My wife Mikey and I were watching the pageant on TV and cheering for Cara throughout the competition. We, like North Dakotans across our State, were very excited when she was crowned Miss America. The amazing thing is that she had actually tried four times to win the Miss North Dakota pageant. She won the Miss North Dakota pageant on her fourth try, and then she went on to win the Miss America pageant. It is just an amazing story of somebody who decided she were going to accomplish a goal and did so. It is truly amazing and inspirational to anyone who sets out to achieve something really worthwhile, and it shows what determination can do.

Cara is truly impressive, and we are so proud to have her representing North Dakota and, of course, now the entire Nation as Miss America. Following graduation from Brown University with a degree in business, entrepreneurship, and organizations, Cara served as an intern here in my Washington, DC, office. She did a tremendous job. As I say, she was with us for half of last year. So she started about midyear and finished up at the end of the year. Again, she did tremendous work for us, and we are so appreciative of having her with us.

While only 23, she has a long history of public and community service. For the past 10 years, she has organized the annual Make-a-Wish fashion show, which has raised more than $78,500 to make dreams come true for more than 20 kids who have faced life-altering conditions. It is only fitting that after spending so much of her life making others' dreams come true, Cara's own dreams were made a reality last night. She is so well-deserving of the title, and I know that continued service to others and public service will be part of her life's work.

She is going on to law school at Notre Dame after, of course, taking a year as Miss America and touring around the country and doing what I know will be a fabulous job as Miss America. Then she wants to go on to law school at Notre Dame, where she has already been accepted.

I know she has a real interest in public service and maybe even some day running for Governor or another elective office. I have no doubt that whatever she decides to do, she will be successful, and, more importantly, she will do a great job for others. She will do a great job for many other people. She has such a good heart, and she is such a great young person—exactly the kind of person that we need out there helping face the challenges we face as a nation, setting a great example, and doing things for so many others that makes such a difference in their lives.

She is well-deserving of the title. She represents our State so well, and we have no doubt that she will continue to make us proud as Miss America.

Congratulations, again, to Miss America 2018, Cara Mund. She is fantastic.

I yield the floor.

I suggest the absence of a quorum.

The PRESIDING OFFICER. The clerk will call the roll.

The bill clerk proceeded to call the roll.

Mr. MCCONNELL. Mr. President, I ask unanimous consent that the order for the quorum call be rescinded.

The PRESIDING OFFICER. Without objection, it is so ordered.

Mr. MCCONNELL. Mr. President, I ask unanimous consent that, notwithstanding rule XXII, Senator PAUL be given up to 4 hours of postcloture debate on the pending motion to proceed.

The PRESIDING OFFICER. Without objection, it is so ordered.

UNANIMOUS CONSENT AGREEMENT—EXECUTIVE CALENDAR

Mr. MCCONNELL. Mr. President, notwithstanding the provisions of rule XXII, I ask unanimous consent that at 2:15 p.m. on Tuesday, September 12, the Senate proceed to executive session for consideration of Calendar No. 110, the nomination of Kevin Hassett to be Chairman of the Council of Economic Advisers. I further ask that there be 20 minutes of debate on the nomination equally divided in the usual form; that following the use or yielding back of time, the Senate vote on confirmation with no intervening action or debate; that if confirmed, the motion to reconsider be considered made and laid upon the table; that the President be immediately notified of the Senate's action and the Senate resume legislative session.

The PRESIDING OFFICER. Without objection, it is so ordered.

MORNING BUSINESS

Mr. MCCONNELL. Mr. President, I ask unanimous consent that the Senate be in a period of morning business, with Senators permitted to speak therein for up to 10 minutes each.

The PRESIDING OFFICER. Without objection, it is so ordered.

REMEMBERING DAVID ''TED'' EYRE

Mr. HATCH. Mr. President, today I wish to pay tribute to one of Utah's great public servants, a loving husband, father, and grandfather and a remarkable leader, David ''Ted'' Eyre. Sadly, Ted recently lost his battle with cancer. He leaves behind a grieving community that he served for many years as mayor of Murray City.

Ted had a strong, yet kind demeanor that inspired others to work hard and do what was best for their community. As mayor, he made a tremendous impact on the infrastructure and neighborhoods of Murray City, a thriving community tucked into the Salt Lake Valley.

Ted was able to accomplish many important things for the local community, including: improving Murray Park, the heart of the city; acquiring the historic Murray Theater, Murray Chapel, and Murray Mansion that will serve as gathering places for years to come; expanding Fashion Place Mall and the University of Utah Midvalley Health Center; acquiring properties in the downtown redevelopment area for a new city hall and fire station; and adopting a new general city plan.

Ted had two great passions—aviation and people. Both interests guided him in his decisions throughout his life. He received a degree in aviation science at San Bernardino Valley College. As a young man, he enlisted in the U.S. Army and served in the Vietnam war flying a U–21 Ute transport aircraft in the aviation division of the signal corps. After his military service, he continued his love of flying and excelled as an airline pilot for 30 years for Western and later Delta Airlines, serving as captain for much of that time.

On January 7, 2014, Eyre was sworn in as the mayor of Murray City, quickly endearing himself as a capable leader who valued the input of all and who fought hard to prepare the community for the future. Mayor Eyre left an indelible imprint on the city he led and the citizens he served.

Throughout his life, Eyre not only distinguished himself as a talented pilot, courageous soldier, and devoted public servant, he also became a friend to all he came into contact with and was a beloved husband, father, and grandfather. I am grateful for the opportunity to pay tribute to a great man, his life, and the example he leaves behind. His influence will be felt for generations to come.

(At the request of Mr. SCHUMER, the following statement was ordered to be printed in the RECORD.)

VOTE EXPLANATION

● Mr. MENENDEZ. Mr. President, I was unavoidably absent for rollcall vote No. 193, the motion to invoke cloture on the motion to proceed to H.R. 2810, the National Defense Authorization Act for 2018. Had I been present, I would have voted yea.●

ARMS SALES NOTIFICATION

Mr. CORKER. 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 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. BOB CORKER,
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. 16–35, concerning the Army's proposed Letter(s) of Offer and Acceptance to the Government of the Kingdom of Bahrain for defense articles and services estimated to cost $27 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.

1. TRANSMITTAL NO. 16–35

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: The Kingdom of Bahrain.

(ii) Total Estimated Value:

Major Defense Equipment* $21 million.

