- 1. The M1A2 SEPv3 Abrams Tank is a third-generation American Main Battle Tank produced by General Dynamics Land Systems and named for General Creighton Abrams. The M1A2 SEPv3 (System Enhancement Package version 3) features include a multi-fuel turbine engine, composite armor, an advanced computer fire control system, separate ammunition storage in a blow-out compartment, and 120mm main gun. Extensive improvements have been integrated into the latest M1A2 SEPv3 configuration. These improvements include improved digital systems, increased electrical power margin to support demands of future technologies, line replaceable modules (LRM) to reduce operational support costs, ammunition data link to support new tank main gun rounds, and an auxiliary power unit (APU), M1A2 SEPv3 Abrams Tank components considered to contain sensitive technology in the proposed sale are as follows:
- a. Export Thermal Imaging System (TIS) and Export Commander's Independent Thermal Viewer (CITV): The TIS and CITV constitute a target acquisition system which. when operated with other tank systems, gives the tank crew a substantial battlefield advantage over adversary. The TIS provides the Abrams M1A2 crew with the ability to effectively aim and fire the tank main armament system under a broad range of adverse conditions. The TIS can be operated and viewed by the tank gunner or tank commander and is the main sighting system for the tank or main gun (cannon). The CITV provides the same target acquisition system as the TIS but through a separate system that can be controlled and operated independent of the TIS.
- b. Special Armor (FMS-released version of special armor): Major components of special armor are fabricated in sealed modules and in serialized removable subassemblies
- c. 120 millimeter (mm) Main Gun (Cannon) and M256 Gun Barrel: The Abrams 120mm main gun system is composed of a 120mm smoothbore gun (cannon), also referred to as the M256 gun barrel, manufactured at Watervliet Arsenal. It can fire armor-piercfin-stabilized discarding sabot ing (APFSDS), other warheads, and combustible cartridge case ammunition.
- d. AGT-1500 Gas Turbine Propulsion System: The use of AGT-1500 gas turbine propulsion system in the M1A2 is a unique application of armored vehicle power pack technology. The hardware is composed of the AGT-1500 engine and transmission.
- e. Common Remotely Operated Weapon Station—Low Profile (CROWS-LP) (M153A2E1): The CROWS-LP allows for remote operation of the M2HB, M2A1, M240B, and M240 machine gun systems.
- f. Ammunition Data Link (ADL): The ADL consists of hardware, electronics, and software. The ADL is required to effectively fire the latest generation of "smart" 120mm main gun ammunition. The ADL transmits data to main gun smart ammunition to increase its capability and effectiveness.
- g. Driver Vision Enhancer: The AN/VAS-5 Vision Enhancer—Abrams (DVE-A)and Rear-View Sensor System (RVSS), M88 (DVE-CV), and JAB (DVE & RVSS) are uncooled thermal imaging systems. The DVE-A (CV) and RVSS allow for tactical vehicle movement in support of operational missions in all environmental conditions (day/night and all weather) and provides enhanced driving capability during limited visibility conditions (darkness, smoke, dust, fog, etc.)
- h. AN/PSN–13 Defense Advanced Global Positioning System (GPS) Receiver (DAGR): The DAGR is a handheld GPS receiver used by the U.S. Army and select foreign military services. DAGR is a military-grade, dual-fre-

