



THE SAUDI ARMS SALE:

Reinforcing a Strategic Partnership in the Gulf

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The US has critical strategic interests that it shares with Saudi Arabia, and shape the proposed Saudi arms sale:

- First, for all the talk of the energy independence over the last four decades, the US Department of Energy estimates that the US will be as strategically dependent on imported oil through 2035 as it is today (over 40% of all liquids in the reference case). And, these projections do not take account of our indirect imports of oil in the form of manufactured goods, or our dependence on the health of a global economy that is dependent on stable supply and market driven prices. The stability of Gulf energy exports is critical to our economy and every job in the US.
- Second, the US has finite limits to its military power, and both the US and Saudi Arabia face rapidly changing threats. The US needs allies that have interoperable forces that can fight effectively along side the US, and that can ease the burden on the US by defending themselves. Iran already poses a massive asymmetric naval-air-assault force threat to the Gulf states. The US invasion of Iraq has left Iraqi forces a decade away from being any kind of counterbalance to Iran, and Saudi Arabia as the only meaningful regional power to work with. Al Qaeda in the Peninsula is based in Yemen, and terrorism and outside infiltration is a serious threat. As a result, creating strong, highly mobile Saudi forces is critical to the security of Saudi energy and civil facilities. Helping Saudi Arabia create a combination of effective air and naval power not only affects the Gulf, but the security of tanker and other shipping in the Gulf of Oman and steadily more unstable Red Sea.
- Third, Iran already poses a missile and chemical weapons threat and may pose a nuclear one within the next 3-5 years. Upgrades of the Saudi Patriots have created a base for an integrated approach to air and missile defense. They lay the groundwork for follow-on sales of advanced missile defense systems like THAAD, and an emphasis on defense – not Saudi purchases of missiles or nuclear systems. Coupled to recent US offers of “extended regional deterrence,” and the new proposed arms sales that can help create a Saudi Air Force that is more of a threat to Iran than Iran’s conventional missiles are to Saudi Arabia, US arms transfers offer the best hope of both giving Saudi Arabia and other Gulf states security and stopping the spread of a nuclear arms race in the region.
- Fourth, the proposed arms sale package creates level of interdependence which not only gives the current Saudi government a strong incentive to work with the US, but all future Saudi governments for the next 15-20 years. Saudi Arabia will need continuing support from the US during the entire life cycle of every major system sold, and no future Saudi government can ignore this fact. Moreover, the sales are large in dollar terms, but not in terms of numbers of weapons. This will not be some kind of massive build-up. Saudi Arabia had an Air Force with some 417 combat aircraft in 2000, and it now has only 219. The Saudi F-15 buy is not a build-up. It will take some 3-5 years to deliver and put fully in service, replace

some 87 obsolete F-5A/Bs and F-5EIIIs that were in service in 2000, and help Saudi Arabia compensate for the serious performance limits on 107 aging Tornados still in service.

Understanding the Strategic Reasons for the Sale

Saudi Arabia and the US have had shared common vital national security interests in the region since 1945 – a partnership that was strongly reinforced by the fall of the Shah of Iran and the emergence of a radical regime in Iran.

Energy and the Continuing Importance of Strategic Partnership

The US and Saudi Arabia may have very different political systems and cultures, but they are bound together by the same critical strategic interests. Saudi Arabia depends on the secure flow of Gulf energy exports -- both for its own economy and the stability of its neighbors. The US depends on that same flow of energy exports to keep energy prices moderate, the stability and growth of a global economy, and the stability and growth of its own economy and foreign trade.

It is all very well for Americans to talk about "energy independence." US politicians, academics, media, and think tanks have been doing so for nearly four decades. The fact remains, however, that the latest *Annual Energy Outlook* (<http://www.eia.doe.gov/oiaf/aeo/>) and *International Energy Outlook* (<http://www.eia.doe.gov/oiaf/ieo/>), which are issued by the Department of Energy, project that the US will not make any significant reduction in its strategic dependence on oil imports through 2035.

The reference case projection in the *Annual Energy Outlook* shows that the US will still import roughly half of its energy liquids through 2035, and the total could be over 60%. The only case the Department of Energy projects that reduces US dependence to around 35% is one where real oil prices have risen to well over \$200 a barrel in constant dollars - a case that presents massive problems for the US economy.

Moreover, these projections by the Department of Energy make no effort to measure the level of indirect imports that the US makes through its imports of manufactured goods from Europe and Asia – manufacturers in countries like China and Japan which are far more dependent on oil and gas imports from the Gulf and other exporting nations than the US.

The energy side of US vital interests in the Gulf is driven by three other factors:

- First, it does not matter where the US gets its oil from on any given day. The US competes on a world market driven by total world supply and pays world prices. If a crisis occurs in the Gulf, the US will compete at the same increase in prices as every other importing nation, if world prices rise on a longer-term basis, the US

will pay for the same increase, and if supplies are cut by a major conflict, the US must share the oil left for import with other OECD states.

- Second, the US is steadily more dependent on the health of the global economy and the global economy is steadily more dependent on the stable flow of oil and gas exports. Oil prices are not simply a matter of increases in gasoline or home heating costs. They affect every job in America.
- Third, nearly 40 years of world-wide efforts to find new oil and gas reserves have not materially reduced the importance of the Gulf region to future energy exports. The Gulf now has a higher percentage of world oil reserves than it did when the oil crisis began in 1973, and Department of Energy estimates indicate that the Gulf share of world oil production capacity will increase from 28% in 2010 to 31% in 2035.ⁱ

Energy exports are scarcely the only factor that unites Saudi Arabia and the US. Counterterrorism is another critical aspect of national security for both states, and Saudi Arabia has long received technical support from the US and benefit from sending its students to study in the US. Some 30,000 Saudi students now study in the US, and US universities now play a growing role in Saudi education. It was energy, however, that first bound the US and Saudi Arabia together in the 1930s, and that underpins every aspect of US and Saudi security cooperation.

The US and Saudi Strategic Partnership

The practical value of the US and Saudi strategic partnership was demonstrated by a long series of Saudi efforts that helped the US deal during the Cold War. It has since been demonstrated in combat. Saudi Arabia played a key role in containing Iranian military pressure on the Southern Gulf during the Iran-Iraq War, and Saudi defense of its air space and waters was made possible by US sales and training support.

A US-Saudi military partnership led the Coalition that drove Iraq from Kuwait. It was demonstrated in the basing of US fighters and surface-to-air missiles in Saudi Arabia from 1992-2003, which played a critical role in enforcing sanctions in Iraq. It also was demonstrated during the US invasion of Iraq in 2003. While Saudi Arabia did not support the war, it quietly allowed Coalition special forces to stage out of Ar Ar on the Iraqi border, helped support US air operations, and allowed over flights and recovery.

While US combat forces left Saudi Arabia in 2003, the US Military Training Mission (USMTM), and advisory team supporting the Saudi Arabian National Guard (SANG), remained. Saudi Arabia has continued to play a major role in US-led exercises as joint exercises involving Britain and France. As Saudi help in blocking the shipment of terrorist bombs from Yemen to the US in October 2010, has shown, Saudi Arabia has steadily improved its intelligence cooperation with the US, and a counterterrorism mission similar to USMTM has now been established in country.

Containing Iran

While Saudi Arabia must be diplomatic about its public treatment of its neighbor, Iran is now the central focus of US and Saudi military cooperation. An ambitious and extremist Iranian regime has emerged as a threat to the entire region. It has built up a massive capability to conduct irregular warfare in the Gulf, it has created strong ties to extremist and terrorist non-state actors, it is steadily expanding its long range missile forces, it is seeking to create a major defense production base for conventional weapons, it is a declared chemical weapons state, and it is becoming a nuclear threshold state that has at least studied arming its missile with nuclear warheads.

This is having a major impact on regional stability at a time when other major changes are taking place in the regional military balance. The US invasion of Iraq in 2003 destroyed most of its conventional military forces and Iraq's ability to act as counter balance to Iran. US withdrawal from Iraq at the end of 2011 will also leave Iraq without the conventional forces it needs to deter intimidation and military pressure from neighboring states like Iran for at least eight to ten years. This has fundamentally changed the military balance in the Gulf in ways that both create major new security demands for Saudi Arabia, and as effective a mix of US presence, US power projection capability, and strong, interoperable Saudi and other GCC forces as possible. This shift is shown in **Figure One** below:

Figure One

Radically Altering the Gulf Balance: Iraq vs. Iran: 2003 vs. 2010

| Category | 2003 | | | 2010 | | |
|---------------------|---------|---------|-------------|---------|---------|-------------|
| | Iraq | Iran | Force Ratio | Iraq | Iran | Force Ratio |
| Active Manpower | 424,000 | 513,000 | 8:10 | 191,957 | 523,000 | 2:5 |
| Reserve Manpower | 650,000 | 350,000 | 19:10 | 0 | 350,000 | NA |
| Main Battle Tanks | 2,200 | 1,565 | 7:5 | 149 | 1,613 | 1:10 |
| OAFVs | 1,300 | 815 | 8:5 | 505 | 725 | 7:10 |
| APCs | 2,400 | 590 | 4:1 | 1,479 | 650 | 23:10 |
| Towed Artillery | 1,900 | 2,085 | 9:10 | 0 | 2,010 | NA |
| SP Artillery | 150 | 310 | 1:2 | 0 | 310 | NA |
| MRLs | 200 | 889 | 1:5 | 0 | 876 | NA |
| Combat Aircraft | 316 | 283 | 11:10 | 0 | 312 | NA |
| Attack Helicopters | 100 | 85 | 6:5 | 0 | 50 | NA |
| Major SAM Launchers | 225 | 205 | 11:10 | 0 | 234 | NA |

Source: Adapted from the IISS Military Balance and Jane's Sentinel series

Creating the Capability to Deter and Defend

These forces require major changes in the US and Saudi partnership, and the new US arms sales will build on a long series of US arms transfers designed to build up critical Saudi mission capabilities, and develop interoperable Saudi forces. While Saudi Arabia continues to buy arms from a variety of sources – including British aircraft and Frecnhe

ships – its army, National Guard, Air Force, and Air Defense force all rely on US-made systems and are highly interoperable with the US forces in the Gulf and US power projection forces.