Other $6 million.

Total $27 million.

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

Major Defense Equipment (MDE):

One-hundred and seven (107) TOW 2A, Radio Frequency (RF) Missiles (BGM–71–4B–RF).

Seventy-seven (77) TOW 2B Aero, RF Missiles (BGM–71F–Series).

Thirty-seven (37) TOW Bunker Buster (BB), RF Missiles (BGM–71–F1–RF).

Non-MDE:

This request also includes the following Non-MDE: Government Technical Support/Logistical Support, Contractor Technical Support, and other associated equipment and services.

(iv) Military Department: Army.

(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: September 8, 2017.

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

POLICY JUSTIFICATION

Bahrain—TOW 2ARF Missile (BGM–71–4B–RF), TOW 2B RF Missiles (BGM–71F–Series). TOW BB RF Missiles (BGM–71–F1 RF)

The Government of Bahrain has requested:

Major Defense Equipment (MDE):

One-hundred and seven (107) TOW 2A, Radio Frequency (RF) Missiles (BGM–71–4B–RF).

Seventy-seven (77) TOW 2B Aero, RF Missiles (BGM–71F–Series).

Thirty-seven (37) TOW Bunker Buster (BB), RF Missiles (BGM–71–F1–RF).

Non-MDE:

The request also includes the following Non-MDE: Government Technical Support/Logistical Support, Contractor Technical Support, and other associated equipment and services.

The estimated value of MDE is $21 million. The total overall estimated value is $27 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, which has been and continues to be an important security partner in the region.

The proposed sale of TOW 2A, TOW 2B, TOW BB missiles, and technical support will advance Bahrain's efforts to develop an integrated ground defense capability. Bahrain will use the capability as a deterrent to regional threats and to strengthen its homeland defense. This sale will also improve interoperability with United States and regional allies. Bahrain 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 principal contractor will be Raytheon Missile Systems, Tucson, Arizona. There are no known offset agreements proposed in connection with this potential sale.

Implementation of this proposed sale will require the U.S. Government or contractor representatives to travel to Bahrain for multiple periods for equipment deprocessing/fielding, system checkout and new equipment training. There will be no more than two contractor personnel in Bahrain at any one time and all efforts will take less than two weeks in total.

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

TRANSMITTAL NO. 16–35

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

Annex Item No vii

(vii) Sensitivity of Technology:

1. The Radio Frequency (RF) TOW 2A Missile (BGM–71E–4B–RF) is a direct-attack missile designed to defeat armored vehicles, reinforced urban structures, field fortifications and other such targets. TOW missiles are fired from a variety of TOW launchers used by the U.S. Army, U.S. Marine Corps, and Foreign Military Sales (FMS) customers. The TOW 2A RF missile can be launched from the same launcher platforms as the existing wire-guided TOW 2A missile without modification to the launcher. The TOW 2A missile (both wire & RF) contains two tracker beacons for the launcher to track and guide the missile in flight. Guidance commands from the launcher are provided to the missile by a RF link contained within the missile case. The hardware, software, and technical publications to be provided with the sale are UNCLASSIFIED. The highest level of classified information authorized for released through the sale of the TOW 2A is SECRET.

2. The RF TOW 2B Aero Missile (BGM–71 F–3–RF) is a fly-over-shoot-down missile designed to defeat armored vehicles. TOW missiles are fired from a variety of TOW Launchers in the inventories of the U.S. Army, the U.S. Marine Corps, and Foreign Military Sales (FMS) customers. The TOW 2B Aero RF missile can be launched from the same launcher platforms as wire-guided TOW 2B and TOW 2B Aero missiles without modification to the launcher. The TOW 2B missile (both wire-guided & RF) contains two tracker beacons for the launcher to track and guide the missile in flight. Guidance commands from the launcher are provided to the missile by an RF link contained within the missile case. The hardware and technical publications to be provided with the sale are UNCLASSIFIED. Software algorithms for the system are classified SECRET. The highest level of classified information released through the sale of the TOW 2B is SECRET.

3. The RF TOW Bunker Buster (BB), BGM–71–F1–RF is a variant of the TOW 2A that replaces the TOW 2A warhead with a high explosive blast-fragmentation warhead. This bulk charge warhead is effective against reinforced concrete walls, light armored vehicles, and earth and timber bunkers. Guidance commands from the launcher are provided to the missile by an RF link contained within the missile case. The hardware, software, and technical publications to be provided with the sale are UNCLASSIFIED. The highest level of classified information released through the sale of the TOW 2B is SECRET.

4. If a technologically advanced adversary were to obtain knowledge of the specific hardware and software elements of these variants, 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.

5. A determination has been made by the U.S. Government that the Government of Bahrain can provide 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.

6. All defense articles and services listed in this transmittal have been authorized for release and export to the Government of Bahrain.

DEFENSE SECURITY COOPERATION AGENCY,
Arlington, VA.

Hon. BOB CORKER,
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. 16–59, concerning the Department of the Air Force's proposed Letter(s) of Offer and Acceptance to the Government of Bahrain for defense articles and services estimated to cost $1.082 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,

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

Enclosures.

TRANSMITTAL NO. 16–59

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 Bahrain.

(ii) Total Estimated Value:

Major Defense Equipment* $406 million.

Other $676 million.

Total $1.082 billion.

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

Major Defense Equipment (MDE):

Twenty-three (23) F–110–GE–129 engines (includes 3 spares).

Twenty-three (23) APG–83 Active Electronically Scanned Array Radars (includes 3 spares).

Twenty-three (23) Modular Mission Computers (includes 3 spares).

Twenty-three (23) Embedded Global Navigation Systems/LN260 EGI (includes 3 spares).

Forty (40) LAU–129 Launchers.

Twenty-three (23) Improved Programmable Display Generators (iPDG).

Twenty-five (25) AN/AAQ–33 SNIPER Pods (MDE Determination Pending).

Two (2) AIM–9X Sidewinder Missiles.

Two (2) AGM–88B/C High-Speed Anti-Radiation Missiles (HARM).

Two (2) WGU–43 Guidance Control Unit (GCU) (for GBU–24 Paveway III).

Two (2) BSU–84 Air Foil Group (AFG) (for GBU–24 Paveway III).

Five (5) KMU–572 Joint Direct Attack Munition (JDAM) Tailkits (for GBU–38 JDAM and GBH–54 Laser JDAMs).

