

Billing Code



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DEPARTMENT OF DEFENSE

Office of the Secretary

[Transmittal No. 20-19]

Arms Sales Notification

AGENCY: Defense Security Cooperation Agency, Department of Defense (DoD).

ACTION: Arms sales notice.

SUMMARY: The Department of Defense is publishing the unclassified text of an arms sales notification.

FOR FURTHER INFORMATION CONTACT: Karma Job at karma.d.job.civ@mail.mil or (703) 697-8976.

SUPPLEMENTARY INFORMATION: This 36(b)(1) arms sales notification is published to fulfill the requirements of section 155 of Public Law 104-164 dated July 21, 1996. The following is a copy of a letter to the Speaker of the House of Representatives, Transmittal 20-19 with attached Policy Justification and Sensitivity of Technology.

Dated: January 8, 2021.

Aaron T. Siegel,

Alternate OSD Federal Register Liaison Officer,

Department of Defense.



DEFENSE SECURITY COOPERATION AGENCY
201 12TH STREET SOUTH, SUITE 101
ARLINGTON, VA 22202-5408

DEC 28 2020

The Honorable Nancy Pelosi
Speaker of the House
U.S. House of Representatives
H-209, The Capitol
Washington, DC 20515

Dear Madam 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. 20-19 concerning the Army's proposed Letter(s) of Offer and Acceptance to the Government of Kuwait for defense articles and services estimated to cost \$4.0 billion. After this letter is delivered to your office, we plan to issue a news release to notify the public of this proposed sale.

Sincerely,

A handwritten signature in black ink that reads "Heidi H. Grant".

Heidi H. Grant
Director

Enclosures:

1. Transmittal
2. Policy Justification
3. Sensitivity of Technology
4. Regional Balance (Classified document provided under separate cover)

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 Kuwait

(ii) Total Estimated Value:

Major Defense Equipment*	\$2.0 billion
Other	<u>\$2.0 billion</u>
TOTAL	\$4.0 billion

(iii) Description and Quantity or Quantities of Articles or Services under Consideration for Purchase: The Government of Kuwait has requested to buy eight (8) AH-64E Apache Longbow Attack Helicopters and remanufacture sixteen (16) of their AH-64D Apache Longbow Attack Helicopters to the AH-64E configuration.

Major Defense Equipment (MDE):

Eight (8) AH-64E Apache Helicopters (new procurement)
Sixteen (16) AH-64E Apache Helicopters (remanufacture)
Twenty-two (22) T700-GE 701D Engines
Thirty-six (36) Remanufactured T700-GE 701D Engines
Twenty-seven (27) AN/AAR-57 Counter Missile Warning Systems (CMWS)
Eighteen (18) Embedded Global Position Systems with Inertial Navigation (EGI)
with Multi-Mode Receiver (MMR)
Thirty-six (36) Remanufactured EGIs with MMR
Eight (8) AN/ASQ-170(V) Modernized Target Acquisition and Designation
Sight/AN/AAQ-11 Pilot Night Vision Sensor (MTADS/PNVS)
Seventeen (17) AN/APG-78 Longbow Fire Control Radars (FCR) with Radar
Electronics Units (REU)
Seventeen (17) APR-48B Modernized Radar Frequency Interferometers (M-RFI)
Eighteen (18) M299 AGM-114 Hellfire Missile Launchers
Four (4) Remanufactured M299 AGM-114 Hellfire Missile Launchers
Eighteen (18) Hydra 70 (70mm) 2.75 Inch Rocket M260 Rocket Launchers
Four (4) Remanufactured Hydra 70 (70mm) 2.75 Inch Rocket M260 Rocket
Launchers
Nine (9) M230E1 30mm Chain Gun M139 Area Weapons System (AWS) Guns
Two (2) Remanufactured M230E1 30mm Chain Gun M139 AWS Guns
One (1) Longbow Crew Trainers (LCT)
One (1) Remanufactured LCT

Non-MDE:

Also included are fifty-four (54) AN/ARC-201 non-COMSEC Very-High
Frequency/Frequency Modulation (VHF/FM) Radios; fifty-four (54) Ultra-High
Frequency (UHF) Radios (AN/ARC 231 or MXF 4027); twenty-eight (28)
Identify Friend or Foe Transponders (APX 123 or APX 119); twenty-seven (27)
IDM 401 (Improved Data Modem); twenty-seven (27) Link 16 Datalinks; twenty-
seven (27) AN/APR-39D (V)2 Radar Warning Receivers; twenty-seven (27)
AN/AVR-2 Laser Warning Receivers; twenty-seven (27) Infrared
Countermeasures Dispensers (2 flares, 1 chaff); nine (9) ASN-157 Doppler Radar
Velocity Sensors; nine (9) AN/ARN-149 (V)3 Automatic Direction Finders

