

Transmittal No. 06-38

**Notice of Proposed Issuance of Letter of Offer
Pursuant to Section 36(b)(1)
of the Arms Export Control Act**

**Annex
Item No. vii**

(vii) Sensitivity of Technology:

1. The JAVELIN Weapon System hardware and the documentation provided with the proposed sale thereof are unclassified. However, sensitive technology is contained with the system itself. This sensitivity is primarily in the software programs which instruct the system how to operate in the presence of countermeasures. The JAVELIN system provided to Oman is limited to the Block I Version 2 (8 series software) of the system.

2. The JAVELIN anti-tank missile system provides a man-portable, medium anti-tank capability to infantry, scouts, and combat engineers. JAVELIN is comprised of two major tactical components; a reusable Command Launch Unit (CLU) and a missile sealed in a disposable launch tube assembly. The CLU provides the interface between the operator and the missile. The CLU incorporates an integrated day/night sight and provides target engagement capability in adverse weather and countermeasure environments. The CLUs thermal sight is a second-generation Forward Looking Infrared (FLIR) sensor, operating in the 8 to 10 microns wavelength, and is a 240x2 scanning array integral with Dewar/Cooler unit. To facilitate initial loading and subsequent updating of software, all on-board missile software is uploaded via the CLU after mating and prior to launch. JAVELIN is unclassified, however, information associated with the system is classified up to the secret level.

3. The software programs contained in the JAVELIN Weapon System are in the form of microprocessors equipped with available Read Out Memory maps. However, the system does not allow access to the actual software program. The overall hardware is considered sensitive in that the modulation frequency and infrared wavelengths could be useful in attempted countermeasure developments.

4. If a technologically advanced adversary were to obtain knowledge of the specific hardware and software elements, the information could be used to develop countermeasures which might reduce weapon system effectiveness or be used in the development of a system with similar or advanced capabilities.

DEPARTMENT OF DEFENSE**Office of the Secretary**

[Transmittal No. 06-31]

36(b)(1) Arms Sales Notification

AGENCY: Department of Defense, Defense Security Cooperation Agency.

ACTION: Notice.

SUMMARY: The Department of Defense is publishing the unclassified text of a section 36(b)(1) arms sales notification. This is published to fulfill the requirements of section 155 of Public Law 104-164 dated 21 July 1996.

FOR FURTHER INFORMATION CONTACT: Ms. J. Hurd, DSCA/DBO/ADM, (703) 604-6575.

The following is a copy of a letter to the Speaker of the House of

Representatives, Transmittal 06-31 with attached transmittal, policy justification, and Sensitivity of Technology.

August 1, 2006.

C.R. Choate,

Alternate OSD Federal Register Liaison Officer, Department of Defense.

BILLING CODE 5001-06-M



DEFENSE SECURITY COOPERATION AGENCY

WASHINGTON, DC 20301-2800

28 JUL 2006

In reply refer to:
I-06/004610

The Honorable J. Dennis Hastert
Speaker of the House of Representatives
Washington, DC 20515-6501

Dear Mr. Speaker:

Pursuant to the reporting requirements of Section 36(b)(1) of the Arms Export Control Act, as amended, we are forwarding herewith Transmittal No. 06-31, concerning the Department of the Army's proposed Letter(s) of Offer and Acceptance to Saudi Arabia for defense articles and services estimated to cost \$2.9 billion. After this letter is delivered to your office, we plan to issue a press statement to notify the public of this proposed sale.

Sincerely,

Enclosures:

- 1. Transmittal
- 2. Policy Justification
- 3. Sensitivity of Technology

Y. K. LER
DIRECTOR, US/AF
DIRECT

Same ltr to:

House
Committee on International Relations
Committee on Armed Services
Committee on Appropriations

Senate
Committee on Foreign Relations
Committee on Armed Services
Committee on Appropriations

Transmittal No. 06-31

**Notice of Proposed Issuance of Letter of Offer
Pursuant to Section 36(b)(1)
of the Arms Export Control Act, as amended**

- (i) **Prospective Purchaser:** Saudi Arabia
- (ii) **Total Estimated Value:**
- | | |
|--------------------------|------------------------|
| Major Defense Equipment* | \$.038 billion |
| Other | <u>\$2.862 billion</u> |
| TOTAL | \$2.900 billion |
- (iii) **Description and Quantity or Quantities of Articles or Services under Consideration for Purchase:** 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.
- (iv) **Military Department:** Army (VTC)
- (v) **Prior Related Cases, if any:** FMS case VKZ - \$1,839 million - 8Jul90
- (vi) **Sales Commission, Fee, etc., Paid, Offered, or Agreed to be Paid:** none
- (vii) **Sensitivity of Technology Contained in the Defense Article or Defense Services Proposed to be Sold:** See Annex attached.
- (viii) **Date Report Delivered to Congress:** 28 JUL 2006

* as defined in Section 47(6) of the Arms Export Control Act.

POLICY JUSTIFICATION

Saudi Arabia - M1A1 and Upgrade of M1A2 to M1A2S Abrams Tanks

The Government of Saudi Arabia has requested a 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.

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 will contribute to the foreign policy and national security of the United States (U.S.) 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.

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 re-assembly 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. Saudi will have no difficulty absorbing these additional tanks into its armed forces.

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

The prime contractor will be General Dynamics Land Systems of Sterling Heights, Michigan. There are no known offset agreements proposed in connection with this potential sale.