Two (2) GBU–39 Small Diameter Bombs (SDB) Guided Test Vehicles.

Two (2) AGM–84 Harpoon Missiles.

Three (3) MAU–210 ECCG (for GBU–50 Enhanced Paveway II).

Three (3) BLU–109 Inert Bomb Bodies.

Four (4) MK–82/BLU 111 Inert Bomb Bodies.

Two (2) FMU 152 or FMU 139 Fuzes.

Non-MDE includes:

One (1) Joint Mission Planning System, one (1) F–16V simulator, twenty (20) AN/ALQ–211 AIDEWS systems, one (1) avionics level test station, six (6) DB–110 Advanced Reconnaissance Systems, two (2) LAU–118A Launchers, forty-five (45) AN/ARC–238 SINCGARS Radio or equivalent, twenty-three (23) AN/APX126 Advanced Identification Friend or Foe (AIFF) system or equivalent, twenty-three (23) cryptographic appliques, two (2) CATM–9L/M, two (2) AIM–120C–7 Advanced Medium Range Air-to-Air Missile (AMRAAM) Captive Air Training Missiles (CATM), three (3) MXU–651 AFG (for GBU–50 Enhanced Paveway II), four (4) DSU–38 Precision Laser Guidance Sets (PLGS) (for GBU–54 Laser JDAM), four (4) AGM–154 Joint Standoff Weapon (JSOW) Captive Flight Vehicles (CFV), three (3) MK–84/BLU 117 Inert Bomb Bodies, two (2) FMU–152 D–1 Inert Fuzes, three (3) BRU–57 Bomb Racks, two (2) BRU–61 Bomb Racks for SDB, two (2) ADU–890 SDB adapter cable for CMBRE, two (2) ADU–891 AMRAAM/AIM 9X adapter cable for CMBRE, telemetry for all flight test assets, secure communications equipment, spares and repair parts, support equipment, personnel training and training equipment, publications and technical documentation, U.S. Government and contractor technical support services, containers, missile support and test equipment, integration test, site survey, design, construction studies/analyses/services, cybersecurity, critical computer resources support, force protection and other related elements of logistics and program support.

(iv) Military Department: Air Force (X7–D–QAU).

(v) Prior Related Cases, if any:

FMS Case BA–D–SGA—$330.9 million—21 Apr 87.

FMS Case BA–D–SGG—$234.9 million—20 Feb 98.

(vi) Sales Commission, Fee, etc. Paid, Offered, or Agreed to be Paid: None.

(vii) Sensitivity of Technology Contained in the Defense Articles or Defense Services Proposed to be Sold: See Attached Annex.

(viii) Date Report Delivered to Congress: September 8, 2017.

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

POLICY JUSTIFICATION

Government of Bahrain—Upgrade of F–16 Block 40 Aircraft to F–16V Configuration

The Government of Bahrain requested to upgrade its existing twenty (20) F–16 Block 40 aircraft to the F–16V configuration. The requested sale comprises of twenty-three (23) F–110–GE–129 engines (includes 3 spares); twenty-three (23) APG–83 Active Electronically Scanned Array Radars (includes 3 spares); twenty-three (23) Modular Mission Computers (includes 3 spares); twenty-three (23) Embedded Global Navigation Systems/LN260 EGI (includes 3 spares); twenty-three (23) Improved Programmable Display Generators (iPDGs) (includes 3 spares); forty (40) LAU–129 launchers; twenty-five (25) AN/AAQ–33 SNIPER Pods; two (2) AIM–9X Sidewinder Missiles; two (2) AGM–88 High-speed Anti-Radiation Missiles (HARM); two (2) WGU–43 Guidance Control Unit (GBU) Guidance Control Unit (GCU) (for GBU–24 Paveway III; two (2) BSU–84 Air Foil Group (AFG) (for GBU–24 Paveway III); five (5) KMU–572 Joint Direct Attack Munition (JDAM) Tailkits (for GBU–38 JDAM and GBU–54 Laser JDAM); two (2) GBU–39 Small Diameter Bombs (SDB) Guided Test Vehicles (GTV); two (2) AGM–84 Harpoon Exercise Missiles; three (3) MAU–210 ECCG (for GBU–50 Enhanced Paveway II); three (3) BLU–109 Inert Bomb Bodies; four (4) MK–82/BLU–111 Inert Bomb Bodies; and two (2) GMU–152 or FMU–139 Fuzes.

This sale also includes one (1) Joint Mission Planning System, one (1) F–16V simulator, twenty (20) AN/ALQ–211 AIDEWS Systems, one (1) avionics level test station, six (6) DB–110 Advanced Reconnaissance Systems, two (2) LAU–118A Launchers, forty-five (45) AN/ARC–238 SINCGARS Radio or equivalent, twenty-three (23) Advanced Identification Friend or Foe (AIFF) systems or equivalent; twenty-three (23) cryptographic appliques; two (2) CATM–9L/M, two (2) AIM–120C–7 Advanced Medium Range Air-to-Air Missile (AMRAAM) Captive Air Training Missiles (CATM), three (3) MXU–651 AFG (for GBU–50 Enhanced Paveway II), four (4) DSU–38 Precision Laser Guidance sets (PLGS) (for GBU–54 Laser JDAM), four (4) AGM–154 Joint Stand-Off Weapon (JSOW) Captive Flight Vehicles (CFV), three (3) MK–84/BLU–117 Inert Bomb Bodies, two (2) FMU–152 D–1 Inert Fuzes, three (3) BRU–57 Bomb Racks, two (2) BRU–61 Bomb Racks for SDB, two (2) ADU–890 SDB adapter cable for CMBRE, two (2) ADU–891 AMRAAM/AIM–9X adapter cable for CMBRE, Telemetry for all flight test assets secure communication equipment, spares and repair parts, support equipment, personnel training and training equipment, publications and technical documentation, U.S. Government and contractor technical support services, containers, missile support and test equipment, integration test, site survey, design, construction studies/analyses/services, associate operations, maintenance, training, support facilities, cybersecurity, critical computer resources support, force protection, and other related elements of logistics and program support. The total estimated program cost is $1.082 billion.

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 which has been and continues to be an important security partner in the region. Our mutual defense interests anchor our relationship and the Royal Bahraini Air Force (RBAF) plays a significant role in Bahrain's defense.

