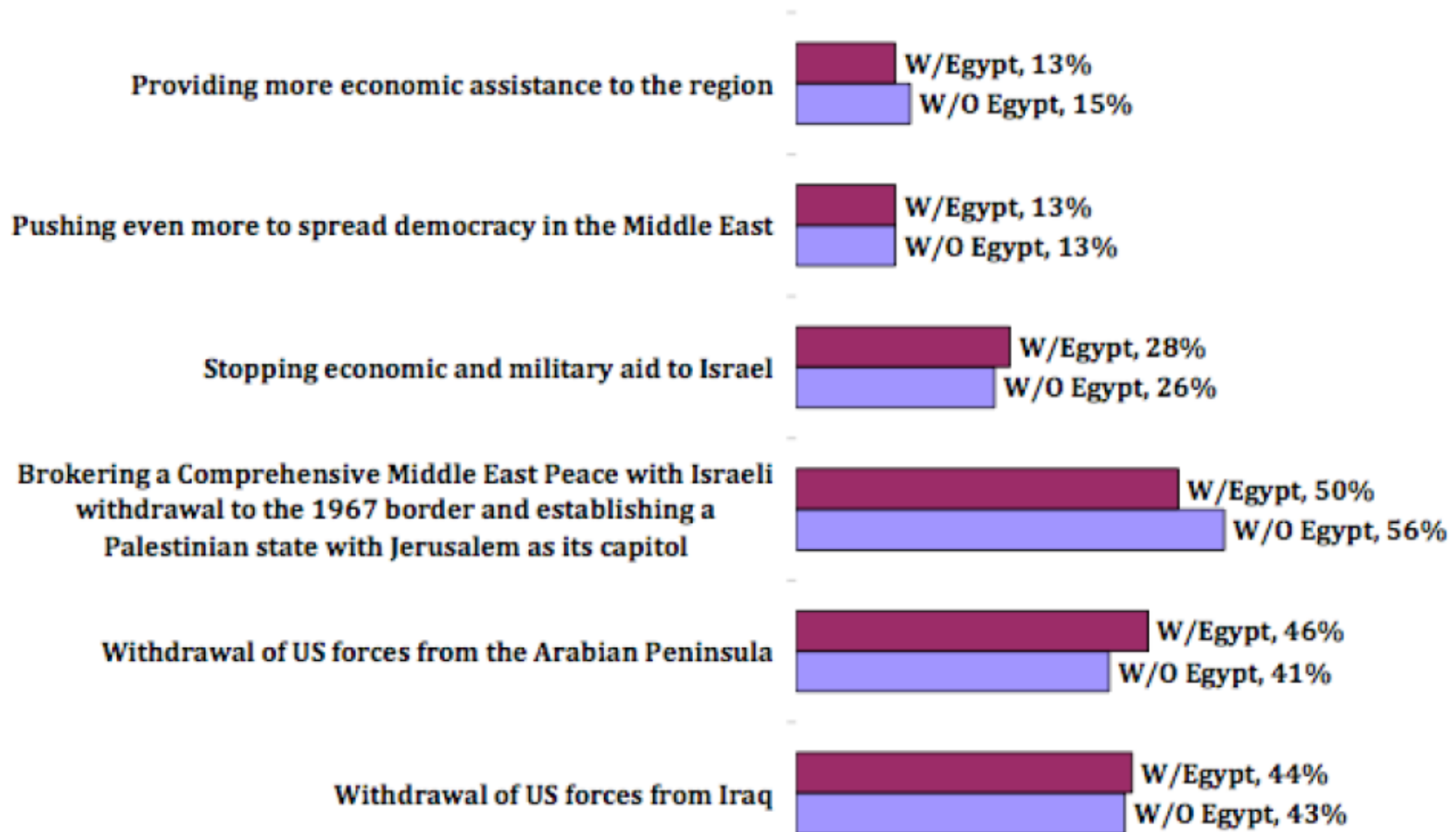
Which TWO of the following factors do you believe are most important in driving American policy in the Middle East?



Source: Shibley Telhami, 2008 Annual Arab Public Opinion Poll Poll Survey of the Survey of the Anwar Anwar Sadat Chair for Peace and Sadat Chair for Peace and Development at the University of Maryland Development at the University of Maryland (with Zogby International) International) Conducted March 2008 in Egypt, Jordan, Survey conducted March 2008 in Egypt, Jordan, Lebanon, Morocco, Saudi Arabia (KSA) and the Lebanon, Morocco, Saudi Arabia (KSA) and the UAE UAE

Arab View of Steps Necessary to Improve View of US

What TWO steps by the US would improve your views of the US most?



Restoring US Strategic Relations with Saudi Arabia

- Maintain strong relations with Israel, but understand need for constant, real, high profile efforts to support Israeli-Palestinian peace and peace with Syria.
- Make the US departure from Iraq a model of “smart” diplomacy.
- Work towards common negotiations, defense, and deterrence of Iran.
- Put forward clear plan for post-Iraq strategic partnership.
- Recognize Saudi progress and help in counterterrorism, *then* seek further progress.
- Treat Saudi and Gulf critical infrastructure, petroleum export, and border/coastal protection as critical *US strategic interests*.
- Act on US Embassy and USMTM priorities for improving the “mechanic” of civil and military US and Saudi relations.
- Not only solve but vastly improve visa and education in the US issues at every level: See education as a critical strategic asset .
- Recognize and encourage Saudi government reforms; work quietly at country team level to aid Saudi reformers to move at Saudi pace.
- Understand that public diplomacy and information campaigns are local, come through country team and efforts, not satellite TV.
- Understand that regional progress comes through one bilateral step at a time.
- Sometimes, actually sit back and *listen*.