- quency receiver and has the security hardware necessary to decode GPS band signals. The DAGR is a handheld GPS receiver which utilizes Selective Availability Anti-Spoofing Module (SAASM) security. It is used for the Abrams Tank, the M88A2 Heavy Equipment Recovery Combat Utility Lifting Extraction System (HERCULES) Combat Recovery Vehicle, and the Joint Assault Bridge.
- i. GPS with M-Code capability: M-Code is designed to enhance military position, navigation, and timing capabilities. M-Code is designed with improved resistance to existing and emerging threats to GPS, such as jamming and spoofing (i.e., detecting and rejecting false signals).
- j. AN/PRC-158: The AN/PRC-158 is a multiband handheld radio. It is a portable, compact, tactical, software-defined combat-net radio manufactured by L3/Harris Corporation. It is used for the Abrams Tank and the M88A2 HERCULES Combat Recovery Vehi-
- k. PVS-14 Night Vision Monocular: The PVS-14 Night Vision Monocular is a rugged, lightweight, multi-purpose night vision device that has repeatedly proven itself in combat. The PVS-14 can be used as a handheld device or mounted on a head har-
- 2. M88A2 HERCULES Combat Recovery Vehicle: The M88A2 HERCULES is designed to recover damaged Abrams M1 Main Battle Tanks from the battlefield. The vehicle can extricate M1s and other combat vehicles that have become bogged down or entangled and can additionally repair or replace damaged parts under fire. The M88A2 main winch is capable of 70-ton single line recovery and a 140-ton 2:1 recovery when used with a 140-ton pulley. The A-frame boom of the M88A2 can lift 35 tons when used in conjunction with the spade down. The spade can be used for light earth moving and to anchor the vehicle when using the main winch. The M88A2 employs an Auxiliary Power Unit (APU) to provide auxiliary electrical and hydraulic power when the main engine is not in operation: the APU can also be used to start other vehicles.
- 3. M1110 Joint Assault Bridge (JAB): The M1110 JAB is a fully tracked armored Combat Engineer System designed to provide assault bridging capabilities to armored forces. The JAB System consists of an M1A1 Abrams chassis (with A2 heavy suspension) and a hydraulic bridge launch mechanism that will launch and retrieve the Heavy Assault Scissor Bridge (HASB).
- 4. M1150 Assault Breacher Vehicle: The M1150 is a tracked, Combat Engineer System designed to breach mine fields and complex obstacles and provide in-stride breaching capability. It provides crew protection and vehicle survivability while having the speed and mobility to keep pace with the maneuver force.
- 5. The highest level of classification of defense articles, components, and services included in this potential sale is SECRET.
- 6. If a technologically advanced adversary were to obtain knowledge of the specific hardware and software elements, the information could be used to develop countermeasures that might reduce weapon system effectiveness or be used in the development of a system with similar or advanced capabilities.
- 7. A determination has been made that Bahrain can provide substantially the same degree of protection for the sensitive technology being released as the U.S. Government. This sale is necessary in furtherance of the U.S. foreign policy and national security objectives outlined in the Policy Justification.
- 8. All defense articles and services listed in this transmittal have been authorized for re-

lease and export to the Government of Bah-

### ARMS SALES NOTIFICATION

Mr. CARDIN. Mr. President, section 36(b) of the Arms Export Control Act requires that Congress receive prior notification of certain proposed arms sales as defined by that statute. Upon such notification, the Congress has 30 calendar days during which the sale may be reviewed. The provision stipulates that, in the Senate, the notification of proposed sales shall be sent to the chairman of the Senate Foreign Relations Committee.

In keeping with the committee's intention to see that relevant information is still available to the full Senate, I ask unanimous consent to have printed in the RECORD the notifications that have been received. If the cover letter references a classified annex, then such an annex is available to all Senators in the office of the Foreign Relations Committee, room SD-423.

There being no objection, the material was ordered to be printed in the RECORD, as follows:

> DEFENSE SECURITY COOPERATION AGENCY, Washington, DC.

Hon, BENJAMIN L. CARDIN. Chairman, Committee on Foreign Relations, U.S. Senate, Washington, DC.

DEAR MR. CHAIRMAN: Pursuant to the reporting requirements of Section 36(b)(5)(A) of the Arms Export Control Act (AECA), as amended, we are forwarding Transmittal No. 0S-23. This notification relates to enhancements or upgrades from the level of sensitivity of technology or capability described in the Section 36(b)(1) AECA certification 09-53 of October 26, 2009.

Sincerely,

JAMES A. HURSCH, Director.

Enclosures.