The proposed sale improves Bahrain's capability to meet current and future threats. Bahrain will use this capability as a deterrent to regional threats and to strengthen its homeland defense. The upgraded F–16Vs will provide an increase in the capability of existing aircraft to sustain operations, meet training requirements, and support transition training for pilots to the upgraded aircraft. This upgrade will improve interoperability with U.S. forces and other regional allies. Bahrain will have no difficulty absorbing this upgrade into its armed forces.

The proposed sale will not affect the basic military balance in the region.

The prime contractor will be Lockheed Martin. There are no known offset agreements proposed in connection with this potential sale.

Implementation of this proposed sale will require the assignment of at least five (5) additional U.S. Government representatives to Bahrain.

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

TRANSMITTAL NO. 16–59

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 Bahrain. The F–16V weapon system is UNCLASSIFIED, except as noted below. The aircraft utilizes the F–16C/D airframe and features advanced avionics and systems. It contains the General Electric F–110–GE–129 engine, AN/APG–83 Active Electronically Scanned Array Radars , digital flight control system, internal and external electronic warfare equipment, AN/APX126 Advanced Identification Friend of Foe (AIFF), LN260 Embedded GPS/INS (EGI), Modular Mission Computers (MMC), improved Programmable Display Generators (iPDG), AN/AAQ–33 SNIPER Pods, Multifuncation Information Distribution System Joint Tactical Radio System (MIDS-JTRS), operational flight trainer, and software computer programs.

2. Sensitive and/or classified (up to SECRET) elements of the proposed F–16V include hardware, accessories, components, and associated software: AN/APX126 Advanced Identification Friend or Foe (AIFF), cryptographic appliques, Secure communication equipment, Joint Mission Planning System, F–16V Simulator, AN/ALQ–211 AIDEWS Pods, Avionics Level Test Station, DB–110 Advanced Reconnaissance Systems, LAU–118A Launchers, and F–110–GE–129 engine. Additional sensitive areas 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, infrared signature and Advanced Interference Blanker Units, 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. AN/ALQ–211 Airborne Integrated Defensive Electronic Warfare Suite (AIDEWS) provides passive radar warning, wide spectrum RE jamming, and control and management of the entire Electronic Warfare (EW) system. The commercially developed system software and hardware is UNCLASSIFIED. The system is classified SECRET when loaded with a U.S. derived EW database, which will be provided.

5. AN/ARC–238 SINCGARS Radio or equivalent is considered UNCLASSIFIED, but employs cryptographic technology that is classified SECRET. Classified elements include operating characteristics, parameters, technical data, and keying material.

6. AN/APX–126 Advanced Identification Friend or Foe (AIFF) is a system capable of transmitting and interrogating Mode V and is supported by cryptographic appliques. It is UNCLASSIFIED unless/until Mode W and/or Mode V operational evaluator parameters are loaded into the equipment. Classified elements of the AIFF system include software object code, operating characteristics, parameters, and technical data are SECRET.

7. The 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. The Modular Mission Computer (MMC) is the central computer for the F–16. As such it serves as the hub for all aircraft subsystems, avionics, and weapons. The hardware and software (Operational Flight Program—OFP) are classified up to SECRET.

9. An Improved Programmable Display Generator (iPDG) will support the two color MFD's, allowing the pilot to set up to twelve display programs. One of them includes a color Horizontal Situation Display, which will be, provide the pilot with a God's eye view of the tactical situation. Inside is a 20MHz, 32-bit Intel 80960 Display Processor and a 256K battery-backed RAM system memory. The color graphics controller is based on the T.I. TMS34020 Raster Graphics Chipset. The IPDG also contains substantial growth capabilities including a high-speed Ethernet interface (10/100BaseT) and all the hardware necessary to support digital moving maps. The digital map function can be enabled by the addition of software. The hardware and software are UNCLASSIFIED.

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

11. 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.

12. The SNIPER (AN/AAQ–33) targeting system is UNCLASSIFIED and contains technology representing the latest state-of-the-art in 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.

13. The AIM–120C–7 Advanced Medium Range Air-to-Air Missile (AMRAAM) Captive Air Training Missiles (CATM) is a supersonic, air launched, aerial intercept, guided missile featuring digital technology and micro-miniature solid-state electronics. The missile employs active radar target tacking, proportional navigation guidance, and active Radio Frequency target detection. It can be launched day or night, in any weather and increases pilot survivability by allowing the pilot to disengage after missile launch and engage other targets. 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.

14. AIM–9X Sidewinder missile is an air-to-air guided missile that employs a passive infrared (IR) target acquisition system that features digital technology and micro- miniature solid-state electronics. The AIM–9X tactical and CATM guidance units are subsets of the overall missile and were recently designated as MDE. The AIM–9X is CONFIDENTIAL, Major components and subsystems range from UNCLASSIFIED to CONFIDENTIAL, and technical data and other documentation are classified up to SECRET. The overall system classification is SECRET.

The AIM–9X is launched from the aircraft using a LAU–129 guided missile launcher (currently in country inventory). The LAU–129 provides mechanical and electrical interface between missile and aircraft. The LAU–129 system is UNCLASSIFIED.

15. AGM–88B/C HARM is an air-to-ground missile designed to destroy or suppress enemy radars used for air defense. HARM has wide frequency coverage, is target reprogrammable in flight, and has a reprogrammable threat library. Hardware and software for the system is classified SECRET and ballistics data is CONFIDENTIAL. The overall system classification is SECRET.

The AGM–88 is launched from the aircraft using a LAU–118A guided missile launcher. The LAU–118A provides mechanical and electrical interface between missile and aircraft. The LAU–118A system is UNCLASSIFIED.

16. GBU–10/12: 2,000-lb (GBU–10) and 500-lb (GBU–12) laser-guided bombs (LGBs). The LGB is a maneuverable, free-fall weapon that guides on laser energy reflected off of the target. The LGB is delivered like a normal general purpose warhead and the laser guidance guides the weapon into the target. Laser designation for the weapon can be provided by a variety of laser target designators. The LGB consists of a laser guidance kit, a computer control group and a warhead specific air foil group, that attach to the nose and tail of Mk 84, Mk 82 bomb bodies.

a. The GBU–10: This is a 2,000lb (BLU–117 BB or Mk 84) General Purpose (GP) guided bomb fitted with the MXU–651 airfoil and the MAU–169 or MAU–209 computer control group to guide to its laser designated target.

b. The GBU–12: This is a 500lb (BLU–111/B or Mk–82) guided bomb fitted with the MXU–650 airfoil and the MAU–169 or MAU 209 computer control group to guide to its laser designated target. The weapon components are UNCLASSIFIED. Some technical data and vulnerabilities/countermeasures are SECRET. The overall weapons classification is SECRET.