Examples of key US-made systems in Saudi forces include:

- 315 M1A2 and 450 M-60A3 main battle tanks.
- 400 M-2 Bradley AIFVs.
- 3,000 M-113/A1/A2/A3 APCs.
- 110 M-109A1/A2 self-propelled howitzers.
- TOW anti-tank guided weapons.
- AH-64A and AH-64D attack helicopters.
- UH-60 utility helicopters.
- Stinger man-portable surface-to-air missiles.
- 4 US Badr-class missile frigates.
- Harpoon antiship missiles.
- 4 Addiyah class minesweepers.
- 70 F-15S, 66 F-15C, and 18 F-15D fighters and strike fighters.
- 5 E-3A AWACS
- 8 KC-130H and 7 KE-3A tankers.
- 38 C-130 transports.
- Patriot surface-to-air/anti-missile battalions with 160 PAC-2 systems.
- IHawk surface-to-air battalions with 128 Hawk MIM-23B systems.

These US systems form the backbone of Saudi capabilities for armored and air warfare, and are supported by a large array of US-made advanced missiles and precision guided weapons, support systems, sensor and early warning systems, and C4I/battle management systems. They have already done much to improve Saudi capabilities, and Saudi interoperability with US forces. They are part of a broader pattern of such arms transfers that not only build up Saudi capabilities but also those of other Gulf Cooperation Council (GCC) states. They are steadily improving their capability to deter and defend against Iran in all forms of intimidation and warfare, as well as give Saudi Arabia and other local forces the capability to deal with any terrorist or low-level threats like the tribal attacks from Yemen into Saudi Arabia last year.

Ideally, they will help deter and contain Iran until major changes take place in the character and ambitions of its regime. Deterrence, however, is ultimately dependent on the capability to defend and reliance on deterrence may not be enough. Iran's future behavior is unpredictable – as is the future alignment and military capability of Iraq. This makes a combination of Saudi and US military capabilities a critical factor shaping stability in the Gulf region, and makes their interoperability and level of joint training critical to both stability and war fighting.

While the US no longer maintains combat forces in Saudi Arabia, Saudi Arabia's purchases of US munitions and spare parts, its creation of maintenance and support systems for US-made weapons, its potential basing capability, and its purchase of US C4I and sensor systems would be of critical value in any major crisis where the US had to rapidly deploy and sustain forces in the Gulf region.

How the Proposed Sales Reinforce the Overall Pattern of US Arms Transfers to Saudi Arabia

Far too much attention has focused on the total cost of the new arms transfers that the Department of Defense notified to Congress on October 20, 2010, and far too little attention has focused on how they fit into the pattern of past US arms transfers and their impact on regional security. Even the cost data, however, require more perspective.

When one considers that \$60 billion is the total potential value of the US transfers over a period that may well take 8-10 years, and that major weapons systems are only part of this cost, it is not clear that Saudi Arabia will actually spend more on arms deliveries over a coming four year period than it has in the past – particularly in constant dollars, which is the only valid measure of comparable cost.

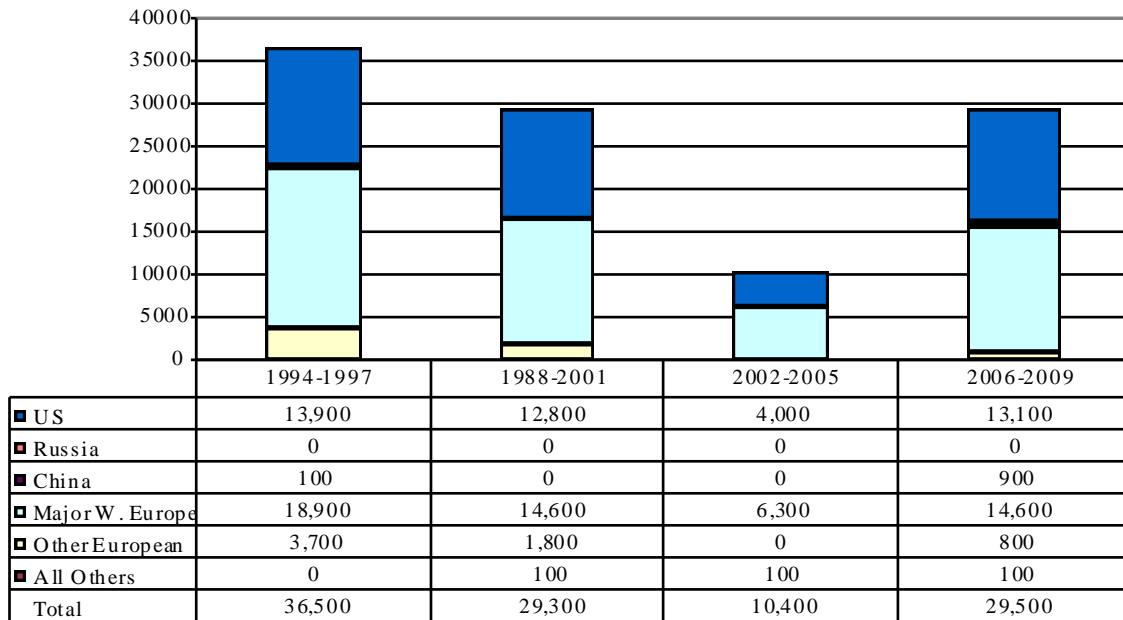
If one looks at the cost of Saudi arms transfers over recent four-year periods, Saudi Arabia has long made massive arms imports from the West. This is clearly reflected in the arms transfer data shown figure in **Figure Two**. This same figure also shows that Saudi Arabia knows it has a choice of suppliers and does choose arms transfers from other countries when they provide a better option or in the cases where the US does not sell for political reasons.

As **Figure Three** shows, the UAE and other Gulf states have also sharply increased their arms orders over the last eight years as Iran, terrorism, and problems in neighboring states have increased in recent years. Part of this increase comes from the fact that Iran has built up massive new capabilities for asymmetric warfare in the Gulf area, and shown it can threaten other states by transferring arms to non-state actors and using its Al Quads force to train them.

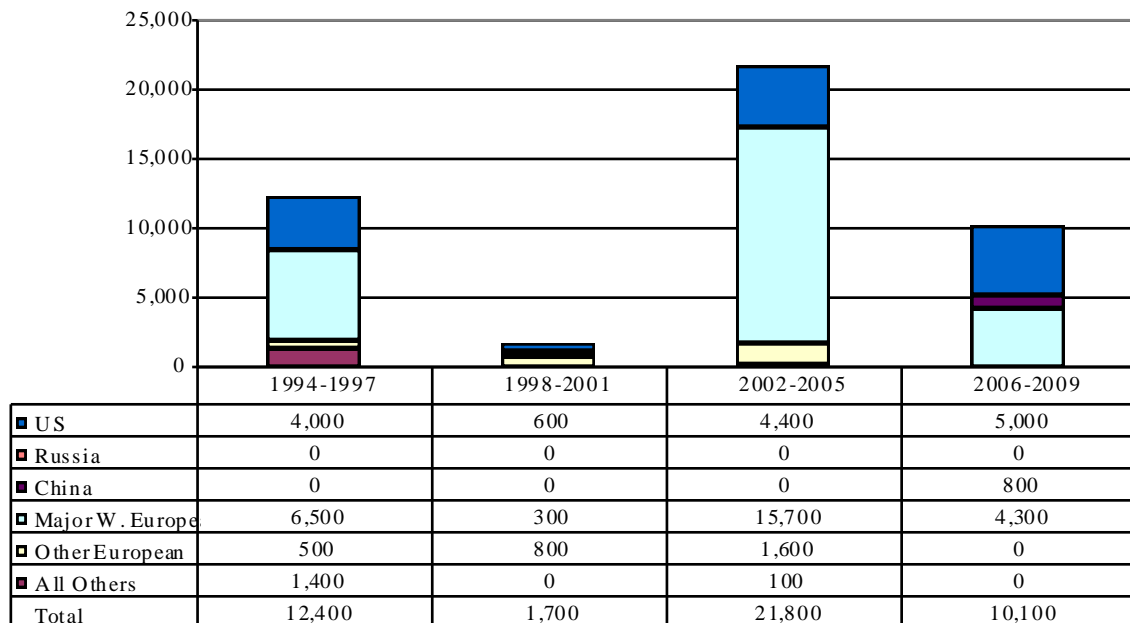
Figure Two: Saudi Arabia's Arms Transfers 1994-2009

(In Current Million \$US; 0 = Less than \$US 50 million)