## TRANSMITTAL NO. 0S-23

- Report of Enhancement or Upgrade of Sensitivity of Technology or Capability (Sec. 36(b)(5)(A)), (AECA)
  - (i) Purchaser: Government of Morocco.
- (ii) Sec. 36(b)(1), AECA Transmittal No.: 09-53; Date: October 26, 2009; Military Department: Army.
  - Funding Source: National Funds.
- (iii) Description: On October 26, 2009, Congress was notified by Congressional certification transmittal number 09-53, of the possible sale, under Section 36(b)(1) of the Arms Export Control Act, of three CH-47D CHI-NOOK Helicopters with 6 (2 per helicopter) T55-GA-714A Turbine engines, 2 spare T-55-GA-714A Turbine engines, 4 AN/ARC-201E Single Channel Ground and Airborne Radio Systems (SINCGARS), mission equipment, communication and navigation equipment, ground support equipment, spare and repair parts, special tools and test equipment, technical data and publications, site survey, U.S. government and contractor technical and logistics personnel services, and other related elements of logistics support. The estimated total case value was \$134 million. Major Defense Equipment (MDE) constituted \$63 million of this total.
- On February 8, 2022, Congress was notified by Congressional certification transmittal number 0L-21 of the inclusion of one (1) additional T-55-GA-714A engine (spare) (MDE). The estimated total value of the new items

was \$.95 million but did not cause an increase in the estimated total program cost. The estimated total case value remained \$134 million with MDE remaining \$63 million of this total.

This transmittal reports the inclusion of an additional three (3) T-55-GA-714A engines (spares) (MDE). The estimated total value of the new items is \$4.2 million but will not cause an increase in the estimated total program cost. The estimated total case value will remain \$134 million with MDE remaining \$63 million of this total.

(iv) Significance: This notification is being provided as the additional MDE items were not enumerated in the original notification. The proposed sale will support Morocco's ongoing effort to sustain its current fleet of CH-47D aircraft, enabling its armed forces' ability to maintain regional stability and security.

(v) Justification: This proposed sale will support the foreign policy and national security of the United States by helping to improve the security of a Major Non-NATO Ally that continues to be an important force for political stability and economic progress in North Africa.

(vi) Sensitivity of Technology:

The Sensitivity of Technology statement contained in the original notification applies to items reported here.

The highest level of classification of defense articles, components, and services included in this potential sale is SECRET.

(vii) Date Report Delivered to Congress: March 19, 2024.

### ARMS SALES NOTIFICATION

Mr. CARDIN. Mr. President, section 36(b) of the Arms Export Control Act requires that Congress receive prior notification of certain proposed arms sales as defined by that statute. Upon such notification, the Congress has 30 calendar days during which the sale may be reviewed. The provision stipulates that, in the Senate, the notification of proposed sales shall be sent to the chairman of the Senate Foreign Relations Committee.

In keeping with the committee's intention to see that relevant information is still available to the full Senate. I ask unanimous consent to have printed in the RECORD the notifications that have been received. If the cover letter references a classified annex, then such an annex is available to all Senators in the office of the Foreign Relations Committee, room SD-423.

There being no objection, the material was ordered to be printed in the RECORD, as follows:

> DEFENSE SECURITY COOPERATION AGENCY,

Washington, DC.

Hon. Benjamin L. Cardin, Chairman, Committee on Foreign Relations, U.S. Senate, Washington, DC.

DEAR MR. CHAIRMAN: Pursuant to the reporting requirements of Section 36(b)(1) of the Arms Export Control Act, as amended, we are forwarding herewith Transmittal No. 23-56, concerning the Army's proposed Letter(s) of Offer and Acceptance to the Government of Morocco for defense articles and services estimated to cost \$260 million. We will issue a news release to notify the public of this proposed sale upon delivery of this letter to your office.

Sincerely,

JAMES A. HURSCH,

Director.

Enclosures.

### TRANSMITTAL NO. 23-56

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: Government of Morocco.

(ii) Total Estimated Value:

Major Defense Equipment \* \$180 million. Other \$80 million.

Total \$260 million.

Funding Source: National Funds.

(iii) Description and Quantity or Quantities of Articles or Services under Consideration for Purchase:

Major Defense Equipment (MDE):

Six hundred twelve (612) Javelin FGM-148F Missiles (includes twelve (12) Fly-to-Buy

Two hundred (200) Javelin Lightweight Command Launch Units (LWCLUs).