17. GBU–31 and GBU–38 are 2000lb/500lb Joint Direct Attack Munitions (JDAM) JDAM is a guidance kit that converts existing unguided free-fall bombs into precision-guided ''smart'' munitions. By adding a new tail section containing Inertial Navigation System (INS) guidance/Global Positioning System (GPS) guidance to existing inventories of BLU–109, BLU–111 and BLU–117 or Mk–84 and Mk–82 bombs, the cost effective JDAM provides 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 and all of its components are UNCLASSIFIED, technical data for JDAM is classified up to SECRET.

JDAMs use the Global Positioning System (GPS) Precise Positioning System (PPS), which provides for a more accurate capability than the commercial version of GPS.

18. GBU–49 and GBU–50 are 500lb/2000lb dual mode laser and GPS guided munitions respectively. The GBU–49/50 use airfoil groups similar to those used on the GBU–12 and GBU–10 for inflight maneuverability. Weapons components are UNCLASSIFIED. Technical data and countermeasures/vulnerabilities are SECRET. The overall system classification is SECRET.

GBU–49/50s use the GPS PPS, which provides for a more accurate capability than the commercial version of GPS.

19. GBU–54/56 are the 500lb/2000lb Laser JDAM (Joint Direct Attack Munitions): These weapons use the DSU–38/B/DSU–40 laser Sensor respectively and use both Global Position System aided inertial navigations and/or laser guidance to execute threat targets. The laser sensor enhances standard JDAM's reactive target capability by allowing rapid prosecution of fixed targets with large initial target location errors (TLE). The DSU–38/B Laser sensor also provides the additional capability to engage mobile targets. The addition of the DSU–38 laser sensor combined with additional cabling and mounting hardware turns a GBU–38 JDAM into a GBU–54 Laser JDAM. The addition of the DSU–40 laser sensor combined with additional cabling and mounting hardware turns a GBU–31 JDAM into a GBU–56 Laser JDAM. Weapons components are UNCLASSIFIED. Technical data and countermeasures/vulnerabilities are SECRET. The overall system classification is SECRET.

Laser JDAMs use the GPS PPS, which provides for a more accurate capability than the commercial version of GPS.

20. GBU–39 Small Diameter Bomb (SDB): The GBU–39 small diameter bomb (SDB) is a 250-lb class precision guided munition that allows 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, with a significant 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 UNCLASSIFIED; technical data is classified up to SECRET.

SDBs use the GPS PPS, which provides for a more accurate capability than the commercial version of GPS.

21. The GBU–24 Paveway III is a 2000lb class low level laser guided munition that can be employed at high, medium, and low altitudes. GBU–24 components are UNCLASSIFIED. Target designation tactics and associated aircraft maneuvers, the probability of destroying specific/peculiar targets, vulnerabilities regarding countermeasures, and the electromagnetic environment is classified SECRET.

22. The AGM–154 is a family of low-cost standoff weapons that are modular in design and incorporate either a sub-munition or a unitary warhead. Potential targets for Joint Standoff Weapon (JSOW) range from soft targets, such as troop concentration, to hardened point targets like bunkers. The AGM–154C is a penetrator weapon that carries a BROACH warhead and pay load. The AGM–154 hardware, software and maintenance data is UNCLASSIFIED. Vulnerabilities and countermeasures are classified up to SECRET. Overall system classification is SECRET.

The AGM–154 uses the GPS PPS, which provides for a more accurate capability than the commercial version of GPS.

23. The AGM–84L–1 Harpoon is a non-nuclear tactical weapon system currently in service in the U S. Navy and in 28 other foreign nations. It provides a day, night, and adverse weather, standoff air-to-surface capability. Harpoon Block II is a follow on to the Harpoon missile that is no longer in production. Harpoon Block II is an effective Anti-Surface Warfare missile.

The AGM–84L–1 incorporates components, software, and technical design information that are considered sensitive. These elements are essential to the ability of the Harpoon missile to selectively engage hostile targets under a wide range of operational, tactical and environmental conditions. The following Harpoon components being conveyed by the proposed sale that are considered sensitive and are classified CONFIDENTIAL include: IIR seeker, INS, OPP software

and, missile operational characteristics and performance data. The overall system classification is SECRET.

24. M61A1 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 Gatlin gun used to damage/destroy aerial targets, suppress/incapacitate personnel targets, and damage or destroy moving and stationary light materiel targets. The M61A1 and its components are UNCLASSIFIED.

25. Software, hardware, and other data/information, which is classified or sensitive, is reviewed prior to release to protect system vulnerabilities, design data, and performance parameters. Some end-item hardware, software, and other data identified above are classified at the CONFIDENTIAL and SECRET level. Potential compromise of these systems is controlled through management of the basic software programs of highly sensitive systems and software-controlled weapon systems on a case-by-case basis.

26. If a technologically advanced adversary were to obtain knowledge of the specific hardware or software source code in this proposed sale, the information could be used to develop countermeasures which might reduce weapon system effectiveness or be used in the development of systems with similar or advance capabilities.

27. This sale is necessary in furtherance of the U.S. foreign policy and national security objectives outlined in the Policy Justification. Moreover, the benefits to be derived from this sale, as outlined in the Policy Justification, outweigh the potential damage that could result if the sensitive technology were revealed to unauthorized persons.

28. A determination has been made that the recipient country can provide substantially the same degree of protection for the sensitive technology being released as the U.S. Government.

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

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

DEFENSE SECURITY COOPERATION AGENCY,
Arlington, VA.

Hon. BOB CORKER,
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. 16–60, concerning the Department of the Air Force's proposed Letter(s) of Offer and Acceptance to the Government of Bahrain for defense articles and services estimated to cost $2.785 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,

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

Enclosures.

TRANSMITTAL NO. 16–60

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

(i) (U) Prospective Purchaser: Government of Bahrain.

(ii) (U) Total Estimated Value:
Major Defense Equipment * $2.095 billion.
Other $0.690 billion.
Total $2.785 billion.

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

Major Defense Equipment (MDE):

Nineteen (19) F–16V Aircraft.

Nineteen (19) M61 Vulcan 20mm Gun Systems.