New Arms Deliveries by Supplier



New Arms Agreements by Supplier

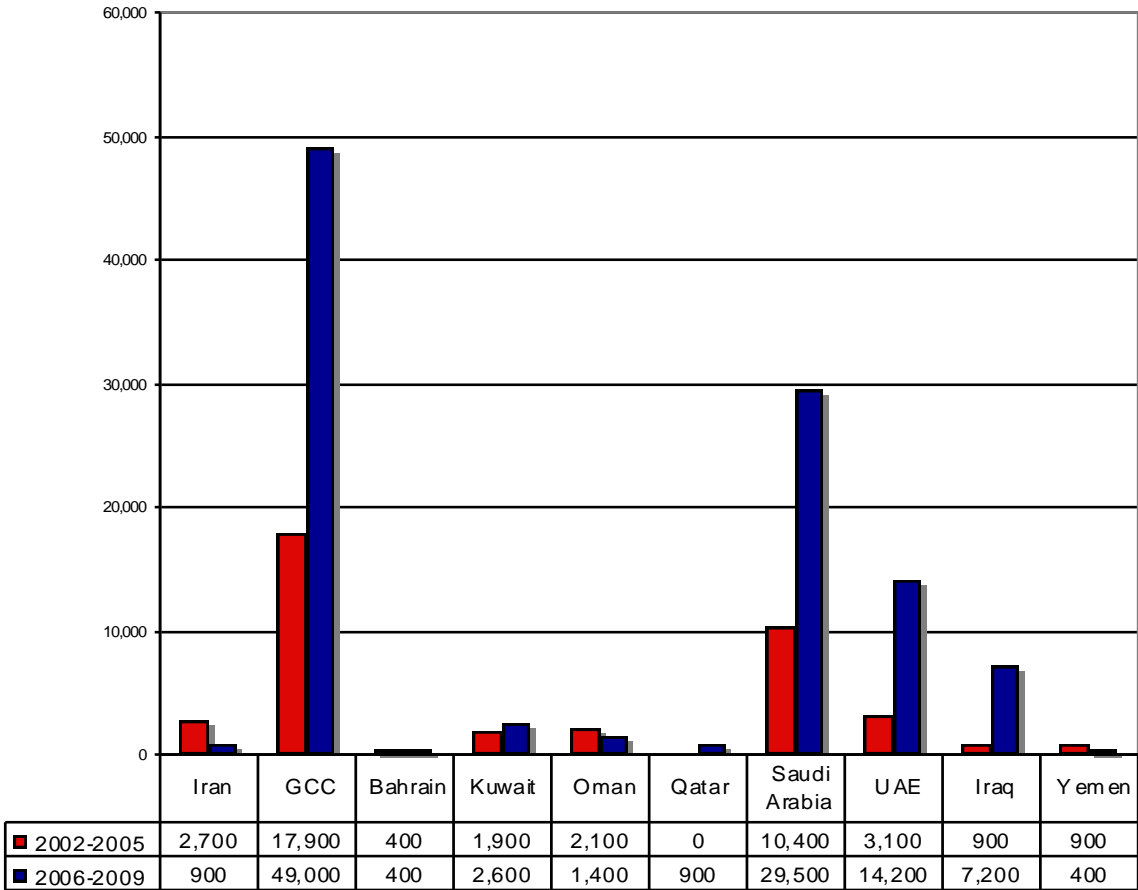


Source: Adapted from Richard F. Grimmett, *Conventional Arms Transfers To Developing Nations*, Congressional Research Service, various editions.

and second,. As **Figure Two** shows, Saudi Arabia has long relied on US arms transfers,
Figure Three

**Buying an Edge Against Iran: How Gulf Arms Sales Changed Between 2002-2005
and 2006-2009**

(From All Suppliers in current \$US millions)



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

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

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Focusing on the Content of US Arms Transfers to Saudi Arabia Rather than the Cost: Building on a Proven Foundation

If one looks at the content of the proposed new sales, rather than the cost, it also becomes clear that they are part of an effort to enhance Saudi capabilities in ways that serve both Saudi and US security interests, and promote the stability of the entire Gulf region. This is reflected in a mix of ongoing arms transfers and upgrades that will give Saudi Arabia fare stronger air capabilities and a major increase in tactical mobility and strike power for dealing with any contingency involving Iran, terrorist elements, and threats from Yemen.

Moreover, these same transfers are improving Saudi capabilities to secure facilities and shipping in the Gulf and Red Sea areas, deal with coastal and offshore attacks and infiltrations across Saudi Arabia's borders, and to help other Gulf states in an emergency.

The broader patterns in recent US transfers to Saudi Arabia is summarized in **Figure Four**, which covers the period s since 2001. **Figure Four** not only describes each sale, and its purpose as reported to Congress by the Defense Security Cooperation Agency (DSCA Table Three also shows just how much effort has gone on since 2001 to build-up counterterrorism capabilities, strengthen the Saudi National Guard's capability to protect energy and critical infrastructure facilities, show Iran and other states the dangers in threatening to use missiles or irregular military forces.

It also shows that Saudi Arabia is willing to accept dependence on US military advice and contractor support, and is creating a broad level of interoperability in every aspect of its forces. It should be stressed that such sales are only part of a story that involves cooperation between Saudi and US commanders and officials that affects virtually every element of Saudi forces -- a story described in depth in a recent CSIS book on Saudi national security: **Saudi Arabia: National Security in a Troubled Region (Praeger, 2009), which can be ordered at the CSIS book store on the CSIS web site at *****.**

Figure Four

Notifications of Major Proposed US Arms Sales to Saudi Arabia: 2001-2010

CY 2010

October 20, 2010

84 F-15SA aircraft
10 AH-64D Longbow Helicopters
24 AH-64D Longbow Helicopters
36 AH-64D Block III APACHE Helicopters, 72 UH-60M BLACKHAWK Helicopters, 36 AH-6i Light Attack Helicopters, 12 MD-530F Light Turbine Helicopters

September 13, 2010:

Continuation of a blanket order training program inside and outside the Kingdom of Saudi Arabia that includes, but is not limited to, flight training, technical training, professional military education, specialized training, mobile training teams, and English Language training. Also provided are site surveys, trainers, simulators, program management, publications and technical documentation, personnel training and training equipment, U.S. government and contractor technical and logistical support services, and other related program requirements necessary to sustain a long-term

CONUS training program. The estimated cost is \$350 million

CY 2009

December 17, 2009

SANG Modernization Program: possible sale for 2,742 BGM-71E-4B-RF Tube-Launched, Optically-Tracked, Wire-Guided (TOW-2A) Radio Frequency missiles (42 missiles are for lot acceptance testing), publications and technical documentation, and other related elements of logistics support. The proposed sale will support efforts to modernize the Saudi Arabian National Guard (SANG). The estimated cost is \$177 million.

August 6, 2009

Communication Navigation and Surveillance/Air Traffic Management upgrades: a two-phased approach for the Communication Navigation and Surveillance/Air Traffic Management upgrades of the communication and navigation systems for the Royal Saudi Air Force's fleet of 13 RE-3, KE-3, and E-3 aircraft. Phase One will include Global Positioning System/Inertial Navigation Systems, 8.33 kHz Very High Frequency radios, Traffic Collision Avoidance Systems, Mode S Transponders, Mode 4/5 Identification Friend or Foe Encryption, High Frequency radio replacements, Multifunctional Information Display Systems for Link 16 operations, Have Quick II radios, Satellite Communications and Common Secure Voice encryptions. Phase 2 will include digital flight deck instrumentation and displays, flight director system/autopilot, flight management system, cockpit data line message and combat situational awareness information. Also included are spare and repair parts, support and test equipment, publication and technical documentation, personnel training and training equipment, personnel support and test equipment to include flight simulators, U.S. government and contractor engineering support, technical and logistics support services, and other related elements of logistical and program support.

August 5, 2009

Tactical Airborne Surveillance System (TASS) aircraft upgrades: upgrade the TASS aircraft, installation of 10 AN/ARC-230 High Frequency Secure Voice/Data Systems, 25 AN/ARC-231 or 25 AN/ARC-210 Very High Frequency/Ultra High Frequency (VHF/UHF) Secure Voice/Data Systems, four Multifunctional Information Distribution System-Low Volume Terminals (MIDS-LVT), four LN-100GT Inertial Reference Units, 25 SY-100 or functional equivalent Crypto Systems, seven SG-250 or functional equivalent Crypto Systems, six SG-50 or functional equivalent, 10 CYZ-10 Fill Devices, modification of existing ground stations, TASS equipment trainer, mission scenario generator (simulator), and maintenance test equipment; spare and repair parts, support and test equipment, personnel training and training equipment, publications and technical documentation including flight/operator/maintenance manuals, modification/construction of facilities, U.S. Government and contractor engineering and support services and other related elements of logistics support. The estimated cost is \$530 million

CY 2008

September 26, 2008

AIM-9X SIDEWINDER missiles: sale of 250 All-Up-Round AIM-9X SIDEWINDER Missiles, 84 AIM-9X SIDEWINDER Captive Air Training Missiles (CATMs), 12 AIM-9X SIDEWINDER Dummy Air Training Missiles (DATMs), missile containers, missile modifications, test sets and support equipment, spare and repair parts, publications and technical data, maintenance, personnel training and training equipment, contractor engineering and technical support services, and other related elements of logistics support. The estimated cost is \$164 million.

Saudi Arabia - AN/FPS-117 Long Range Radar Upgrade: equipment upgrade of 17 AN/FPS-117 radars, which includes installation and checkout, engineering, calibration, reintegration, testing, support equipment, spare and repair parts, personnel training, publications and technical data, U.S. Government and contractor technical assistance and other related elements of logistics support. The estimated cost is \$145 million.

Multifunctional Information Distribution System/Low Volume Terminals: sale of 80 Link 16 Multifunctional Information Distribution System/Low Volume Terminals (MIDS/LVT-1) to be installed on United Kingdom Eurofighter Typhoon aircraft, data transfer devices, installation, testing, spare and repair parts, support equipment, personnel training, training equipment, contractor engineering and technical support, and other related elements of program support. The estimated cost is \$31

million.

September 9, 2008

AH-64D APACHE Longbow Helicopters: sale of 12 AH-64D Block II APACHE Longbow Helicopters, 30 T700-GE-701D Engines, 12 Modernized Targeting Acquisition and Designation Systems/Pilot Night Vision Sensors, 4 each AN/APG-78 Fire Control Radars and AN/APR-48 Radar Frequency Interferometers, 28 M299 HELLFIRE Longbow Missile Launchers, 12 AN/ALQ-144C(V)3 Infrared Jammers, 12 AN/APR-39A(V)4 Radar Signal Detecting Sets, 12 AN/ALQ-136(V)5 Radar Jammers, 12 AAR-57(V)3/5 Common Missile Warning Systems, 36 Improved Countermeasures Dispensers, and 12 AN/AVR-2B Laser Warning Sets. Also included: composite horizontal stabilators, Integrated Helmet and Display Sight Systems, repair and return, transportation, depot maintenance, spare and repair parts, support equipment, publications and technical documentation, U.S. Government and contractor technical support, and other related elements of program support. The estimated cost is \$598 million.

July 18, 2008

Continued assistance in the modernization - the Saudi Arabian National Guard: sale for the continuation of the United States supported effort to modernize the SANG by providing the following defense services: 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. The estimated cost is \$1.8 billion.

January 14, 2008

Joint Direct Attack Munitions: 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. The proposed sale will greatly improve the accuracy of unguided, general-purpose bombs in any weather condition enabling the Royal Saudi Air Force's (RSAF) F-15S aircraft to participate to a greater degree in coalition operations. The proposed sale of JDAMs for use on RSAF F-15S aircraft will enhance training opportunities; increase RSAF F-15 operational capability, sustainability, and interoperability with USAF, Gulf Cooperation Council, and other coalition air forces.