(ADF); sixteen (16) remanufactured AN/ARN-149 (V)3 ADFs; nine (9) AN/APN-209 Radar Altimeters; twenty-seven (27) AN/ARN-153 Tactical Airborne Navigation (TACAN) systems; sixteen (16) Manned-Unmanned Teaming International (MUM-Ti) (UPR) Air to Air to Ground Data Link Systems; twenty-four (24) MUM-Ti (Ground) Air to Air to Ground Data Link Systems; twenty-four (24) 100 gallon Internal Auxiliary Fuel Systems (IAFS); twenty-four (24) 125 gallon Reduced Capacity Crashworthy External Fuel Systems (RCEFS); two (2) IAFS Spares; two (2) IAFS Publications; six (6) IAFS Ground Support Equipment (GSE) Apache Magazine and Auxiliary Tank Transfer Systems (AMATTS); five (5) IDM Software Loader Verifiers (SLV); training devices; helmets; simulators; generators; transportation; wheeled vehicles and organizational equipment; spare and repair parts; support equipment; tools and test equipment; technical data and publications; personnel training and training equipment; U.S. government and contractor engineering, technical, and logistics support services; and other related elements of logistics support.

(iv) Military Department: Army (KU-B-UXF)

(v) Prior Related Cases, if any: KU-B-UKS

(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: **December 28, 2020**

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

POLICY JUSTIFICATION

Kuwait – AH-64E Apache Helicopter

The Government of Kuwait has requested to buy eight (8) AH-64E Apache Longbow Attack Helicopters and remanufacture sixteen (16) of their AH-64D Apache Longbow Attack Helicopters to the AH-64E configuration consisting of: eight (8) AH-64E Apache Helicopters (new procurement); sixteen (16) AH-64E Apache Helicopters (remanufacture); twenty-two (22) T700-GE 701D engines; thirty-six (36) remanufactured T700-GE 701D engines; twenty-seven (27) AN/AAR-57 Counter Missile Warning Systems (CMWS); eighteen (18) Embedded Global Position Systems with Inertial Navigation (EGI) with Multi-Mode Receiver (MMR); thirty-six (36) remanufactured EGIs with MMR; eight (8) AN/ASQ-170(V) Modernized Target Acquisition and Designation Sight/AN/AAQ-11 Pilot Night Vision Sensor (MTADS/PNVS); seventeen (17) AN/APG-78 Longbow Fire Control Radars (FCR) with Radar Electronics Units (REU); seventeen (17) APR-48B Modernized Radar Frequency Interferometers (M-RFI); eighteen (18) M299 AGM-114 Hellfire Missile Launchers; four (4) remanufactured M299 AGM-114 Hellfire Missile Launchers; eighteen (18) Hydra 70 (70mm) 2.75 Inch Rocket M260 Rocket Launchers; four (4) remanufactured Hydra 70 (70mm) 2.75 Inch Rocket M260 Rocket Launchers; nine (9) M230E1 30mm Chain Gun M139 Area Weapons System (AWS) Guns; two (2) remanufactured M230E1 30mm Chain Gun M139 AWS Guns; one (1) Longbow Crew Trainers (LCT); and one (1) remanufactured LCT. Also included are fifty-four (54) AN/ARC-201 non-COMSEC Very-High Frequency/Frequency Modulation (VHF/FM) radios; fifty-four (54) Ultra-High Frequency (UHF) radios (AN/ARC-231 or MXF 4027); twenty-eight (28) Identify Friend or Foe Transponders (APX 123 or APX 119); twenty-seven (27) IDM 401 (Improved Data Modem); twenty-seven (27) Link 16 Datalinks; twenty-seven (27) AN/APR-39D (V)2 Radar Warning Receivers; twenty-seven (27) AN/AVR-2 Laser Warning Receivers; twenty-seven (27) Infrared Countermeasures Dispensers (2 flares, 1 chaff); nine (9) ASN-157 Doppler Radar Velocity Sensors; nine (9) AN/ARN-149 (V)3 Automatic Direction Finders (ADF); sixteen (16) remanufactured AN/ARN-149 (V)3 ADFs; nine (9) AN/APN-209 Radar Altimeters; twenty-seven (27) AN/ARN-153 Tactical Airborne Navigation (TACAN) systems; sixteen (16) Manned-Unmanned Teaming International (MUM-Ti) (UPR) Air to Air to Ground Data Link Systems; twenty-four (24) MUM-Ti (Ground) Air to Air to Ground Data Link Systems; twenty-four (24) 100 gallon Internal Auxiliary Fuel Systems (IAFS); twenty-four (24) 125 gallon Reduced Capacity Crashworthy External Fuel Systems (RCEFS); two (2) IAFS Spares; two (2) IAFS Publications; six (6) IAFS Ground Support Equipment (GSE) Apache Magazine and Auxiliary Tank Transfer Systems (AMATTS); five (5) IDM Software Loader Verifiers (SLV); training devices; helmets; simulators; generators; transportation; wheeled vehicles and organizational equipment; spare and repair parts; support equipment; tools and test equipment; technical data and publications; personnel training and training equipment; U.S. government and contractor engineering, technical, and logistics support services; and other related elements of logistics support. The total estimated cost is \$4.0 billion.