Twenty-two (22) F–16V F–110–GE–129 Engines (includes 3 spares).

Twenty-two (22) APG–83 Active Electronically Scanned Array Radars (includes 3 spares).

Twenty-two (22) Modular Mission Computers (includes 3 spares).

Twenty-two (22) Embedded Global Navigation Systems/LN260 EGI (includes 3 spares).

Twenty-two (22) Improved Programmable Display Generators (iPDG) (includes 3 spares).

Thirty-eight (38) LAU–129 Launchers.

Non-MDE include: Nineteen (19) AN/ALQ–211 AIDEWS Systems, thirty-eight (38) LAU–118A Launchers, forty-two (42) AN/ARC–238 SINCGARS Radio or equivalent, twenty-two (22) AN/APX–126 Advanced Identification Friend or Foe (AIFF) system or equivalent, twenty-two (22) cryptographic appliques, secure communication equipment, spares and repair parts, personnel training and training equipment, simulators, publications and technical documentation, U.S. Government and contractor technical support services, containers, missile support and test equipment, original equipment manufacturer integration and test, U.S. Government and contractor technical support and training services, site survey, design, construction studies/analysis/services, associated operations/maintenance/training/support facilities, cybersecurity, critical computer resources support, force protection and other related elements of logistics and program support.

(iv) (U) Military Department: Air Force (X7–D–SAB)

(v) (U) Prior Related Cases, if any: FMS Case BA–D–SGA—$330,927,474—21 Apr 87; FMS Case BA–D–SGG—$234,879,152—20 Feb 98.

(vi) (U) Sales Commission. Fee, etc.. Paid, Offered, or Agreed to be Paid: None.

(vii) (U) Sensitivity of Technology Contained in the Defense Article or Defense Services Proposed to be Sold: See Annex Attached.

(viii) (U) Date Report Delivered to Congress: September 8, 2017.

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

POLICY JUSTIFICATION

(U) Government of Bahrain—F–16V Aircraft with Support

(U) The Government of Bahrain has requested a possible sale of nineteen (19) F–16V Aircraft; nineteen (19) M61 Vulcan 20mm Gun Systems; twenty-two (22) F–16V F110–GE–129 Engines (includes 3 spares); twenty-two (22) APG–83 Active Electronically Scanned Array Radars (includes 3 spares); twenty-two (22) Modular Mission Computers (includes 3 spares); twenty-two (22) Embedded Global Navigation Systems/LN260 EGI (includes 3 spares); twenty-two (22) Improved Programmable Display Generators (iPDG) (includes 3 spares); and thirty-eight (38) LAU–129 Launchers. This sale also includes nineteen (19) AN/ALQ–211 AIDEWS Systems, thirty-eight (38) LAU–118A Launchers, forty-two (42) AN/ARC–238 SINCGARS Radio or equivalent, twenty-two (22) AN/APX–126 Advanced Identification Friend or Foe (AIFF) system or equivalent, twenty-two (22) cryptographic appliques, secure communication equipment, spares and repair parts, personnel training and training equipment, simulators, publications and technical documentation, U.S. Government and contractor technical support services, containers, missile support and test equipment, original equipment manufacturer integration and test, U.S. Government and contractor technical support and training services, site survey, design, construction studies/analysis/services, associated operations/maintenance/ training/support facilities, cybersecurity, critical computer resources support, force protection and other related elements of logistics and program support. The total estimated program cost is $2.785 billion.

(U) 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, which has been and continues to be an important security partner in the region. Our mutual defense interests anchor our relationship and the Royal Bahraini Air Force (RBAF) plays a significant role in Bahrain's defense.

(U) The proposed sale improves Bahrain's capability to meet current and future threats. Bahrain will use the capability as a deterrent to regional threats and to strengthen its homeland defense. This purchase of F–16Vs will improve interoperability with United States and other regional allies. Bahrain employs 20 older F–16 Block 40s and will have no difficulty absorbing these aircraft into its armed forces.

(U) The proposed sale of these aircraft will not alter the basic military balance in the region.

(U) The prime contractor will be Lockheed Martin. There are no know offset agreements proposed in connection with this potential sale.

(U) Implementation of this proposed sale will require the assignment of at least ten (10) additional U.S. Government representatives and approximately seventy-five (75) contractor representatives to Bahrain.

(U) There will be no adverse impact on U.S. defense readiness as aresult of this proposed sale.

TRANSMITTAL NO. 16–60

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. (U) This sale involves the release of sensitive technology to Bahrain. The F–16C/D Block V weapon system is unclassified, except as noted below. The aircraft uses the F–16 airframe and features advanced avionics and systems. It contains the General Electric F–110–129 engine, AN/APG–83 radar, digital flight control system, internal and external electronic warfare (EW) equipment, Advanced Identification Friend or Foe (AIFF), operational flight trainer, and software computer programs.

2. (U) Sensitive or classified (up to SECRET) elements of the proposed F–16V include hardware, accessories, components, and associated software: AN/APG–83 AESA Radars, Modular Mission Computers, Advanced Identification Friend or Foe (AIFF), cryptographic appliques, Embedded Global Positioning System/Inertial Navigation System, Modular Mission Computer (MMC), AN/ALQ–211 AIDEWS Systems, LAU–129 Launchers, Modular Mission Computers, and Improved Programmable Display Generators (iPDGs). Additional sensitive areas 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. (U) The AN/APG–83 is an Active Electronically Scanned Array (AESA) radar upgrade for the F–16V. 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. (U) AN/ALQ–211 Airborne Integrated Defensive Electronic Warfare Suite (AIDEWS) System provides passive radar warning, wide spectrum RF jamming, and control and management of the entire EW system. Commercially developed system software and hardware is UNCLASSIFIED. The system is classified SECRET when loaded with a U.S. derived EW database, which will be provided.

5. (U) The secure voice communications radio system is considered unclassified, but may employ cryptographic technology that is classified SECRET. Classified elements include operating characteristics, parameters, technical data, and keying material.

6. (U) An Advanced Identification Friend or Foe (AIFF) is a system capable of transmitting and interrogating Mode V. It is UNCLASSIFIED unless Mode IV or Mode V operational evaluator parameters are loaded into the equipment that is classified SECRET. Classified elements of the ATP system include software object code, operating characteristics, parameters, and technical data.

