

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 SkyGuardian 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

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. 19-10 concerning the Air Force's proposed Letter(s) of Offer and Acceptance to the Government of Morocco for defense articles and services estimated to cost \$985.2 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. 19-10

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: Kingdom of Morocco.

(ii) Total Estimated Value:

Major Defense Equipment* \$252.9 million.

Other \$732.3 million.

Total \$985.2 million.

(iii) Description and Quantity or Quantities of Articles or Services under Consideration for Purchase: Morocco has requested to upgrade its existing 23 F-16 aircraft to F-16V configuration.

Major Defense Equipment (MDE):

Twenty-six (26) APG-83 Active Electronically Scanned Array (AESA) Radars (includes 3 spares).

Twenty-six (26) Modular Mission Computers (includes 3 spares).

Twenty-six (26) Link-16 Multifunctional Information Distribution Systems—JTRS (MIDS—JTRS) with TACAN and ESHI Terminals (includes 3 spares).

Twenty-six (26) LN260 Embedded Global Navigation Systems (EGI) (includes 3 spares).

Twenty-six (26) Joint Helmet Mounted Cueing Systems II (includes 3 spares).

Twenty-six (26) Improved Programmable Display Generators (iPDG) (includes 3 spares).

Fifty (50) LAU-129 Multi-Purpose Launchers.

Twenty-six (26) AN/AAQ-33 Sniper Pods.

Non-MDE: Also included are twenty-six (26) AN/ALQ-213 EW Management Systems; twenty-six (26) Advanced Identification Friend/Foe; Joint Mission Planning System; twenty-six (26) AN/ALQ-211 AIDEWS; six (6) DB-110 Advanced Reconnaissance Systems; secure communications, cryptographic precision navigation equipment; spares and repair parts; support equipment; personnel training and training equipment; publications and technical documentation; support and test equipment; simulators; integration and test; U.S. Government and contractor engineering, technical and logistical support services; and other related elements of logistics and program support.

(iv) Military Department: Air Force (MO-D-QAL).

(v) Prior Related Cases, if any: MO-D-SAY.

(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 22, 2019.

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

POLICY JUSTIFICATION

Morocco—F-16 Block 52+ Upgrade to F-16V Configuration

The Government of Morocco has requested to upgrade its existing twenty-three F-16 aircraft to the F-16V configuration. The requested buy includes twenty-six (26) APG-83 Active Electronically Scanned Array (AESA) Radars (includes 3 spares), twenty-six (26)

Modular Mission Computers (includes 3 spares), twenty-six (26) Link-16 Multifunctional Information Distribution System—JTRS (MIDS—JTRS) with TACAN and ESHI Terminals (includes 3 spares), twenty-six (26) LN260 Embedded Global Navigation Systems (EGI) (includes 3 spares), twenty-six (26) Joint Helmet Mounted Cueing Systems II (includes 3 spares), twenty-six (26) Improved Programmable Display Generators (iPDG) (includes 3 spares), fifty (50) LAU-129 Multi-Purpose Launchers; and twenty-six (26) AN/AAQ-33 Sniper Pods. Also included are twenty-six (26) AN/ALQ-213 EW Management Systems; twenty-six (26) Advanced Identification Friend/Foe; Joint Mission Planning System; twenty-six (26) AN/ALQ-211 AIDEWS; six (6) DB-110 Advanced Reconnaissance Systems; secure communications, cryptographic precision navigation equipment; spares and repair parts; support equipment; personnel training and training equipment; publications and technical documentation; support and test equipment; simulators; integration and test; U.S. Government and contractor engineering, technical and logistical support services; and other related elements of logistics and program support. The estimated cost is \$985.2 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 major Non-NATO ally that continues to be an important force for political stability and economic progress in North Africa.

The proposed sale will contribute to Morocco's self-defense capabilities. The purchase will improve interoperability with the United States and enhance Morocco's ability to undertake coalition operations, as it has done in the past in flying sorties against ISIS in Syria and Iraq. Morocco already operates an F-16 fleet and will have no difficulty absorbing this aircraft and services into its armed forces.

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

The prime contractor will be Lockheed Corporation, Bethesda, Maryland. The purchaser typically requests offsets. Any offset agreement will be defined in negotiations between the purchaser and the contractor.

Implementation of this proposed sale will require the assignment of 10 additional U.S. Government and approximately 75 contract representatives to Morocco.

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

TRANSMITTAL NO. 19-10

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. This sale will involve the release of sensitive technology to Morocco. The F-16C/D Block 52 upgrade of Morocco's fleet to the "V" configuration of the weapon system is unclassified, except as noted below. The aircraft utilizes the F-16 airframe and features advanced avionics and systems. It contains the existing Pratt & Whitney F100-PW-229 EEP, and will be upgraded to include the following: AN/APG-83 radar, digital flight control system, internal and external electronic warfare equipment, Advanced IFF, LINK-16 datalink, operational flight trainer, and software computer programs.