CY 2007

December 7, 2007

AN/AAQ-33 SNIPER Targeting Pods: 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. The proposed sale will improve the operational capability of the Royal Saudi Air Force (RSAF) by upgrading the long-range target detection and identification systems of the Saudi F-15s. The proposed sale will provide an upgraded capability of the RSAF's existing 1980's LANTIRN pod technology. This sale also will increase the RSAF AWACS sustainability and interoperability with the U.S. Air Force, the Gulf Cooperation Council countries, and other coalition air forces. The proposed sale of a modern F-15 SNIPER targeting system will greatly improve the RSAF's capabilities against offensive air force capabilities.

Mission equipment for AWACS aircraft: 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. The proposed sale will enhance training opportunities; increase the Royal Saudi Air Force's (RSAF) AWACS operational capability, sustainability, and interoperability with the USAF, Gulf Cooperation Council, and other coalition air forces. Saudi Arabia needs this additional mission equipment to continue its development of an extended Airborne Early Warning (AEW) capability, as well as

enhanced command, control and communications (C3).

October 4, 2007

Saudi Arabia - Light Armored Vehicles and High Mobility Multi-Purpose Wheeled Vehicles: sale of

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.

The proposed sale of Light Armored Vehicles will provide a highly mobile, light combat vehicle capability enabling Saudi Arabia to rapidly identify, engage, and defeat perimeter security threats and readily employ counter and anti-terrorism measures. The vehicles will enhance the stability and security operations for boundaries and territorial areas encompassing the Arabian Peninsula.

CY 2006

November 13, 2006

Sale of 155 General Electric (GE) F110-GE129 engines or 20 Pratt & Whitney F100-PW229 engines in support - F-15S aircraft: sale of engines to restore/refurbish the Royal Saudi Air Force (RSAF) current inventory of P&W engines; support equipment; engine improvement program services; flight tests...The estimated cost is \$1.5 billion. The RSAF is considering re-engining its 70 F-15S aircraft, or undertaking a massive recovery/re-sustainment plan of the current engines, or a combination of both. The potential sale will further U.S. foreign policy and national security objectives by increasing RSAF F-15S aircraft operational capability, sustainability, and interoperability with USAF. The relationships built during future flight training operations will enhance the USAF's influence and access within the Kingdom...will facilitate sustained RSAF interoperability with the USAF and enhance the RSAF's ability to participate in coalition operations within the Gulf Cooperation Council region.

September 27, 2006

Continued effort to modernize the Saudi Arabian National Guard (SANG). sale for the continuation of the United States supported effort to modernize the SANG by providing...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. The SANG needs these defense articles so that it can effectively conduct security and counter-terrorism operations. The continuation of services under the SANG Modernization Program is an evolution of the SANG as an effective defensive force with the advice, assistance, and training of the U.S. Army. The Modernization Program ensures necessary training, logistics, support, doctrine development and force integration for the continuing expansion and use of their weapon systems. These services will remain the cornerstone of an effort to upgrade and enhance the infrastructure of the SANG organization. The sale will also provide SANG with additional command, control, and communications equipment needed to operate in a secure communications environment that will facilitate the performance of its mission within Saudi Arabia. It is consistent with the National Command Authority's intent for stability in the Central Command Area of Operation. The radios will provide the critical VHF and HF links necessary for a large fast moving force and integration with the SINCGARS radios SANG already has fielded in its Light Armored Vehicle and Light Infantry

Brigades.

July 28, 2006

Remanufacture and upgrade - AH-64A to AH-64D APACHE Helicopters: 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. Saudi Arabia will use the AH-64D in the same manner as they are currently using their AH-64A models. Their focus is on national security, protecting their borders and oil infrastructure. The resulting effect will be more advanced targeting and engagement capabilities. The proposed sale will upgrade the Saudi anti-armor day/night missile capability, provide for the defense of vital installations, and provide close air support for the military ground forces. Saudi Arabia will have no difficulty absorbing these helicopters into its armed forces.

M1A1 and Upgrade - M1A2 to M1A2S Abrams Tanks: 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. We previously notified transmittal number 90-07 to Congress on 2 December 1989 of the possible sale of 315 M1A2A Abrams tanks, with ancillary weapons and equipment, 30 M88A1 recovery vehicles, 175 M998 utility trucks, other trucks, ammunition, and full logistics support for an estimated value of \$725 million. Transmittal number 90-78 was notified to Congress on 27 October 1990 for the possible sale of 150 M1A2 tanks, 200 Bradley Fighting Vehicle Family Systems (including TOW versions and 1,750 TOW IIA Missiles), 207 M113 Armored Personnel Carrier Family Vehicles, 50 M548 Cargo Carriers, 17 M88A1 and 43 M578 Recovery Vehicles, ammunition, and full logistics support for an estimated value of \$3.2 billion. This proposed sale consists of three phases: (1) engineering phase for 30 months, (2) purchase of and upgrade of 58 M1A1s to M1A2S (Saudi) configuration, and (3) tear down of the 315 M1A2 Abrams in Saudi Arabia's tank fleet and upgrade to the M1A2S configuration. The Abrams Integrated Management (AIM) program was designed economically to rebuild and maintain the M1A1 Main Battle Tank (MBT) to a 'like new' condition to improve fleet readiness and reduce sustainment costs. The 58 M1A1s will undergo an 'AIM-like' process and will be upgraded to the M1A2S configuration in the United States. The 315 Saudi M1A2A MBT's will undergo an 'AIM-like' process and will be re-configured to the M1A2S configuration. Vehicle teardown and final reassembly will be accomplished in Saudi Arabia. The proposed sale and upgrade will allow Saudi Arabia to operate and exercise a more lethal and survivable M1A2S tank for the protection of critical infrastructure. This proposed sale/upgrade keeps a substantial number of tanks in the region that have a high degree of commonality with the U.S. tank fleet. The M1A2S design is intended to take advantage of the digital capabilities of the M1A2 while limiting obsolescence challenges.

July 21, 2006

Provide funds for blanket order requisitions, under a Cooperative Logistics Supply Support Agreement (CLSSA): 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.

July 20, 2006

Continue modernization - the Saudi Arabian National Guard (SANG): 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. The SANG needs these defense articles so that it can effectively conduct security and counter-terrorism operations. The continuation of services under the SANG Modernization Program is an evolution of the

SANG as an effective defensive force with the advice, assistance, and training of the U.S. Army. The Modernization Program ensures necessary training, logistics, support, doctrine development and force

integration for the continuing expansion and use of their weapon systems. These services will remain the cornerstone of an effort to upgrade and enhance the infrastructure of the SANG organization.

Saudi Arabia - UH-60L Utility/Assault Black Hawk helicopters: 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.

This proposed sale will contribute to the foreign policy and national security of the United States by helping to improve the security of a friendly country that has been and continues to be an important force for political stability and economic progress in the Middle East.

The Royal Saudi Land Forces (RSLF) have a long-term plan to use these additional Black Hawk helicopters to modernize and increase their rotary wing fleet. Saudi forces have used rotary wing assets in numerous anti-terrorism operations within their borders and view their ability to quickly move troops around the country as a critical capability. The helicopters will allow Saudi Arabia to exercise a more flexible and maintainable operation for the protection of critical infrastructure. The additional aircraft will primarily be used to move troops and light equipment over long distances within their kingdom for external defense and internal requirements, as needed.

CY 2005

October 3, 2005

Contractor, Technical Services, and Logistics Support: sale for the continuation of support for F-5, F-15, RF-5, E-3, RE-3, KE-3, and C-130, aircraft; F-100-PW-220/229, J-85, T-56, and CFM-56 aircraft engines; and A/TGM-65 AIM-7 and AIM-9 missiles which have already been delivered to and are being operated by Saudi Arabia; contractor services; maintenance; spare and repair parts; support and test equipment; goggles; communication support; precision measuring equipment; personnel training; training equipment; technical support; and contractor engineering; and other related elements of program support. The estimated cost is \$760 million.

Saudi Arabia - Continued Assistance in the Modernization - the SANG: sale for the continuation of the United States supported effort to modernize the Saudi Arabian National Guard (SANG) by providing Major Defense Equipment (MDE) and non-MDE items:

Major Defense Equipment (MDE)

144 Armored Personnel Carrier Vehicles
12 Water Cannon Vehicles

52 Command and Control Vehicles
17 Ambulance and Evacuation Vehicles
36 Platoon Command Vehicles
55,500 40mm Ammunition
3,600 F-2000 5.56mm Assault Rifles with
40mm Grenade Launchers
51,400 F-2000 5.56mm Assault Rifles without
40mm Grenade Launchers
198 AN/VRC-90E SINCGARS Vehicular
Single Long-Range Radio Systems

Non-MDE Vehicles

104 ¼-ton trucks
6 pick-up trucks
16 patrol trucks
48 10-ton trucks
12 5-ton trucks w/winch
63 5-ton trucks
6 refrigeration trucks
16 11,000-gallon fuel tankers
8 9,000-gallon water tankers
8 16,500-gallon water tankers
6 executive automobiles
8 26-passenger buses
24 60-passenger buses
6 tire demounter trucks
9 25-ton wreckers
6 mobile workshop trucks
6 mobile lubrication trucks
4 5-ton dump trucks
11 mobile command trucks

Note: All U. S. standard commercial/non-tactical vehicles or other commercial equivalents.

Battery Chargers Non-MDE

172 Harris Corporation RF-5000v 125W High Frequency (HF) or Current Production Version
Commercial HF Radios
180 M24 7.62 Sniper Weapon System (scope is integrated) or commercial equivalent
265 Motorola Commercial Very HF Single or Multi-Channel Handheld Radios or other
commercial equivalents
323 12 Gauge Shotguns or commercial equivalent
Ballistic Protection
Batons
Contractor engineering and technical support
Generators
Personnel training
Protective Clothing and Equipment
Publications
Shop Equipment
Spare and repair parts
Sets, Kits, and Outfits (assemblages of components in a container (pouch, box, chest,
van, trailer, or shelter) primarily designed to accomplish a specific mission)
Sights and Scopes (the scope is for the M24 Sniper Weapon System which is an integral
component of the weapon system)
Standard simulations and training systems to include: Multiple Integrated Laser Emitting
System, Engagement Skills Trainer for marksmanship training, and the Battle Staff
Automated Training System Support Equipment to include Mobile Workshops
Training devices
Training equipment

Other related elements of program support

The estimated cost is \$918 million.

