

14. The KIV-78 is a crypto applique for Mode 5 IFF. The hardware is UNCLASSIFIED unless loaded with Mode 4 and/or Mode 5 classified elements.

15. The SNIPER (AN/AAQ-33) targeting system is UNCLASSIFIED and contains technology representing the latest state-of-the-art in electro-optical clarity and haze, and low light targeting capability. Information on performance and inherent vulnerabilities is classified SECRET. Software (object code) is classified CONFIDENTIAL. Overall system classification is SECRET.

16. The AN/ARC-238 radio with HAVE QUICK II is a voice communications radio system and considered UNCLASSIFIED without HAVE QUICK II. HAVE QUICK II employs cryptographic technology that is classified SECRET. Classified elements include operating characteristics, parameters, technical data, and keying material.

17. The LAU-129 Guided Missile Launcher is capable of launching a single AIM-9 (Sidewinder) family of missile or AIM-120 Advanced Medium Range Air-to-Air Missile (AMRAAM). The LAU-129 launcher provides mechanical and electrical interface between missile and aircraft. There are five versions produced strictly for foreign military sales. The only difference between these versions is the material they are coated with or the color of the coating. This device is UNCLASSIFIED.

18. The AIM-120C-7 Advanced Medium Range Air-to-Air Missile (AMRAAM) is a supersonic, air launched, aerial intercept, guided missile featuring digital technology and microminiature solid-state electronics. AMRAAM capabilities include lookdown/shootdown, multiple launches against multiple targets, resistance to electronic countermeasures, and interception of high- and low-flying maneuvering targets. The AMRAAM AUR is classified CONFIDENTIAL, major components and subsystems range from UNCLASSIFIED to CONFIDENTIAL, and technical data and other documentation are classified up to SECRET.

19. Joint Direct Attack Munitions (JDAM) (General Overview) is a Joint Service weapon which uses an onboard GPS-aided Inertial Navigation System (INS) Guidance Set with a MK 82, MK 83, MK 84, BLU-109, BLU-110, BLU-111, BLU-117, BLU-126 (Navy) or BLU-129 warhead. The Guidance Set, when combined with a warhead and appropriate fuze, and tailkit forms a JDAM Guided Bomb Unit (GBU). The JDAM Guidance Set gives these bombs adverse weather capability with improved accuracy. The tail kit contains an Inertial Navigation System (INS) guidance/Global Positioning System (GPS) guidance to provide highly accurate weapon delivery in any "flyable" weather. The INS, using updates from the GPS, helps guide the bomb to the target via the use of movable tail fins. The JDAM weapon can be delivered from modest standoff ranges at high or low altitudes against a variety of land and surface targets during the day or night. After release, JDAM autonomously guides to a target, using the resident GPS-aided INS guidance system. JDAM is capable of receiving target coordinates via preplanned mission data from the delivery aircraft, by onboard aircraft sensors (i.e. FLIR, Radar, etc.) during captive carry, or from a third party source via manual or automated aircrew cockpit entry. The JDAM as an All Up Round is SECRET; technical data for JDAM is classified up to SECRET.

20. GBU-31/38 (JDAM) are 2,000 pound and 500 pound JDAMs respectively. The JDAM All Up Round (AUR) and all of its components are SECRET; technical data for JDAM is classified up to SECRET. The GBU-31/38 contain a GPS Receiver Card with Selective Availability Anti-Spoofing Module (SAASM).

21. GBU-54/56 (LIDAM) are 500 pound and 2,000 pound JDAM respectively, which incorporates all the capabilities of the JDAM and adds a precision laser guidance set. The Laser-JDAM (LIDAM) gives the weapon system an optional semi-active laser guidance in addition to the correct GPS/INS guidance which allows for striking moving targets. The LJDAM AUR and all of its components are SECRET; technical data for JDAM is classified up to SECRET. The GBU-54/56 contain a GPS Receiver Card with Selective Availability Anti-Spoofing Module (SAASM).