2. Sensitive and/or classified (up to SECRET) elements of the proposed F-16 V include hardware, accessories, components, and associated software: APG-83 AESA Radars, Modular Mission Computers, Improved Programmable Display Generator (iPDG),

Link-16 MIDS—JTRS with TACAN and ESHI terminals, Embedded GPS—INS (EGI) LN-260, Joint Helmet Mounted Cueing System II (JHMCS), Advanced Identification Friend or Foe (AIFF), Joint Mission Planning System, AN/ALQ-211 AIDEWS, DB-110 Advanced Reconnaissance Systems, Multi-Purpose Launchers LAU-129, Sniper (AN/AAQ-33) targeting pods, AN/ALQ-213 EW Management Systems, Secure Communications, Cryptographic Appliques, and Improved Programmable Display Generators. Additional sensitive items include operating manuals and maintenance technical orders containing performance information, operating and test procedures, and other information related to support operations and repair. The hardware, software, and data identified are classified to protect vulnerabilities, design and performance parameters and other similar critical information.

3. The AN/APG-83 is an Active Electronically Scanned Array (AESA) radar upgrade for the F-16. It includes higher processor power, higher transmission power, more sensitive receiver electronics, and Synthetic Aperture Radar (SAR), which creates higher-resolution ground maps from a greater distance than existing mechanically scanned array radars (e.g., APG-68). The upgrade features an increase in detection range of air targets, increases in processing speed and memory, as well as significant improvements in all modes. The highest classification of the radar is SECRET.

4. Modular Mission Computer (MMC) is the central aircraft computer of the F-16. It serves as the hub for all aircraft subsystems and avionics data transfer. The hardware and software are classified SECRET.

5. The Improved Programmable Display Generator (iPDG) and color multifunction displays utilize ruggedized commercial liquid crystal display technology that is designed to withstand the harsh environment found in modern fighter cockpits. The display generator is the fifth generation graphics processor for the F-16. Through the use of state-of-the-art microprocessors and graphics engines, it provided orders of magnitude increases in throughput, memory, and graphics capabilities. The hardware and software are UNCLASSIFIED.

6. Multifunctional Information Distribution System (MIDS) is an advanced Link-16 command, control, communications, and intelligence (C3I) system incorporating high-capacity, jam-resistant, digital communication links for exchange of near real-time tactical information, including both data and voice, among air, ground, and sea elements. The MIDS terminal hardware, publications, performance specifications, operational capability, parameters, vulnerabilities to countermeasures, and software documentation are classified CONFIDENTIAL. The classified information to be provided consists of that which is necessary for the operation, maintenance, and repair (through intermediate level) of the data link terminal, installed systems, and related software.

7. Embedded GPS—INS (EGI) LN-260 is a sensor that combines GPS and inertial sensor inputs to provide accurate location information for navigation and targeting. The EGI LN-260 is UNCLASSIFIED. The GPS crypto variable keys needed for highest GPS accuracy are classified up to SECRET.

8. Joint Helmet Mounted Cueing System (JHMCS II) is a modified HGU-55/P helmet that incorporates a visor-projected Heads-Up Display (HUD) to cue weapons and aircraft sensors to air and ground targets. This system projects visual targeting and aircraft performance information on the back of the helmet's visor, enabling the pilot to monitor this information without interrupting his field of view through the cockpit canopy.

This provides improvement for close combat targeting and engagement. Hardware is Unclassified; technical data and documents are classified up to SECRET.

9. The AN/APX-126 Advanced Identification Friend or Foe (AIFF) Combined Interrogator Transponder (CIT) is a system capable of transmitting and interrogating Mode V. It is UNCLASSIFIED unless/until Mode IV and/or Mode V operational evaluator parameters are loaded into the equipment. Elements of the IFF system classified up to SECRET include software object code, operating characteristics, parameters, and technical data. Mode IV and Mode V anti jam performance specifications/data, software source code, algorithms, and tempest plans or reports will not be offered, released, discussed, or demonstrated.

10. JMPS (Joint Mission Planning System) is a multi-platform PC based mission planning system. JMPS hardware is unclassified but the software is classified up to SECRET.

11. The AN/ALQ-211 Airborne Integrated Defensive Electronic Warfare Suite (AIDEWS) provides passive radar warning, wide spectrum RF jamming, and control and management of the entire EW system. It is an externally mounted Electronic Warfare (EW) pod. The commercially developed system software and hardware is UNCLASSIFIED. The system is classified SECRET when loaded with a US derived EW database.