The proposed sale coupled with the training, assistance, and advice provided by the U.S. Government through the Office of the Program Manager SANG will serve to make a key regional ally and partner in the Global War on Terror more capable of defeating those who would threaten regional stability, and less reliant on the deployment of U.S. combat forces to maintain or restore stability in the Middle East. The SANG needs these defense articles so that it can effectively conduct security and counter-terrorism operations. The continuation of services under the SANG Modernization Program is an evolution of the SANG as an effective defensive force with the advice, assistance, and training of the U.S. Army. The Modernization Program ensures necessary training, logistics, support, doctrine development and force integration for the continuing expansion and use of their weapon systems. These services will remain the cornerstone of an effort to upgrade and enhance the infrastructure of the SANG organization.

Saudi Arabia - Multifunctional Information Distribution System/ Low Volume Terminals: sale of 165 Link 16 Multifunctional Information Distribution System (MIDS)/Low Volume Terminals (Fighter Data Link terminals), 25 Joint Tactical Information Distribution System (JTIDS) terminals, installation, testing, spare and repair parts, support equipment, personnel training, training equipment, contractor engineering and technical support, and other related elements of program support. The estimated cost is \$401 million. The MIDS terminals will increase pilot operational effectiveness by providing an at-a-glance portrayal of targets, threats, and friendly forces on an easy-to-understand relative position display. This proposed system will increase combat effectiveness while reducing the threat of friendly fire. The system will increase benefits of joint training exercises and foster interoperability with the U.S. Air Force and other countries. Combined with AWACS and ground Command and Control, MIDS/JTIDS will provide allied forces greater situational awareness in any coalition operation.

September 27, 2005

Upgrade Services - C-130E/H Aircraft: sale of upgrade kits and services for 54 C- 130E/H aircraft. The Avionics Modernization Program upgrade includes navigation and communications equipment, LCD displays with a heads-up display, software development/integration, associated support equipment, modification kits, spare and repair parts, test equipment, publications and technical documentation, personnel training and training equipment, U.S. Government and contractor engineering and logistics personnel services and other related elements of logistics support. The estimated cost is \$800 million.

CY 2004

None

CY 2003

Continued Modernization - the Saudi Arabian National Guard: sale of services for the continuation of the U.S. supported effort to modernize the Saudi Arabian National Guard (SANG) by providing minor defense articles including spare and repair parts for V150 armored vehicles, light armored vehicles, artillery pieces, communications equipment, other military equipment, medical equipment and medicines, automation equipment and software for logistics, training, and management, translated (into Arabic) tactical and technical manuals. Defense services transferred would include training, professional military advice and assistance, management assistance, contract administration, construction oversight, transportation of equipment, upper echelon maintenance, management of repair and return of components. These support services would be for the period 1 January 2004 through 31 December 2008. This proposed sale does not entail the procurement of Major Defense Equipment. The estimated cost is \$990 million. The continuation of services under the SANG Modernization Program is an evolution of the SANG as an effective defensive force with the advice, assistance and training of the U.S. Army. The Modernization Program ensures necessary training, logistics, support, doctrine development and force integration for the continuing expansion and use of their weapon systems. These services will remain the cornerstone of an effort to upgrade and enhance the infrastructure of the SANG organization.

AN/AAQ-24(V) NEMISIS Directional Infrared Countermeasures Systems: sale of four AN/AAQ-24(V)

NEMISIS Directional Infrared Countermeasures Systems which consist of three small laser turret assemblies, six missile warning sensors, one system processor, one control indicator unit, two signal repeaters, included associated support equipment, spare and repair parts, publications, personnel training and training equipment, technical assistance, contractor technical and logistics personnel services and other related elements of program support. The estimated cost is \$240 million. Saudi Arabia will install the AN/AAQ-24(V) NEMISIS System on their Boeing 747 and 737 aircraft. They will use the system for the movement and protection of their "Head of State".

CY 2002

None

CY 2001

C3 System Development for RSNF: sale of U.S. Government and contractor engineering, technical and logistics services in the development and implementation of a comprehensive 10 year program for the upgrade, development, operation and maintenance program, and system additions to the Royal Saudi Naval Forces (RSNF) Command, Control, and Communications (C3) System. The system additions will include, but are not limited to, installation of commercial data link and mobile communications equipment. The estimated cost is \$257 million. The RSNF need the equipment and services in order to modernize and enhance an aging C3 system that was provided during the period of 1974 through 2000. The program, which will provide commercially available equipment, material and services, will significantly enhance interoperability with U.S., NATO and other Saudi military forces operating in the region. They involve the sale of U.S. Government and contractor engineering, technical and logistics services in the development and implementation of a comprehensive 10 year program for the upgrade, development, operation and maintenance program, and system additions to the Royal Saudi Naval Forces (RSNF) Command, Control, and Communications (C3) System. The system additions will include, but are not limited to, installation of commercial data link and mobile communications equipment. The estimated cost is \$257 million. This proposed sale will contribute to the foreign policy and national security of the United States by helping to improve the security of a friendly country which has been and continues to be an important force for political stability and economic progress in the Middle East. The RSNF need the equipment and services in order to modernize and enhance an aging C3 system that was provided during the period of 1974 through 2000. The program, which will provide commercially available equipment, material and services, will significantly enhance interoperability with U.S., NATO and other Saudi military forces operating in the region.

Source: Adapted by the author from data provided by the Defense Security Cooperation Agency as of October 28, 2010, http://www.dsca.osd.mil/pressreleases/36-b/36b_index.htm

The Strategic Impact of the Current Arms Transfer Proposals

Important as these past sales have been, they have left gaps in Saudi capabilities both in preparing for the future, and in dealing with key missions like providing mobility and tactical strike power. Saudi Arabia has not modernized its air force at the same rate it has modernized other elements of its force structure, and must now make major investments if it is to preserve a clear "edge" over Iran, use its air force to compensate for the limits of its ground forces and navy, and create a more effective deterrent to Iran's potential use of chemically armed missiles.

Saudi Arabia needs more mobility and tactical strike power to deal with Iran's growing capability to attack targets in the Gulf and along its coasts, deal with terrorist threats to its population and critical infrastructure, and rapidly deploy forces to deal with threats like tribal attacks from Yemen and the growing instability in the Horn of Africa and Red Sea.

These are the requirements which have shaped all four of the new arms transfers, and which will eventually require further arms transfers to develop a missile defense

capability and boosting the strength of the Saudi fleet for contingencies in the Gulf, Gulf of Oman, Gulf of Aden, and Red Sea.

The Saudi F-15 Transfers

The new arms transfers involve two packages that will greatly strengthen the Royal Saudi Air Force, and enhance its capabilities over the next 10-15 years. The Department of Defense request for each package is presented in full in Appendix One, and the packages are summarized in **Figure Five**.

There are several technical aspects of this package that need careful attention. It is not simply a buy of aircraft. Unlike most global arms transfers, the US Foreign Military Sales Program includes all of the technology, arms stocks, training, and maintenance equipment necessary to make a weapons stem effective. This makes major US sales appear to be far more expensive than those of most other countries in terms of cost per major weapons platform, but the buyer country must buy all of these items as well to make its arms transfer effective.

In far too many cases, other seller countries and commercial sales either do not provide the necessary equipment or disguise the details and true cost of the sale. As a result, dollar comparisons of US and foreign sales can be meaningless as measures of both cost and military effectiveness unless the analyst checks to look at the full nature of what is being bought, and the level of transparency and disclosure involved.

It also is far too easy to focus on the airplanes alone and not look at the rest of the package. The transfer would have several other major effects. Coupled to past sales of systems like the AWACS and follow on upgrades, major sensor and battle management systems, and secure communications, and data systems; the proposed sale would give the RSAF an extraordinarily high degree of interoperability with the US Air Forces, US Navy and Marine air and surface forces, and US ground forces.

Saudi munitions purchases given the RSAF a major capability to retaliate against any Iran attack or probe, and potentially to use precision-guided conventional munitions to deter and retaliate against any Iranian use of conventionally armed ballistic missiles. Such sales will not, of themselves, eliminate the incentive Iran's missile and nuclear programs are creating for Saudi purchases of more modern ballistic missiles, and the risk of a Saudi or Gulf nuclear program. They will, however, give Saudi Arabia a partial alternative, help prove the US is a reliable partner, and enhance the credibility of both US proposals to create a mix of local and US seaborne missile defenses, and provide extended regional deterrence.

Advances in targeting systems and night warfare capabilities improve the capability to strike against the light forces of the Iranian Islamic Revolutionary Guards and its naval branch, as well as terrorists and infiltrators across the Yemeni border and along Saudi Arabia's Red Sea Coast. The purchase of Harpoon missiles further improves Saudi capability to deal with Iran's naval forces and naval elements of the IRGC.

The upgrades to RSAF air-to-air combat capability, and capability to suppress enemy SAMs and other ground-based air defenses, not only give Saudi Arabia an edge over Iran, but also ensure that the RSAF can fully operate in any major air combat with US air forces. This level of interoperability is critical in any major contingency, and the lack of it presented serious problems in US coordination with some other NATO air forces that joined the Coalition in 1991.

These issues are far more critical today. The steady advances in real-time air targeting and targeting, beyond visual range air-to-air combat, IS&R, secure communications, and secure data transfers and displays; make it steadily more critical for the US and partner air forces to have the same level of capability in key areas of interoperability. This is particularly true in an area where traditional NATO allies are steadily reducing their power projection capabilities.

Moreover, this level of common munitions stocks, mission support capability, and maintenance and repair capability means that US air units could deploy to Saudi Arabia in a matter of days and begin immediate operations in any major contingency that Saudi forces alone could not deal with. This provides a level of rapid reaction capability from over-the-horizon and the US that sharply reduces the strain of forward deployment of US forces without increasing risk. It will be a major asset in reshaping the US posture in the Gulf as the US withdraws from Iraq.

It will scarcely eliminate the need for forward US deployments in countries like Bahrain, Kuwait, and Qatar, but it will reduce it. Moreover, the US does not need to deploy forces in Saudi Arabia for such purchases to quietly send a signal to Iran that US forces might be deployed in the event of any serious threat to Iraq.