The 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 is an important force for political stability and economic progress in the Middle East.

The proposed sale of the AH-64E Apache helicopters will supplement and improve Kuwait's capability to meet current and future threats by enhancing Kuwait's close air support, armed reconnaissance, and antitank warfare mission capabilities. Kuwait 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 principal contractors associated with this sale will be The Boeing Company, Mesa, AZ; Lockheed Martin Corporation, Orlando, FL; General Electric, Cincinnati, OH; Lockheed Martin Mission Systems and Sensors, Owego, NY; Longbow Limited Liability Corporation, Orlando, FL; and Raytheon Corporation, Tucson, AZ. There are no known offset agreements proposed in connection with this potential sale.

Implementation of this proposed sale will require the temporary assignment of approximately three U.S. Government personnel and five contractor representatives to Kuwait to support delivery of the helicopters and provide support and equipment familiarization. In addition, Kuwait has expressed an interest in a Technical Assistance Fielding Team (TAFT) to provide in-country pilot and maintenance training. Execution of a TAFT will require a team of twelve additional personnel (one military and eleven contractors) to be deployed to Kuwait for the period of approximately three years.

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

Notice of Proposed Issuance of Letter of Offer
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Annex
Item No. vii

(vii) Sensitivity of Technology:

1. The AH-64E Apache Attack Helicopter is the Army's advanced attack helicopter equipped for performing close air support, anti-armor, and armed reconnaissance missions. The aircraft contains the following sensitive communications and target identification equipment, navigation equipment, aircraft survivability equipment, displays, and sensors:

a. The AN/ARC-201 Very High Frequency-Frequency Modulation (VHF-FM) Single Channel Ground and Airborne Radio System (SINCGARS) airborne radio is a reliable, field-proven voice and data communication system used with the AH-64E. A country-unique non-COMSEC export variant of this radio will be provided that meets Kuwait's requirements.

b. The AN/ARC-231 Ultra High Frequency (UHF) radio is a software defined radio for military aircraft that provides two-way multi-mode voice and data communications over a 30hz to 512hz frequency range. The MFX 4027 is a variant system based on the AN/ARC-231 architecture but incorporating commercial encryption. The radio offered to Kuwait will be determined based on U.S. and Kuwaiti requirements.

c. The Identify Friend-or-Foe (IFF) digital transponder set provides pertinent platform information in response to an IFF interrogator. The digital transponder provides cooperative Mark XII IFF capability using full diversity selection, as well as Mode Select (Mode S) capability. In addition, transponder operation provides interface capability with the aircraft's Traffic Collision and Avoidance System (TCAS). The transponder receives pulsed radio frequency interrogation signals in any of six modes (1, 2, 3/A, S, and 5), decodes the signals, and transmits a pulse-coded reply. The Mark XII IFF operation includes Selective Identification Feature (SIF) Modes 1, 2, 3/A and C, as well as secure cryptographic Mode 5 operational capability.

d. Link 16 Datalink is a military tactical data link network. Link 16 provides aircrews with enhanced situational awareness and the ability to exchange target information to Command and Control (C2) assets via Tactical Digital Information Link-Joint (TADIL-J). Link 16 can provide a range of combat information in near-real time to U.S. and allies' combat aircraft and C2 centers. The AH-64E uses the Harris Small Tactical Terminal (SIT) KOR-24A to provide Airborne and Maritime/Fixed Station (AMF) Small Airborne Link 16 Terminal (SALT) capability. The SIT is the latest generation of small, two-channel, Link 16 and VHF/UHF radio terminals. While in flight, the SIT provides simultaneous communication, voice or data, on two key waveforms.

e. The AN/APR-39 Radar Warning Receiver Signal Detecting Set is a system that provides warning of a radar directed air defense threat and allows appropriate countermeasures. This is the 1553 databus compatible configuration.

f. The AN/AVR-2B Laser Warning Set is a passive laser warning system that receives, processes

and displays threat information resulting from aircraft illumination by lasers on the aircraft's multi-functional display.

g. The AAR-57 Common Missile Warning System (CMWS) detects energy emitted by threat missile in-flight, evaluates potential false alarm emitters in the environment, declares validity of threat and selects appropriate counter-measures for defeat. The CMWS consists of an Electronic Control Unit (ECU), Electro-Optic Missile Sensors (EOMSs), and Sequencer and Improved Countermeasures Dispenser (ICMD).