22. GBU-49 and GBU-50 Enhanced Paveway II (EP II) are 500lbs/2000lbs dual mode laser and GPS guided munitions respectively. Information revealing target designation tactics and associated aircraft maneuvers, the probability of destroying specific/peculiar targets, vulnerabilities regarding countermeasures and the electromagnetic environment is classified SECRET. Information revealing the probability of destroying common/unspecified targets, the number of simultaneous lasers the laser seeker head can discriminate, and data on the radar/infrared frequency is classified CONFIDENTIAL.

23. GBU-39 (250lb) Small Diameter Bomb (SDB-I) The Guided Bomb Unit-39 (GBU-39/B) small diameter bomb (SDB) is a 250-lb class precision guided munition that is intended to provide aircraft with an ability to carry a high number of bombs. The weapon offers day or night, adverse weather, precision engagement capability against pre-planned fixed or stationary soft, non-hardened, and hardened targets, and provides greater than 50 NM standoff range. Aircraft are able to carry four SDBs in place of one 2,000-lb bomb. The SDB is equipped with a GPS-aided inertial navigation system to attack fixed, stationary targets such as fuel depots and bunkers. The SDB and all of its components are SECRET; technical data is classified up to SECRET.

24. GBU-10/12/16/58 Paveway II (PWII), a Laser Guided Bomb (LGB), is a maneuverable, free-fall weapon that guides to a spot of laser energy reflected off of the target. The LGB is delivered like a normal general purpose (GP) warhead and the semi-active guidance corrects for many of the normal errors inherent in any delivery system. Laser designation for the LGB can be provided by a variety of laser target markers or designators. A LGB consists of a Computer Control Group (CCG) that is not warhead specific, and a warhead specific Air Foil Group (AFG) that attaches to the nose and tail of a GP bomb body. The PWII can use either the FMU-152 or FMU-139D/B fuzes. The overall weapon is CONFIDENTIAL. The GBU-10 is a 2,000lb (MK-84 or BLU-117 B/B) GP bomb body fitted with the MXU-651 AFG, and MAU-209CB or MAU-169 L/B CCG to guide to its laser designated target. The GBU-12 is a 500lb (MK-82 or BLU-111 B/B) GP bomb body fitted with the MXU-650 AFG, and MAU-209C/B or MAU-168L/B CCGs to guide to its laser designated target. The GBU-16 is a 1,000lb (BLU-110 B/B or MK-83) GP bomb body fitted with the MXU-650 airfoil and MAU-209C/B or MAU-168L/B CCGs to guide to its laser designated target. The GBU-58 is a 250lb (BLU-110 B/B or MK-83) GP bomb body fitted with the MXU-650 airfoil and MAU-209C/B or MAU-168L/B CCGs to guide to its laser designated target.

25. M61 20mm Vulcan Cannon: The 20mm Vulcan cannon is a six barreled automatic cannon chambered in 20x120mm with a cyclic rate of fire from 2,500-6,000 shots per minute. This weapon is a hydraulically powered air cooled Gatling gun used to damage/destroy aerial targets, suppress/incapacitate personnel targets and damage or destroy moving and stationary light materiel targets. The M61 and its components are UNCLASSIFIED.

26. 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.

27. 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 sale is necessary in furtherance of the U.S. foreign policy and national security objectives outlined in the Policy Justification.

28. All defense articles and services listed in this transmittal are authorized for release and export to the Government of Morocco.

#### ARMS SALES NOTIFICATION

Mr. RISCH, Madam 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 available to the full Senate, I ask unanimous consent to have printed in the RECORD the notifications which have been received. If the cover letter references a classified annex, then such 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,  
Arlington, VA.

Hon. JAMES E. RISCH,  
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. 19-27, concerning the Air Force's proposed Letter(s) of Offer and Acceptance to the Government of Belgium for defense articles and services estimated to cost \$600 million. After this letter is delivered to your office, we plan to issue a news release to notify the public of this proposed sale.