Moreover, if a stable national government does emerge in Iraq, if the US strategic partnership with Iraq becomes effective and if Iraq buys the F-16, and if Saudi relations with Iraq improve accordingly; it means that Iraq and the Southern Gulf states will not only have advanced, interoperable air forces covering all of the Gulf, but that they will be equally interoperable with the US. Furthermore, this will be reinforced by F-16 sales to the UAE, major upgrades to the Patriot PAC-1 systems in several GCC states, and the possible sale of THAAD. In contrast, if Iraq should come firmly under Iranian influence, the proposed arms transfers will provide a vital pattern of interoperability that will extend from Kuwait to Oman, underpinned by a Saudi Air Force that no combination of Iran and Iraq can ignore.

There are two other important aspects to the proposed sale. First, the F-15 sale does not involve a major or provocative build-up. If one looks at past editions of the IISS *Military Balance*, Saudi Arabia had an Air Force with some 417 combat aircraft in 2000, and it now has only 219. The Saudi F-15 buy is not a build-up. It will take some 3-5 years to deliver and put fully in service. It will replace some 87 obsolete F-5A/Bs and F-5EIs that were in service in 2000, and help Saudi Arabia compensate for the serious performance limits on 107 aging Tornadoes still in service.

Second, the net result does not threaten Israel, which already is receiving massive US support in upgrading its missile and air defenses, and was promised the sale of the more advanced F-35 long before the present arms transfers were planned. As is shown in Annex Two, the Department of Defense notified the Congress of this sale proposal in September 2008 -- more than two years before the notification of the present transfer packages to Saudi Arabia.

Figure Five

The Saudi F-15 Package

Saudi Arabia – F-15SA Aircraft: Transmittal No. 10-43: \$29.432 billion

| | |
|---------|---|
| 84 | F-15SA Aircraft |
| 170 | APG-63(v)3 Active Electronically Scanned Array Radar (AESA) radar sets |
| 193 | F-110-GE-129 Improved Performance Engines |
| 100 | M61 Vulcan Cannons |
| 100 | Link-16 Multifunctional Information Distribution System/Low Volume Terminal (MIDS/LVT) and spares |
| 193 | LANTIRN Navigation Pods (3rd Generation-Tiger Eye) |
| 338 | Joint Helmet Mounted Cueing Systems (JHMCS) |
| 462 | AN/AVS-9 Night Vision Goggles (NVGS) |
| 300 | AIM-9X SIDEWINDER Missiles |
| 25 | Captive Air Training Missiles (CATM-9X) |
| 25 | Special Air Training Missiles (NATM-9X) |
| 500 | AIM-120C/7 Advanced Medium Range Air-to-Air Missiles (AMRAAM) |
| 25 | AIM-120 CATMs |
| 1,000 | Dual Mode Laser/Global Positioning System (GPS) Guided Munitions (500 lb) |
| 1,000 | Dual Mode Laser/GPS Guided Munitions (2000 lb) |
| 1,100 | GBU-24 PAVEWAY III Laser Guided Bombs (2000 lb) |
| 1,000 | GBU-31B V3 Joint Direct Attack Munitions (JDAM) (2000 lb) |
| 1,300 | CBU-105D/B Sensor Fuzed Weapons (SFW)/Wind Corrected Munitions Dispenser (WCMD) |
| 50 | CBU-105 Inert |
| 1,000 | MK-82 500lb General Purpose Bombs |
| 6,000 | MK-82 500lb Inert Training Bombs |
| 2,000 | MK-84 2000lb General Purpose Bombs |
| 2,000 | MK-84 2000lb Inert Training Bombs |
| 200,000 | 20mm Cartridges |
| 400,000 | 20mm Target Practice Cartridges |
| 400 | AGM-84 Block II HARPOON Missiles |
| 600 | AGM-88B HARM Missiles |
| 169 | Digital Electronic Warfare Systems (DEWS) |
| 158 | AN/AAQ-33 Sniper Targeting Systems |
| 169 | AN/AAS-42 Infrared Search and Track (IRST) Systems |
| 10 | DB-110 Reconnaissance Pods |
| 462 | Joint Helmet Mounted Cueing System Helmets |
| 40 | Remotely Operated Video Enhanced Receivers (ROVER) |
| 80 | Air Combat Maneuvering Instrumentation Pods |

The Saudi Helicopter Transfers

The Saudi helicopter purchases involve the complex mix of purchases show in Figure Six. They are similar, however, to the F-15 package in several key respects: First, they give Saudi Arabia a level of mobile strike power to cover virtually any area in the Gulf, and a quick reaction capability that relying on armored forces and ships could not possible match. Second, they provide a major increase in interoperability with US forces,

and the near- equivalent of prepositioning in a major crisis without any of the peace political complications of active US presence on Saudi soil.

At the same time, they give Saudi ground forces a far higher degree of ability to deal with Iran's capacity for irregular and asymmetric warfare on both land and sea. They give Saudi Arab the ability to strike with great precision and limited civilian casualties and collateral damage against non-state actors like those in Yemen. And finally, they provide a decisive edge in mobility and firepower against any raid or terrorist attack on civilians, government institutions and embassies, and critical infrastructure like petroleum facilities and desalination plants.

In the past, Saudi Arabia has relied on a mixture of military cities and heavy armored forces near its most threatened borders, and the light armored forces in its National Guard for defense of its territory and key facilities. It has learned from past terrorist attacks, and fighting in the Yemeni border area, however, that it needs far more mobility, far faster reaction times, and the ability to support the police and counterterrorism forces under its Ministry of Interior with both helicopter lift, and the immediate firepower that only helicopters can provide.

It has already demonstrated that it can absorb the AH-64D, although it will need continuing US technical support, and make effective use of the Uh-60 and light transport helicopters. Current Saudi holdings, however, are far too small to meet the needs of covering a nation the size of the US east of the Mississippi, and a combination of threats like Iran's Marines, the naval branch of the IRGC, and major attacks by groups like Al Qa'ida in the Peninsula. It is also clear that if Saudi forces are to come to the aid of other Gulf nations like Bahrain and Kuwait, they need to be able to react as quickly as possible to both deter and ensure a situation does not escalate.

The full list of items in the transfer request in **Figure Six** also shows that These purchases will ensure that Saudi forces can deny Iran and terrorists any ability to "own the night," and strike with the same precision the US has used against terrorist networks in Iraq and Afghanistan. Once again, the munitions, battle management, IS&R, and support parts of the packages are as important as the major platforms.

Figure Six:

The Helicopter Packages

**AH-64D Apache, UH-60M Blackhawk, AH-6i Light Attack, and MD-530F Light Turbine Helicopters: Transmittal No. 10-44
\$25.6 billion**

| | |
|-----|---|
| 36 | AH-64D Block III APACHE Helicopters |
| 72 | UH-60M BLACKHAWK Helicopters |
| 36 | AH-6i Light Attack Helicopters |
| 12 | MD-530F Light Turbine Helicopters |
| 243 | T700-GE-701D Engines |
| 40 | Modernized Targeting Acquisition and Designation Systems/Pilot Night Vision Sensors |
| 20 | AN/APG-78 Fire Control Radars with Radar Electronics Unit |
| 20 | AN/APR-48A Radar Frequency Interferometer |
| 171 | AN/APR-39 Radar Signal Detecting Sets |

| | |
|-------|--|
| 171 | AN/AVR-2B Laser Warning Sets |
| 171 | AAR-57(V)3/5 Common Missile Warning Systems |
| 318 | Improved Countermeasures Dispensers |
| 40 | Wescam MX-15Di (AN/AAQ-35) Sight/Targeting Sensors |
| 40 | GAU-19/A 12.7mm (.50 caliber) Gatling Guns |
| 108 | Improved Helmet Display Sight Systems |
| 52 | 30mm Automatic Weapons |
| 18 | Aircraft Ground Power Units |
| 168 | M240H Machine Guns |
| 300 | AN/AVS-9 Night Vision Goggles |
| 421 | M310 A1 Modernized Launchers |
| 158 | M299 HELLFIRE Longbow Missile Launchers |
| 2,592 | AGM-114R HELLFIRE II Missiles |
| 1,229 | AN/PRQ-7 Combat Survivor Evader Locators |
| 4 | BS-1 Enhanced Terminal Voice Switches |
| 4 | Digital Airport Surveillance Radars |
| 4 | Fixed-Base Precision Approach Radar |
| 4 | DoD Advanced Automation Service |
| 4 | Digital Voice Recording System |

Saudi Arabia – AH-64D Longbow Helicopters, Engines and Night Vision Sensors: Transmittal No. 10-45 \$3.3 billion

| | |
|-------|---|
| 24 | AH-64D Block III APACHE Longbow Helicopters |
| 58 | T700-GE-701D Engines |
| 27 | Modernized Targeting Acquisition and Designation Systems/Pilot Night Vision Sensors |
| 10 | AN/APG-78 Fire Control Radars with Radar Electronics Unit (Longbow Component) |
| 10 | AN/APR-48A Radar Frequency Interferometer |
| 27 | AN/APR-39 Radar Signal Detecting Sets |
| 27 | AN/AVR-2B Laser Warning Sets |
| 27 | AAR-57(V)3/5 Common Missile Warning Systems |
| 54 | Improved Countermeasures Dispensers |
| 28 | 30mm Automatic Weapons |
| 6 | Aircraft Ground Power Units |
| 48 | AN/AVS-9 Night Vision Goggles |
| 106 | M299A1 HELLFIRE Longbow Missile Launchers |
| 24 | HELLFIRE Training Missiles |
| 1,536 | AGM-114R HELLFIRE II Missiles |
| 4,000 | 2.75 in 70mm Laser Guided Rockets |
| 307 | AN/PRQ-7 Combat Survivor Evader Locators |
| 1 | BS-1 Enhanced Terminal Voice Switch |
| 1 | Fixed-Base Precision Approach Radar |
| 1 | Digital Airport Surveillance Radar |
| 1 | DoD Advanced Automation Service |
| 1 | Digital Voice Recording System |