Non-MDE: Also included are missile simulation rounds; Javelin support equipment; hand and measuring tools; books and publications; power plus distribution equipment; component parts and support equipment; life cycle support and other technical assistance; gunner training; ammunition officer's training; System Integration and Check Out (SICO); maintenance training; Tactical Aviation and Ground Munitions (TAGM); and other related elements of logistics and program support.

(iv) Military Department: Army (MO-B-

(v) Prior Related Cases, if any: None.

(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 Attached Annex.

(viii) Date Report Delivered to Congress: March 19, 2024.

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

# POLICY JUSTIFICATION

## Morocco—Javelin Missiles

The Government of Morocco has requested to buy six hundred twelve (612) Javelin FGM-148F missiles (includes twelve (12) fly-to-buy missiles) and two hundred (200) Javelin Lightweight Command Launch Units (LWCLUs). Also included are missile simulation rounds; Javelin support equipment; hand and measuring tools; books and publications; power plus distribution equipment; component parts and support equipment; life cycle support and other technical assistance; gunner training; ammunition officer's training; System Integration and Checkout (SICO); maintenance training; Tactical Aviation and Ground Munitions (TAGM); and other related elements of logistics and program support. The total estimated cost is \$260 million.

This proposed sale will support the foreign policy and national security of the United States by helping to improve the security of a Major Non-NATO Ally that continues to be an important force for political stability and economic progress in North Africa.

The proposed sale will improve Morocco's long-term defense capacity to defend its sovereignty and territorial integrity and to meet its national defense requirements. Morocco will have no difficulty absorbing this equipment 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 Javelin Joint Venture between Lockheed Martin in Orlando, FL, and RTX Corporation in Tucson, AZ. There are no known offset agreements in connection with this potential sale.

Implementation of this proposed sale will not require the assignment of U.S. Government or contractor representatives to Mo-

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

### TRANSMITTAL NO. 23–56

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 is a medium-range, man portable, shoulderlaunched, fire and forget, anti-tank system for infantry, scouts, and combat engineers. It may also be mounted on a variety of platforms including vehicles, aircraft, and watercraft. The system weighs 49.5 pounds and has a maximum range in excess of 2,500 meters. The system is highly lethal against tanks and other systems with conventional and reactive armors. The system possesses a secondary capability against bunkers.
- 2. Javelin's key technical feature is the use of fire-and-forget technology which allows the gunner to fire and immediately relocate or take cover. Additional special features are the top attack and direct fire modes, an advanced tandem warhead and imaging infrared seeker, target lock-on before launch, and soft launch from enclosures or covered fighting positions. The Javelin missile also has a minimum smoke motor that decreases the chance of it being detected on the battlefield.
- 3. The Javelin Weapon System is comprised of two major tactical components, a reusable Light Weight Command Launch Unit (LWCLU) and a round contained in a disposable launch tube assembly. LWCLU incorporates an integrated day/night sight that provides target engagement capability in adverse weather and counter-measure environments. The LWCLU may also be used in a stand-alone mode for battlefield surveillance and target detection. The LWCLU's thermal sight includes an advanced Forward Looking Infrared (FLIR) sensor. To facilitate initial loading and subsequent updating of software, all on-board missile software is uploaded via the LWCLU after mating and prior to launch.
- 4. The missile is autonomously guided to the target using an imaging infrared seeker and adaptive correlation tracking algorithms. This allows the gunner to take cover or reload and engage another target after firing a missile. The missile has an advanced tandem warhead and can be used in either the top attack or direct fire modes (for target under cover). An onboard flight computer guides the missile to the selected target.
- 5. The highest level of classification of defense articles, components, and services included in this potential sale is SECRET.
- 6. If a technologically advanced adversary obtains knowledge of the specific hardware and software elements, the information could be used to develop countermeasures or equivalent systems that might reduce weapon system effectiveness or be used in the development of a system with similar or advanced capabilities.
- 7. A determination has been made that Morocco can provide substantially the same degree of protection for the sensitive technology being released as the U.S. Government. This proposed sale is necessary to further the U.S. foreign policy and national security objectives outlined in the Policy Justification.
- 8. All defense articles and services listed on this transmittal are authorized for release and export to the Government of Morocco.