12. DB-110 is a tactical airborne reconnaissance system. This capability permits reconnaissance missions to be conducted from very short range to long range by day or night. It is an under-the-weather, podded system that produces high resolution, dual-band electro-optical and infrared imagery. The DB-110 system is UNCLASSIFIED.

13. 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 launchers is the material they are coated with or the color of the coating. This device is UNCLASSIFIED.

14. 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.

15. This sale will involve the release of sensitive and/or classified cryptographic elements for secure communications radios, cryptographic appliques and keying equipment, and precision navigation equipment. The hardware is UNCLASSIFIED except where systems are loaded with cryptographic software, which is classified up to SECRET.

16. 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.

17. 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.

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

THE GREEN NEW DEAL

Mrs. FEINSTEIN. Madam President, I rise to join my colleagues in calling for legislation to resolve the climate crisis. The need for action could not be more urgent. Every day of inaction in the U.S. Senate brings new risks of irreversible harm to our communities, our environment and future generations.

Unfortunately, this week's vote is not really about climate change. The Senate has been asked to invoke cloture on a nonbinding resolution that raises but does not really answer a broad range of questions about climate change and our economy.

The Senate is not ready to end debate on these issues. We have hardly begun.

The Democratic Caucus is united in recognizing the realities of climate change and calling for effective solutions.

However, this constitutes a minority view in the U.S. Senate. For too many years, our calls for comprehensive climate change legislation have fallen on deaf ears.

The Green New Deal in all of its ambition and breadth should be recognized as a sign of the frustration that is mounting in this country as a result of Republican obstruction.

I do not agree with every aspect of this particular resolution. It addresses not only climate policy but also longstanding partisan disputes over healthcare, housing, jobs, and other economic policies.

These are important policy debates, but it is my view that the legislative effort to address climate change does not need to wait for agreement in these other areas. The need for action is too urgent.

But whatever our disagreements about policy approaches and nonbinding resolutions, it is long past time for us to set aside disagreements about the validity of climate science.

The scientific community has warned us about climate change for decades with increasing certainty and specificity, including in a report of the President's Science Advisory Committee in 1965, five assessment reports of the Intergovernmental Panel on Climate Change since 1990, and four national climate assessment reports of the U.S. Global Change Research Program since 2000.

Most recently, a special report of the Intergovernmental Panel on Climate Change identified the disastrous consequences if we allow the world to warm by more than 2.7 degrees Fahrenheit above pre-industrial temperatures.

We are already at more than 1.8 degrees of warming. Sea levels have risen more than 8 inches. Ocean acidity has increased by 30 percent. Ice sheets in Antarctica and Greenland are melting into the sea at an accelerating pace of more than 400 gigatons per year.

Allowing the world to warm another degree, as we are on a course to do be-

tween 2030 and 2052, may well surpass our ability to adapt.

Continued warming will threaten rapid, widespread, and long-lasting increases in heatwaves, wildfire, disease, drought, crop failure, sea level rise, ocean acidification, mass extinction, collapsing food chains, mass population migrations, and human conflict.

To avoid warming in excess of 2.7 degrees Fahrenheit, the special report identified that we will need to cut emissions 45 percent below 2010 levels by 2030 and 100 percent by 2050.

That will require rapid transitions in all sectors at an unprecedented scale.

Unless the U.S. Senate can undertake the hard work of serious legislation soon, it is clear the world will be unable to meet that goal.

The good news is that there are a large number of good policy ideas the Senate can consider if my Republican colleagues agree to join with us in earnest.

There are bipartisan proposals for legislation to place a price on greenhouse gas emissions by placing a fee on fossil fuels.

We can even rebate the revenues to cover the costs for households and industry. These are good ideas that we should explore.

There are numerous examples of clean energy standards and other policy commitments at the State, local, and international level. These are also good ideas that we should explore.

My own State of California has demonstrated bold, creative new ideas for cutting emissions at the same time as it has grown to be the fifth largest economy in the world.

The State has mandated that 50 percent of its electricity must be from renewable sources by 2030.

We are actually ahead of schedule and are on track to reach that deadline by 2020, 10 years ahead of schedule.

From there, we are committed to be completely carbon neutral by 2045.

My State's policies work. From the low-carbon fuel standard to the zero-emission vehicle mandates to the economy-wide cap-and-trade system, each innovative policy approach makes it easier to meet our goals.

By harnessing the strength of the American economy to address climate change, we have an opportunity to create millions of new jobs while strengthening the infrastructure and industries that are critical to our future.

It is long past time for the Senate to move beyond show votes on nonbinding resolutions and move on to the hard work of actual legislation.

I urge my Republican colleagues to join us in this effort.

ENHANCING HUMAN RIGHTS PROTECTION IN ARMS SALES ACT OF 2019

Mr. CARDIN. Madam President, today I rise to speak about the Enhancing Human Rights in Arms Sales Act of 2019, which I was proud to introduce on