Sincerely,  
CHARLES W. HOOPER,  
Lieutenant General, USA, Director.

Enclosures.

TRANSMITTAL NO. 19-27

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 Belgium.

(ii) Total Estimated Value:  
Major Defense Equipment\* \$275 million.  
Other \$325 million.  
Total \$600 million.

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

Major Defense Equipment (MDE):  
Four (4) MQ-9B, Remotely Piloted Aircraft.

Two (2) Fixed Certifiable Ground Control Stations.

Five (5) AN/DAS-4 Multi-Spectral Targeting Systems (4 installed, 1 spare).

Fifteen (15) Embedded Global Positioning System/Inertial Navigation Systems (EGI) (12 installed, 3 spares).

Five (5) AN/APY-8 Lynx Synthetic Aperture Radars (4 installed, 1 spare).

Five (5) Detect and Avoid Systems (4 installed, 1 spare).

Non-MDE: Also included are an Initial Spares Package (ISP) and Readiness Spares Package (RSP) to support a 5-year period of performance; communications equipment; Identification Friend or Foe (IFF) equipment; spare and repair parts; support and test equipment; publications and technical documentation; personnel training and training equipment; U.S. Government and contractor engineering; technical and logistics support services; and other related elements of logistical and program support.

(iv) Military Department: Air Force (BE-D-SAE).

(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 25, 2019.

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

POLICY JUSTIFICATION

Belgium—MQ-9B SkvGuardian Remotely Piloted Aircraft (RPA)

The Government of Belgium has requested to purchase four (4) MQ-9B, RPA; two (2) Fixed Certifiable Ground Control Stations; five (5) AN/DAS-4 Multi-Spectral Targeting Systems (4 installed, 1 spare); fifteen (15) Embedded Global Positioning System/Inertial Navigation Systems (EGI) (12 installed, 3 spares); five (5) AN/APY-8 Lynx Synthetic Aperture Radars (4 installed, 1 spare); and five (5) Detect and Avoid Systems (4 installed, 1 spare). Also included are an Initial Spares Package (ISP) and Readiness Spares Package (RSP) to support a 5-year period of performance; spare and repair parts; support and test equipment; publications and technical documentation; personnel training and training equipment; U.S. Government and contractor engineering; technical and logistics support services; and other related elements of logistical and program support. The total estimated program cost is \$600 million.

This proposed sale will support the foreign policy and national security of the United States by helping to improve the security of a NATO ally. It is vital to the U.S. national interest to assist Belgium to develop and maintain a strong and ready self-defense capability. This potential sale enhances the intelligence, surveillance, and reconnaissance (ISR) capability of the Belgian military in support of national, NATO, United Nations-mandated, and other coalition operations. Commonality of ISR capabilities increases interoperability between the U.S. and Belgian military and peacekeeping forces.

Belgium intends to use these defense articles and services to provide for the defense of its deployed troops, regional security, domestic security, and interoperability with the U.S./NATO partners. The current fleet of Belgian Air Component aircraft have proven insufficient to support sustained and persistent ISR operations. The proposed sale will enable the Belgian Air Component to conduct persistent and wide area ISR, including target acquisition, target designation, providing precision coordinates for Global Positioning System (GPS)-aided munitions, battle damage assessment, signal in-

telligence, communication, and data relays. Belgium will have no difficulty absorbing this equipment and support into its armed forces.

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

The principal contractor will be General Atomics Aeronautical Systems, Inc., San Diego, California. There are no known offset agreements proposed in connection with this potential sale.

Implementation of this proposed sale may require multiple trips to Belgium and potentially a deployed location for U.S. contractor representatives to provide initial launch, recovery, and maintenance support.