7. (U) The 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. (U) The LAU–129 Guided Missile Launcher is capable of launching a single AIM–9 (Sidewinder) family of missile or a single AIM–120 Advanced Medium Range Air-to-Air Missile (AMRAAM). The LAU–129 provides mechanical and electrical interface between missile and aircraft. The LAU–129 system is UNCLASSIFIED.

9. (U) The Modular Mission Computer (MMC) is the central computer for the F–16. As such it serves as the hub for all aircraft subsystems, avionics, and weapons. The hardware and software (Operational Flight Program OFP) are classified up to SECRET.

10. (U) An Improved Programmable Display Generator (iPDG) will support the two color MFD's, allowing the pilot to set up to twelve display programs. One of them includes a color Horizontal Situation Display, which will be, provide the pilot with a God's eye view of the tactical situation. Inside is a 20MHz, 32-bit Intel 80960 Display Processor and a 256K battery-backed RAM system memory. The color graphics controller is based on the T.I. TMS34020 Raster Graphics Chipset. The iPDG also contains substantial growth capabilities including a high-speed Ethernet interface (10/100BaseT) and all the hardware necessary to support digital moving maps. The digital map function can be enabled by the addition of software. The hardware and software are UNCLASSIFIED.

11. (U) M61A1 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 Gatlin gun used to damage/destroy aerial targets, suppress/incapacitate personnel targets, and damage or destroy moving and stationary light materiel targets. The M61A1 and its components are UNCLASSIFIED.

12. (U) Software, hardware, and other data or information, which is classified or sensitive, is reviewed prior to release to protect system vulnerabilities, design data, and performance parameters. Some end-item hardware, software, and other data identified above are classified at the CONFIDENTIAL and SECRET level. Potential compromise of these systems is controlled through management of the basic software programs of highly sensitive systems and software-controlled weapon systems on a case-by-case basis.

13. (U) If a technologically advanced adversary were to obtain knowledge of the specific hardware or software source code in this proposed sale, the information could be used to develop countermeasures which might reduce weapon system effectiveness or be used in the development of systems with similar or advance capabilities.

14. (U) This sale is necessary in furtherance of the U.S. foreign policy and national security objectives outlined in the Policy Justification. Moreover, the benefits to be derived from this sale, as outlined in the Policy Justification, outweigh the potential damage that could result if the sensitive technology were revealed to unauthorized persons.

15. (U) A determination has been made that the recipient country 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.

16. (U) All defense articles and services listed in this transmittal are authorized for release and export to the Government of Bahrain.

DEFENSE SECURITY COOPERATION AGENCY,
Arlington, VA.

Hon. BOB CORKER,
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. 17–01, concerning the Navy's proposed Letter(s) of Offer and Acceptance to the Government of Bahrain for defense articles and services estimated to cost $60.25 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. 17–01

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: Bahrain.

(ii) Total Estimated Value:
Major Defense Equipment * $ 5.10 million.
Other $55.15 million.
Total $60.25 million.

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

Major Defense Equipment (MDE): Two (2) MK 38 Mod 3 25mm Gun Weapons Systems.

Non-MDE: Two (2) 35 meter Fast Patrol Boats; two (2) SeaFLIR 380 HD Forward Looking Infra-Red (FLIR) devices; communication equipment; support equipment; spare and repair parts; tools and test equipment; technical data and publications; personnel training; U.S. government and contractor engineering, technical, and logistics support services; and other related elements of logistics and program support.

(iv) Military Department: Navy.

(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: None.

(viii) Date Report Delivered to Congress: September 8, 2017.

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

POLICY JUSTIFICATION

Bahrain—35 Meter Fast Patrol Boats

Bahrain has requested the purchase of two (2) 35 meter Fast Patrol Boats, each equipped with one (1) MK38 Mod 3 25mm gun weapon system and one (1) SeaFLIR 380 HD Forward Looking Infra-Red (FLIR) device. Additionally, Bahrain has requested communication equipment; support equipment; spare and repair parts; tools and test equipment; technical data and publications; personnel training; U.S. government and contractor engineering, technical, and logistics support services; and other related elements of logistics and program support. The total estimated cost is $60.25 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, which has been and continues to be an important security partner in the region. This proposed sale of patrol boats will enhance the military capabilities of the Royal Bahrain Naval Force in the fulfillment of its self-defense, maritime security, and counter-terrorism missions.

Bahrain will use the capability as a deterrent to regional threats and to strengthen its homeland defense. This sale will also improve interoperability with United States and regional allies. Bahrain 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 principal contractors for systems listed include: 35 meter Fast Patrol Boats—SwiftShips, Morgan City, LA; MK38 Mod 3 25mm Gun Weapon System—BAE Systems, Louisville, KY; SeaFlir Model 380 HD Forward Looking Infra-Red Device—Flir Systems, Inc., Portland, OR. There are no known offset agreements proposed in conjunction with this potential sale.

Implementation of this proposed sale will require multiple trips by U.S. Government and contractor representatives to participate in program and technical reviews plus boat reactivation and boat systems training in country, on a temporary basis, for a period of two years.

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

DEFENSE SECURITY COOPERATION AGENCY,
Arlington, VA.

Hon. BOB CORKER,
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. 17–49, concerning the Navy's proposed Letter(s) of Offer and Acceptance to the Government of Canada for defense articles and services estimated to cost $5.23 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.

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

Enclosures.

TRANSMITTAL NO. 17–49

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 Canada.

(ii) Total Estimated Value:

Major Defense Equipment* $2.64 billion.

Other $2.59 billion.

Total $5.23 billion.

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

Major Defense Equipment (MDE):

Ten (10) F/A–18E Super Hornet Aircraft, with F414–GE–400 Engines.

Eight (8) F/A–18F Super Hornet Aircraft, with F414–GE–400 Engines.

Eight (8) F414–GE–400 Engine Spares.

Twenty (20) AN/APG–79 Active Electronically Scanned Array (AESA) Radars.

Twenty (20) M61A2 20MM Gun Systems.

Twenty-eight (28) AN/ALR–67(V)3 Electronic Warfare Countermeasures Receiving Sets.

Fifteen (15) AN/AAQ–33 Sniper Advanced Targeting Pods.

Twenty (20) Multifunctional Information Distribution Systems—Joint Tactical Radio System (MIDS-JTRS).

Thirty (30) Joint Helmet Mounted Cueing Systems (JHMCS).

Twenty-eight (28) AN/ALQ–214 Integrated Countermeasures Systems.