AH-64D Longbow Helicopters, Engines and Night Vision Sensors: Transmittal No. 10-46 \$2.223 billion

| | |
|-------|---|
| 10 | AH-64D Block III APACHE Longbow Helicopters |
| 28 | T700-GE-701D Engines |
| 13 | Modernized Targeting Acquisition and Designation Systems/Pilot Night Vision Sensors |
| 7 | AN/APG-78 Fire Control Radars with Radar Electronics Unit (Longbow Component) |
| 7 | AN/APR-48A Radar Frequency Interferometer |
| 13 | AN/APR-39 Radar Signal Detecting Sets |
| 13 | AN/AVR-2B Laser Warning Sets |
| 13 | AAR-57(V)3/5 Common Missile Warning Systems |
| 26 | Improved Countermeasures Dispensers |
| 26 | Improved Helmet Display Sight Systems |
| 14 | 30mm Automatic Weapons |
| 6 | Aircraft Ground Power Units |
| 14 | AN/AVS-9 Night Vision Goggles |
| 640 | AGM-114R HELLFIRE II Missiles |
| 2,000 | 2.75 in 70mm Laser Guided Rockets |
| 307 | AN/PRQ-7 Combat Survivor Evader Locators |
| 1 | BS-1 Enhanced Terminal Voice Switch |
| 1 | Fixed-Base Precision Approach Radar |
| 1 | Digital Airport Surveillance Radar |
| 1 | DoD Advanced Automation Service |
| 1 | Digital Voice Recording System |

Looking Towards the Future

The US, Saudi Arabia, the other Southern Gulf states, and Iraq all have critical decisions to make about the future structure of Gulf defense over the next five years. They must all adapt to both creating and maintain an effective mix of conventional forces, and creating new mission capabilities ranging from the lowest level of asymmetric warfare and wars of intimidation to long-range missiles and nuclear weapons. Barring a massive change in the character Iran's regime, the elimination of threats from non-state actors and terrorists, and a sudden outbreak of stability in Yemen and the Horn, there will be no other choice.

There are also hard choices to be made about the relative level of regional military cooperation versus direct dependence on US forces -- although the call for serious regional security cooperation has so far been more a fantasy than anything approaching a meaningful reality. Ideally, there will be less dependence on a forward US presence and rapid deployment capability over time, but as yet the military trends are still moving in the other direction.

The most important aspects of the proposed arms sales are that they meet all of these objectives, and do not limit the prospect for regional cooperation if this should move from concept and rhetoric to more than the shell of reality. These are essential mission packages for deterrence and defense in Saudi Arabia and the Gulf, and they directly serve the strategic interest of Saudi Arabia, other Southern Gulf states, and the United States.

Annex One

Department of Defense Notification to Congress of Proposed New Arms Sales to Saudi Arabia: October 20, 2010

Saudi Arabia – F-15SA Aircraft: Transmittal No. 10-43: \$29.432 billion

October 20, 2010 – The Defense Security Cooperation Agency notified Congress today of a possible Foreign Military Sale to the Government of Saudi Arabia of:

| | |
|---------|---|
| 84 | F-15SA Aircraft |
| 170 | APG-63(v)3 Active Electronically Scanned Array Radar (AESR) radar sets |
| 193 | F-110-GE-129 Improved Performance Engines |
| 100 | M61 Vulcan Cannons |
| 100 | Link-16 Multifunctional Information Distribution System/Low Volume Terminal (MIDS/LVT) and spares |
| 193 | LANTIRN Navigation Pods (3rd Generation-Tiger Eye) |
| 338 | Joint Helmet Mounted Cueing Systems (JHMCS) |
| 462 | AN/AVS-9 Night Vision Goggles (NVGS) |
| 300 | AIM-9X SIDEWINDER Missiles |
| 25 | Captive Air Training Missiles (CATM-9X) |
| 25 | Special Air Training Missiles (NATM-9X) |
| 500 | AIM-120C/7 Advanced Medium Range Air-to-Air Missiles (AMRAAM) |
| 25 | AIM-120 CATMs |
| 1,000 | Dual Mode Laser/Global Positioning System (GPS) Guided Munitions (500 lb) |
| 1,000 | Dual Mode Laser/GPS Guided Munitions (2000 lb) |
| 1,100 | GBU-24 PAVEWAY III Laser Guided Bombs (2000 lb) |
| 1,000 | GBU-31B V3 Joint Direct Attack Munitions (JDAM) (2000 lb) |
| 1,300 | CBU-105D/B Sensor Fuzed Weapons (SFW)/Wind Corrected Munitions Dispenser (WCMD) |
| 50 | CBU-105 Inert |
| 1,000 | MK-82 500lb General Purpose Bombs |
| 6,000 | MK-82 500lb Inert Training Bombs |
| 2,000 | MK-84 2000lb General Purpose Bombs |
| 2,000 | MK-84 2000lb Inert Training Bombs |
| 200,000 | 20mm Cartridges |
| 400,000 | 20mm Target Practice Cartridges |
| 400 | AGM-84 Block II HARPOON Missiles |
| 600 | AGM-88B HARM Missiles |
| 169 | Digital Electronic Warfare Systems (DEWS) |
| 158 | AN/AAQ-33 Sniper Targeting Systems |
| 169 | AN/AAS-42 Infrared Search and Track (IRST) Systems |
| 10 | DB-110 Reconnaissance Pods |
| 462 | Joint Helmet Mounted Cueing System Helmets |
| 40 | Remotely Operated Video Enhanced Receivers (ROVER) |
| 80 | Air Combat Maneuvering Instrumentation Pods |

Also included are the upgrade of the existing Royal Saudi Air Force (RSAF) fleet of seventy (70) F-15S multi-role fighters to the F-15SA configuration, the provision for CONUS-based fighter training operations for a twelve (12) F-15SA contingent, construction, refurbishments, and infrastructure improvements of several support facilities for the F-15SA in-Kingdom and/or CONUS operations, RR-188 Chaff, MJU-7/10 Flares, training munitions, Cartridge Actuated Devices/Propellant Actuated Devices, communication security, site surveys, trainers, simulators, publications and technical documentation, personnel training and training equipment, U.S. government and contractor engineering, technical, and logistical support services, and other related elements of logistical and program support.

The estimated cost is \$29.432 billion.

This proposed sale will enhance the foreign policy and national security objectives of the United States by strengthening our on-going strategically important relationship with the Kingdom of Saudi Arabia (KSA).

For the past twenty years the F-15 has been a cornerstone of the relationship between the U.S. Air Force (USAF) and the RSAF. The procurement of the F-15SA, the conversion of the F-15S fleet to a common configuration, and the CONUS training contingent will provide interoperability, sustained professional contacts, and common ground for training and support well into the 21st century.

The F-15SA will help deter potential aggressors by increasing Saudi's tactical air force capability to defend KSA against regional threats. The CONUS-based contingent would improve interoperability between the USAF and the RSAF. This approach will meet Saudi's self-defense requirements and continue to foster the long-term military-to-military relationship between the United States and the KSA. Saudi Arabia, which currently has the F-15 in its inventory, will have no difficulty absorbing the F-15SA aircraft into its armed forces.

The proposed sale of this service will not alter the basic military balance in the region.

Saudi Arabia – AH-64D Apache, UH-60M Blackhawk, AH-6i Light Attack, and MD-530F Light Turbine Helicopters: Transmittal No. 10-44 \$25.6 billion

October 20, 2010 – The Defense Security Cooperation Agency notified Congress today of a possible Foreign Military Sale to the Government of Saudi Arabia of:

| | |
|-------|---|
| 36 | AH-64D Block III APACHE Helicopters |
| 72 | UH-60M BLACKHAWK Helicopters |
| 36 | AH-6i Light Attack Helicopters |
| 12 | MD-530F Light Turbine Helicopters |
| 243 | T700-GE-701D Engines |
| 40 | Modernized Targeting Acquisition and Designation Systems/Pilot Night Vision Sensors |
| 20 | AN/APG-78 Fire Control Radars with Radar Electronics Unit |
| 20 | AN/APR-48A Radar Frequency Interferometer |
| 171 | AN/APR-39 Radar Signal Detecting Sets |
| 171 | AN/AVR-2B Laser Warning Sets |
| 171 | AAR-57(V)3/5 Common Missile Warning Systems |
| 318 | Improved Countermeasures Dispensers |
| 40 | Wescam MX-15Di (AN/AAQ-35) Sight/Targeting Sensors |
| 40 | GAU-19/A 12.7mm (.50 caliber) Gatling Guns |
| 108 | Improved Helmet Display Sight Systems |
| 52 | 30mm Automatic Weapons |
| 18 | Aircraft Ground Power Units |
| 168 | M240H Machine Guns |
| 300 | AN/AVS-9 Night Vision Goggles |
| 421 | M310 A1 Modernized Launchers |
| 158 | M299 HELLFIRE Longbow Missile Launchers |
| 2,592 | AGM-114R HELLFIRE II Missiles |
| 1,229 | AN/PRQ-7 Combat Survivor Evader Locators |
| 4 | BS-1 Enhanced Terminal Voice Switches |
| 4 | Digital Airport Surveillance Radars |
| 4 | Fixed-Base Precision Approach Radar |
| 4 | DoD Advanced Automation Service |
| 4 | Digital Voice Recording System |

Also included are trainers, simulators, generators, munitions, design and construction, transportation, wheeled vehicles and organization equipment, tools and test equipment, communication equipment, Identification Friend or Foe (IFF) systems, GPS/INS, spare and repair parts, support equipment, personnel training and training equipment, publications and technical documentation, U.S. Government and contractor engineering, technical, and logistics support services, and other related elements of program support. **The estimated cost is \$25.6 billion.**

This proposed sale will contribute to the foreign policy and national security of the United States by helping to improve the security of a friendly country that has been, and continues to be, an important force for political stability and economic progress in the Middle East.

The Saudi Arabian National Guard will use the AH-64D for its national security and protecting its borders and oil infrastructure. The proposed sale will provide for the defense of vital installations and will provide close air support for the Saudi military ground forces. This sale also will increase the Saudi National Guard's APACHE sustainability and interoperability with the U.S. Army, the Gulf Cooperation Council countries, and other coalition forces. Saudi Arabia will have no difficulty absorbing these helicopters into its armed forces.

The proposed sale of this equipment and support will not alter the basic military balance in the region.

The prime contractors will be:

- The Boeing Company Mesa, Arizona
- Lockheed Martin Corporation Orlando, Florida
- Sikorsky Aircraft West Palm Beach, Florida
- MD Helicopters Mesa Arizona
- General Electric Company Cincinnati, Ohio
- Lockheed Martin Millimeter Technology Owego, New York
- Longbow Limited Liability Corporation Orlando, Florida
- ITT Aerospace/Communications Fort Wayne, Indiana

There are no known offset agreements proposed in connection with this potential sale.