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

TRANSMITTAL NO. 19-27

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 MQ-9B SkyGuardian Remotely Piloted Aircraft (RPA) is a weapons capable aircraft designed for Medium-Altitude Long-Endurance (MALE) Intelligence, Surveillance and Reconnaissance (ISR) and Target Acquisition and strike missions. The MQ-9B SkyGuardian RPA is not a USAF program of record but has close ties to, and builds upon, the proven success of the MQ-9A Reaper. The MQ-9B RPA is a Missile Technology Control Regime (MTCR) Category 1 system with a designed maximum payload of 4,800 pounds (800 pounds internal and 4,000 pounds external) and is capable of carrying multiple mission payloads aloft with a maximum range of greater than 5,500 nm. The MQ-9B provides up to 40 hours endurance, speeds up to 220 knots true air speed (KTAS) and a maximum altitude of 45,000 feet. The system is designed to be controlled by two operators within a Certifiable Ground Control Station (CGCS). The CGCS is designed to emulate a reconnaissance aircraft cockpit, giving users extensive means to operate both the aircraft and sensors. The MQ-9B is able to operate using a direct Line-of-Sight (LOS) datalink or Beyond Line-of-Sight (BLOS) through satellite communications (SATCOM). The design enables unmanned aerial vehicle (UAV) control to be transferred between multiple CGCSs, thus allowing remote-split operations and centralized mission control with other assets. The MQ-9B system can be deployed from a single site that supports launch/recovery, mission control, and maintenance. The system also supports remote-split operations where launch/recovery and maintenance occur at a Forward Operating Base and mission control is conducted from another location or Main Operating Base (MOB). The basic MQ-9B Unmanned Aerial System (UAS) is UNCLASSIFIED. However, inclusion of various subsystems, capabilities, and potential weapons results in a maximum classification of SECRET.

2. The Belgian MQ-9B system will include the following components:

a. A secure Certifiable Ground Control Station (CGCS) with workstations that allow aircrew to operate the aircraft, execute the mission, and record/exploit downlinked payload data.

b. The AN/APY-8 Lynx He Block 20A Synthetic Aperture Radar and Ground Moving Target Indicator (SAR/GMTT) system provides an all-weather surveillance, tracking and targeting capability. The system operates in the Ku-band, using an offset-fed dish antenna mounted on a three-axis stabilized gimbal. It has a large field of regard, produces a strip map, and can image up to a

10km wide swath. Swaths from multiple passes can be combined for wide-area surveillance.

c. The AN/DAS-4 Multi-Spectral Targeting System (MTS-D) is a multi-use highly advanced EO/IR sensor providing long-range surveillance, high altitude, target acquisition, tracking, range finding, and laser designation developed and produced for use by the U.S. Air Force.

d. COMSEC is necessary for full functionality of the Embedded GPS-INS (EGI) and the AN/DPX-7 Identification Friend or Foe (IFF)/Transponder.

e. The Detect and Avoid System (DAAS) with Active Electronically Scanned Array (AESA) Due Regard Radar (DRR) is a multi-sensor system that detects and tracks cooperative and non-cooperative air traffic, and enables an autopilot response for deconfliction maneuvers.

f. The Belgium MQ-9B is intended to be used in the near-term only for ISR-type missions. As such, the system is not requested to be armed, but is requested to preserve the option to arm the systems should the need arise at a later time. If weaponized, the system is capable of being equipped with the U.S. Army AGM-114 Hellfire missile and various guided and unguided bombs.

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 or equivalent systems which might reduce weapon system effectiveness or be used in the development of a system with similar or advanced capabilities.

4. This sale is necessary in furtherance of the U.S. foreign policy and national security objectives outlined in the enclosed Policy Justification. A determination has been made that Belgium can provide the same degree of protection for the sensitive technology being released as the U.S. Government.

5. All defense articles and services listed in this transmittal have been authorized for release and export to Belgium.

ARMS SALES NOTIFICATION

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Hon. JAMES E. RISCH,  
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U.S. Senate, Washington, DC.

DEAR MR. CHAIRMAN: Pursuant to the reporting requirements of Section 36(b)(1) of