Implementation of this proposed sale will require the assignment of U.S. Government and contractor representatives to Saudi Arabia for up to eight years. The exact number of representatives will be established during program definition between representatives of the United States Government and the purchaser.

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

Transmittal No. 06-31

Notice of Proposed Issuance of Letter of Offer
Pursuant to Section 36(b)(1)
of the Arms Export Control Act

Annex
Item No. vii

(vii) Sensitivity of Technology:

1. The M1A2S (Saudi) Abrams Integrated Management (AIM) tanks' components considered to contain sensitive technology in the proposed program are as follows:

a. The M1A2S Thermal Imaging System (TIS) constitutes a target acquisition system which, when operated with other tank systems gives the tank crew a substantial advantage over the potential threat. The TIS provides the M1A2 crew with the ability to effectively aim and fire the tank main armament system under a broad range of adverse battlefield conditions. The hardware itself is Unclassified. The engineering design and manufacturing data associated with the detector and infrared (IR) optics and coatings are considered sensitive. The technical data package is Unclassified with exception of the specifications for target acquisition range (Confidential), nuclear hardening (Confidential, restricted data) and laser hardening (Secret).

b. Major components of Special Armor are fabricated in sealed modules and in serialized removable subassemblies. Special armor vulnerability data for both chemical and kinetic energy rounds are classified Secret. Engineering design and manufacturing data related to the special armor are also classified Secret.

c. The M1A2S Tank 120mm Gun and Ammunition system is composed of a smooth bore gun manufactured at Watervliet Arsenal; "long rod" Armor Piercing Fin Stabilized Discarding Sabot warheads; and combustible cartridge case ammunition. This has not changed from the original M1A1 and M1A2 system.

d. The use of the Advanced Gas Turbine-1500 (AGT-1500) Gas Turbine Propulsion System in the M1A2S is a unique application of armored vehicle power pack technology. The hardware is composed of the AGT-1500 engine and transmission, and is Unclassified. Manufacturing processes associated with the production of turbine blades, recuperator, bearings and shafts, and hydrostatic pump and motor, are proprietary and therefore commercially competition sensitive.

e. A major survivability feature of the Abrams Tank is the compartmentalization of fuel and ammunition. Compartmentalization is the positive separation of the crew and critical components from combustible materials. In the event that the fuel or ammunition is ignited or deteriorated by an incoming threat round, the crew is fully protected by the compartmentalization. Sensitive information includes the performance of the ammunition compartments as well as the compartment design parameters.

f. The Far Target Locator gives the tank commander or gunner the capability to use laser energy to locate a target and record the grid coordinates of the target. The coordinates are displayed on the Binocular Image Control Unit (BICU) and are also electronically recorded for embedding in an electronic message. This allows the tank commander to call for fire so those targets beyond the range of the tank can be engaged by order of a tactical operations center.

g. The AN/PVS-7B Night Vision Goggles are considered items of a sensitive nature. These devices are man-portable night vision devices, which incorporate image-intensification technology. This technology is contained in a sealed image intensifier tube that is serialized and removable. Additionally, U.S. Government systems are equipped with a counter-measure device. Engineering and manufacturing data related to the image intensification tube sub-components (Photocathode, Micro channel Plate, and Tube Seals) are classified Confidential. Engineering, testing, and manufacturing data related to the counter-measure device are classified Secret. Additionally, all data related to vulnerabilities and weaknesses are classified Secret.

h. The Second Generation Forward Looking Infrared (FLIR) Horizontal Technology Integration Security (TIS) Classification Guide is a "second generation" thermal imaging sight that attaches to the Abrams tank Gunner's Primary Sight (GPS) and the Commander's Independent Thermal Viewer. The TIS provides the gunner an all-weather/night sight for surveillance, target acquisition, identification and engagement. The latest, "Block I" version of the TIS consists of two line replaceable units, the Thermal Receiving Unit (TRU) and the BICU. The TRU shares a portion of the same head mirror used by the GPS day channel to gather and process thermal information. The BICU injects thermal imagery and fire control symbology into the same GPS eyepiece used for day operations as well as providing a binocular eyepiece for use in battlefield surveillance in the thermal mode. The binocular eyepiece reduces gunner fatigue during long surveillance periods.

2. If a technologically advanced adversary were to obtain knowledge of the specific hardware and software elements, the information could be used to develop countermeasures or equivalent systems which might reduce weapon system effectiveness or be used in the development of a system with similar or advanced capabilities.

[FR Doc. 06-6732 Filed 8-4-06; 8:45 am]

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DEPARTMENT OF DEFENSE

Office of the Secretary

[Transmittal No. 06-30]

36(b)(1) Arms Sales Notification

AGENCY: Department of Defense, Defense Security Cooperation Agency.

ACTION: Notice.

SUMMARY: The Department of Defense is publishing the unclassified text of a section 36(b)(1) arms sales notification. This is published to fulfill the requirements of section 155 of Public Law 104-164 dated 21 July 1996.

FOR FURTHER INFORMATION CONTACT: Ms. J. Hurd, DSCA/DBO/ADM, (703) 604-6575.

The following is a copy of a letter to the Speaker of the House of Representatives, Transmittal 06-30 with attached transmittal, policy justification, and Sensitivity of Technology.

Dated: August 1, 2006.

C.R. Choate,

Alternate OSD Federal Register Liaison Officer, Department of Defense.

BILLING CODE 5001-06-M