h. The ICMD Countermeasures Dispensing M211 Flare is a countermeasure decoy in a 1"x1"x8" form factor in an aluminum case cartridge. It consists of case, piston, special material payload foils, and end cap. The special material is a pyrophoric metal (iron) foil that reacts with oxygen to generate infrared energy. The M211 decoys are dispersed from an aircraft to be used as a decoy in combination with the currently fielded M206 and M212 countermeasure flares to protect against advanced air-to-air and surface-to-air missile threats.

i. Embedded Global Positioning System (GPS)/Inertial Navigation System (INS) (EGI) with Multi-Mode Receiver (MMR) uses GPS satellite signals to correct or calibrate a solution for precise positioning from an Inertial Navigation System (INS). The aircraft has two EGIs with MMR which use internal accelerometers, rate gyro measurements, and external sensor measurements to estimate the aircraft state, provides aircraft flight and position data to aircraft systems. The EGI is a velocity-aided, strap down, ring laser gyro based inertial unit. The EGI unit houses a GPS receiver. The receiver is capable of operating in either non-encrypted or encrypted. When keyed, the GPS receiver will automatically use anti-spoof/jam capabilities when they are in use. The EGI will retain the key through power on/off/on cycles. Because of safeguards built into the EGI, it is not considered classified when keyed. Integrated within the EGI is an Inertial Measurement Unit (IMU) for processing functions. Each EGI also houses a Multi-Mode Receiver (MMR). The MMR is incorporated to provide for reception of ground based NA VAID signals for instrument aided flight. Provides IMC I IFR integration and certification of improved Embedded Global Positioning System and Inertial (EGI) unit, with attached MMR, with specific cockpit instrumentation allows Apaches to operate within the worldwide IFR route structure. Also includes integration of the Common Army Aviation Map (CAAM), Area Navigation (RNA V), Digital Aeronautical Flight Information File (DAFIF) and Global Air Traffic Management (GATM) compliance.

j. The AN/ASQ-170 Modernized Target Acquisition and Designation Sight/AN/AAQ-11 Pilot Night Vision Sensor (MTADS/PNVS) provides day, night, limited adverse weather target information, as well as night navigation capabilities. The PNVS provides thermal imaging that permits nap-of-the-earth flight to, from, and within the battle area, while TADS provides the co-pilot gunner with search, detection, recognition, and designation by means of Direct View Optics (DVO), television, and Forward Looking Infrared (FLIR) sighting systems that may be used singularly or in combinations.

k. The AN/APR-48B Modernized Radar Frequency Interferometer (M-RFI) is an updated version of the passive radar detection and direction finding system. It utilizes a detachable UDM on the M-RFI processor, which contains the Radar Frequency (RF) threat library.

l. The AN/APG-78 Longbow Fire Control Radar (FCR) with Radar Electronics Unit (REU) is an active, low-probability of intercept, millimeter wave radar. The active radar is combined with a passive Radar Frequency Interferometer (RFI) mounted on top of the helicopter mast. The FCR Ground Targeting Mode detects, locates, classifies and prioritizes stationary or moving armored vehicles, tanks and mobile air defense systems as well as hovering helicopters, helicopters, and

fixed wing aircraft in normal flight. If desired, the radar data can be used to refer targets to the regular electro-optical Modernized Target Acquisition and Designation Sight (MTADS).

m. The Manned-Unmanned Teaming International (MUM-Ti) data link system provides cross-platform communication and teaming between Apache, unmanned aerial systems (UAS), and other interoperable aircraft and ground platforms. It provides the ability to display real-time UAS sensor information and MTADS full motion video feeds across MUM-T equipped platforms and ground stations. The MUM-Ti is the multi-band export version of the datalink for the AH-64E.

n. The M299 Missile Launcher, commonly known as the Longbow Hellfire Launcher (LBHL), is a four rail launcher designed to carry the complete family of AGM-114 Hellfire missiles.

o. The M261 2.75 Inch Rocket Launcher is a nineteen tube, three zone rocket launcher utilized on heavy attack aircraft.

p. The Longbow Crew Trainer (LCT) is a containerized, deployable, high-fidelity flight simulator used to train Apache crew members. The LCT provided will be configured to reflect Kuwait's AH-64E Operational Flight Program software.

2. The highest level of information that may be transferred in support of this proposed sale is classified SECRET.

3. 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.

4. A determination has been made that Kuwait can provide substantially the same degree of protection of this technology as the U.S. Government. This proposed sale is necessary in furtherance of U.S. foreign policy and national security objectives outlined in the Policy Justification.

5. All defense articles, technical data, and services listed in this transmittal are authorized for release and export to the Government of Kuwait.