Implementation of this proposed sale requires the assignment of approximately 900 contractor representatives and 30 U.S. Government personnel on a full time basis in Saudi Arabia for a period of 15 years. Also, this program will require multiple trips to Saudi Arabia involving U.S. government and contractor personnel to participate in annual, technical reviews, training, and one-week Program Reviews in Saudi Arabia.

There will be no adverse impact on U.S. defense readiness as a result of this proposed sale.

Saudi Arabia – AH-64D APACHE Longbow Helicopters: Transmittal No. 10-45: \$3.3 billion

October 20, 2010 – The Defense Security Cooperation Agency notified Congress today of a possible Foreign Military Sale to the Government of Saudi Arabia of:

| | |
|-------|---|
| 24 | AH-64D Block III APACHE Longbow Helicopters |
| | 58 T700-GE-701D Engines |
| 27 | Modernized Targeting Acquisition and Designation Systems/Pilot Night Vision Sensors |
| 10 | AN/APG-78 Fire Control Radars with Radar Electronics Unit (Longbow Component) |
| 10 | AN/APR-48A Radar Frequency Interferometer |
| 27 | AN/APR-39 Radar Signal Detecting Sets |
| 27 | AN/AVR-2B Laser Warning Sets |
| 27 | AAR-57(V)3/5 Common Missile Warning Systems |
| 54 | Improved Countermeasures Dispensers |
| 28 | 30mm Automatic Weapons |
| 6 | Aircraft Ground Power Units |
| 48 | AN/AVS-9 Night Vision Goggles |
| 106 | M299A1 HELLFIRE Longbow Missile Launchers |
| 24 | HELLFIRE Training Missiles |
| 1,536 | AGM-114R HELLFIRE II Missiles |
| 4,000 | 2.75 in 70mm Laser Guided Rockets |
| 307 | AN/PRQ-7 Combat Survivor Evader Locators |
| 1 | BS-1 Enhanced Terminal Voice Switch |
| 1 | Fixed-Base Precision Approach Radar |
| 1 | Digital Airport Surveillance Radar |
| 1 | DoD Advanced Automation Service |
| 1 | Digital Voice Recording System |

Also included are trainers, simulators, generators, training munitions, design and construction, transportation, tools and test equipment, ground and air based SATCOM and line of sight communication equipment, Identification Friend or Foe (IFF) systems, GPS/INS, spare and repair parts, support equipment, personnel training and training equipment, publications and technical documentation, U.S. Government and contractor engineering, technical, and logistics support services, and other related elements of program support. **The estimated cost is \$3.3 billion.**

This proposed sale will contribute to the foreign policy and national security of the United States by helping to improve the security of a friendly country that has been and continues to be an important force for political stability and economic progress in the Middle East.

The Royal Saudi Land Forces (RSLF) will use the AH-64D for its national security and to protect its borders and vital installations. This sale also will increase the RSLF's APACHE sustainability and interoperability with the U.S. Army, the Gulf Cooperation Council countries, and other coalition forces. Saudi Arabia will have no difficulty absorbing these helicopters into its armed forces.

The proposed sale of this equipment and support will not alter the basic military balance in the region.

The prime contractors will be:

- The Boeing Company Mesa, Arizona
- Lockheed Martin Corporation Orlando, Florida
- General Electric Company Cincinnati, Ohio
- Lockheed Martin Millimeter Technology Owego, New York
- Longbow Limited Liability Corporation Orlando, Florida

There are no known offset agreements proposed in connection with this potential sale.

Implementation of this proposed sale may require the assignment of an additional 35 U.S. Government and 130 contractor representatives to Saudi Arabia. At present, there are approximately 250 U.S. Government personnel and 630 contractor representatives in Saudi Arabia supporting the modernization program. Also, this program will require multiple trips involving U.S. government and contractor personnel to participate in annual, technical reviews, training, and one-week Program Reviews in Saudi Arabia.

There will be no adverse impact on U.S. defense readiness as a result of this proposed sale.

Saudi Arabia – AH-64D Longbow Helicopters, Engines and Night Vision Sensors: Transmittal No. 10-46 \$2.223 billion

October 20, 2010 – The Defense Security Cooperation Agency notified Congress today of a possible Foreign Military Sale to the Government of Saudi Arabia of:

| | |
|-------|---|
| 10 | AH-64D Block III APACHE Longbow Helicopters |
| 28 | T700-GE-701D Engines |
| 13 | Modernized Targeting Acquisition and Designation Systems/Pilot Night Vision Sensors |
| 7 | AN/APG-78 Fire Control Radars with Radar Electronics Unit (Longbow Component) |
| 7 | AN/APR-48A Radar Frequency Interferometer |
| 13 | AN/APR-39 Radar Signal Detecting Sets |
| 13 | AN/AVR-2B Laser Warning Sets |
| 13 | AAR-57(V)3/5 Common Missile Warning Systems |
| 26 | Improved Countermeasures Dispensers |
| 26 | Improved Helmet Display Sight Systems |
| 14 | 30mm Automatic Weapons |
| 6 | Aircraft Ground Power Units |
| 14 | AN/AVS-9 Night Vision Goggles |
| 640 | AGM-114R HELLFIRE II Missiles |
| 2,000 | 2.75 in 70mm Laser Guided Rockets |
| 307 | AN/PRQ-7 Combat Survivor Evader Locators |
| 1 | BS-1 Enhanced Terminal Voice Switch |
| 1 | Fixed-Base Precision Approach Radar |
| 1 | Digital Airport Surveillance Radar |

- 1 DoD Advanced Automation Service
- 1 Digital Voice Recording System

Also included are trainers, simulators, generators, training munitions, design and construction, transportation, tools and test equipment, ground and air based SATCOM and line of sight communication equipment, Identification Friend or Foe (IFF) systems, GPS/INS, spare and repair parts, support equipment, personnel training and training equipment, publications and technical documentation, U.S. Government and contractor engineering, technical, and logistics support services, and other related elements of program support. **The estimated cost is \$2.223 billion.**

This proposed sale will contribute to the foreign policy and national security of the United States by helping to improve the security of a friendly country that has been and continues to be an important force for political stability and economic progress in the Middle East.

The Saudi Arabian Royal Guard will use the AH-64D to improve its ability to effectively protect its borders, and vital installations. This sale also will increase the Royal Guard's APACHE sustainability and interoperability with the U.S. Army, the Gulf Cooperation Council countries, and other coalition forces. Saudi Arabia will have no difficulty absorbing these helicopters into its armed forces.

The proposed sale of this equipment and support will not alter the basic military balance in the region.

The prime contractors will be:

- The Boeing Company Mesa, Arizona
- Lockheed Martin Corporation Orlando, Florida
- General Electric Company Cincinnati, Ohio
- Lockheed Martin Millimeter Technology Owego, New York
- Longbow Limited Liability Corporation Orlando, Florida

There are no known offset agreements proposed in connection with this potential sale.

Implementation of this proposed sale may require the assignment of an additional 35 U.S. Government and 150 contractor representatives to Saudi Arabia. At present, there are approximately 250 U.S. Government personnel and 630 contractor representatives in Saudi Arabia supporting the modernization program. Also, this program will require multiple trips to Saudi Arabia involving U.S. government and contractor personnel to participate in annual, technical reviews, training, and one-week Program Reviews in Saudi Arabia.

There will be no adverse impact on U.S. defense readiness as a result of this proposed sale.

This notice of a potential sale is required by law and does not mean the sale has been concluded.

Annex Two:
**Notification to Congress of Possible Sale of Israel - F-35 Joint Strike
Fighter Aircraft: September 29, 2008: Transmittal No. 08-83: \$15.2
Billion**

On September 26, the Defense Security Cooperation Agency notified Congress of a possible Foreign Military Sale to Israel of F-35 Joint Strike Fighter Aircraft as well as associated equipment and services. The total value, if all options are exercised, could be as high as \$15.2 billion.

The Government of Israel has requested a possible sale of an initial 25 F-35 Joint Strike Fighter Conventional Take-Off and Landing (CTOL) aircraft with an option to purchase at a later date an additional 50 F-35 CTOL or Short Take-Off and Vertical Landing (STOVL) aircraft. All aircraft will be configured with either the Pratt and Whitney F-135 engines or General Electric-Rolls Royce F-136 engines.

Other aircraft equipment includes: Electronic Warfare Systems; Command, Control, Communication, Computers and Intelligence/ Communication, Navigational and Identification (C4I/CNI); Autonomic Logistics Global Support System (ALGS); Autonomic Logistics Information System (ALIS); Flight Mission Trainer; Weapons Employment Capability, and other Subsystems, Features, and Capabilities; F-35 unique infrared flares; unique systems or sovereign requirements; reprogramming center, Hardware/Software In-the-Loop Laboratory Capability; External Fuel Tanks; and F-35 Performance Based Logistics.

Also includes: software development/ integration, flight test instrumentation, aircraft ferry and tanker support, support equipment, tools and test equipment, spares and repair parts, personnel training and training equipment, publications and technical documents, U.S. Government and contractor engineering and logistics personnel services, and other related elements of logistics and program support.

The estimated cost is \$15.2 billion.

Israel's strategic position makes it vital to the United States' interests throughout the Middle East. Our policy has been to promote Middle East peace, support Israeli commitment to peace with other regional Arab countries, enhance regional stability, and promote Israeli readiness and self-sufficiency. It is vital to the U.S. national interest to assist Israel to develop and maintain a strong and ready self-defense capability. This proposed sale is consistent with those objectives.

Israel needs these aircraft to augment its present operational inventory and to enhance its air-to-air and air-to-ground self-defense capability. Israel will have no difficulty absorbing these aircraft into its armed forces. The proposed sale will not affect the basic military balance in the region.

Implementation of this proposed sale will require multiple trips to Israel involving U.S. Government and contractor representatives for technical reviews/support, program management, and training over a period of 15 years. U.S. contractor representatives will be required in Israel to conduct Contractor Engineering Technical Services (CETS) and Autonomic Logistics and Global Support (ALGS) for after-aircraft delivery.

The prime contractors will be:

Lockheed Martin Aeronautics Company, Fort Worth, Texas