One hundred thirty (130) LAU–127E/A and/or F/A Guided Missile Launchers.

Twenty-two (22) AN/AYK–29 Distributed Targeting System (DTS).

Twenty-two (22) AN/AYK–29 Distributed Targeting Processor (DTP).

One hundred (100) AIM–9X–2 Sidewinder Block II Tactical Missiles.

Thirty (30) AIM–9X–2 Sidewinder Block II Captive Air Training Missiles (CATM).

Eight (8) AIM–9X–2 Sidewinder Block II Special Air Training Missiles (NATM).

Twenty (20) AIM–9X–2 Sidewinder Block II Tactical Guidance Units.

Sixteen (16) AIM–9X–2 Sidewinder Block II CATM Guidance Units.

Non-MDE: Included in the sale are AN/AVS–9 Night Vision Goggles (NVG); AN/ALE–47 Electronic Warfare Countermeasures Systems; AN/ARC–210 Communication System, AN/APX–111 Combined Interrogator Transponder; AN/ALE–55 Towed Decoys; Joint Mission Planning System (JMPS); AN/PYQ–10C Simple Key Loader (SKL); Data Transfer Unit (DTU); Accurate Navigation (ANAV) Global Positioning System (GPS) Navigation; KIV–78 Duel Channel Encryptor, Identification Friend or Foe (IFF), CADS/PADS; Instrument Landing System (ILS); Aircraft Armament Equipment (AAE); High Speed Video Network (HSVN) Digital Video Recorder (HDVR); Launchers (LAU–115D/A, LAU–116B/A, LAU–118A); flight test services; site survey; aircraft ferry; auxiliary fuel tanks; aircraft spares; containers; storage and preservation; transportation; aircrew and maintenance training; training aids and equipment, devices and spares and repair parts; weapon system support and test equipment; technical data Engineering Change Proposals; technical publications and documentation; software; avionics software support; software development/integration; system integration and testing; U.S. Government and contractor engineering technical and logistics support; Repair of Repairable (RoR); repair and return warranties; other technical assistance and support equipment; and other related elements of logistics and program support.

(iv) Military Department: Navy.

(v) Prior Related Cases if any: CN–P–FEC (planning case).

(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: September 11, 2017.

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

POLICY JUSTIFICATION

Government of Canada—F/A–18E/F Super Hornet Aircraft with Support

The Government of Canada has requested a possible sale of ten (10) F/A–18E Super Hornet aircraft, with F414–GE–400 engines; eight (8) F/A–18F Super Hornet aircraft, with F414–GE–400 engines; eight (8) F414–GE–400 engine spares; twenty (20) AN/APG–79 Active Electronically Scanned Array (AESA) radars; twenty (20) M61A2 20MM gun systems; twenty-eight (28) AN/ALR–67(V)3 Electronic Warfare Countermeasures Receiving Sets; fifteen (15) AN/AAQ–33 Sniper Advanced Targeting Pods; twenty (20) Multifunctional Information Distribution Systems—Joint Tactical Radio System (MIDS–JTRS); thirty (30) Joint Helmet Mounted Cueing Systems (JHMCS); twenty-eight (28) AN/ALQ–214 Integrated Countermeasures Systems; one hundred thirty (130) LAU–127E/A and or F/A Guided Missile Launchers; twenty-two (22) AN/AYK–29 Distributed Targeting System (DTS); twenty-two (22) AN/AYK–29 Distributed Targeting Processor (DTP); one hundred (100) AIM–9X–2 Sidewinder Block II Tactical Missiles; thirty (30) AIM–9X–2 Sidewinder Block II Captive Air Training Missiles (CATM); eight (8) AIM–9X–2 Sidewinder Block II Special Air Training Missiles (NATM); twenty (20) AIM–9X–2 Sidewinder Block II Tactical Guidance Units; sixteen (16) AIM–9X–2 Sidewinder Block II CATM Guidance Units. Also included in this sale are AN/AVS–9 Night Vision Goggles (NVG); AN/ALE–47 Electronic Warfare Countermeasures Systems; AN/ARC–210 Communication System; AN/APX–111 Combined Interrogator Transponder; AN/ALE–55 Towed Decoys; Joint Mission Planning System (JMPS); AN/PYQ–10C Simple Key Loader (SKL); Data Transfer Unit (DTU); Accurate Navigation (ANAV) Global Positioning System (GPS) Navigation; KIV–78 Duel Channel Encryptor, Identification Friend or Foe (IFF); CADS/PADS; Instrument Landing System (ILS); Aircraft Armament Equipment (AAE); High Speed Video Network (HSVN) Digital Video Recorder (HDVR); Launchers (LAU–115D/A, LAU–116B/A, LAU–118A); flight test services; site survey; aircraft ferry; auxiliary fuel tanks; aircraft spares; containers; storage and preservation; transportation; aircrew and maintenance training; training aids and equipment, devices and spares and repair parts; weapon system support and test equipment; technical data Engineering Change Proposals; technical publications and documentation; software; avionics software support; software development/integration; system integration and testing; U.S. Government and contractor engineering technical and logistics support; Repair of Repairable (RoR); repair and return warranties; other technical assistance and support equipment; and other related elements of logistics and program support. The estimated total case value is $5.23 billion.

This proposed sale will contribute to the foreign policy and national security objectives of the United States by helping to improve the security of a NATO ally which has been, and continues to be, a key democratic partner of the United States in ensuring peace and stability. The acquisition of the F/A–18E/F Super Hornet aircraft, associated weapons and capability will allow for greater interoperability with U.S. forces, providing benefits for training and possible future coalition operations in support of shared regional security objectives.

The proposed sale of the F/A–18E/F Super Hornet aircraft will improve Canada's capability to meet current and future warfare threats and provide greater security for its critical infrastructure. The F/A–18E/F Super Hornet aircraft will supplement and eventually replace a portion of the Canadian Air Force's aging fighter aircraft. Canada 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 principal contractors will be: Boeing Company, St. Louis, MO; Northrop Grumman, Los Angeles, CA; Raytheon, El Segundo, CA; General Electric, Lynn, MA; and Raytheon Missile Systems Company, Tucson, AZ. The Government of Canada has advised that it will negotiate offset agreements with key U.S. contractors.

Implementation of this proposed sale will require the assignment of contractor representatives to Canada on and intermittent basis over the life of the case to support delivery of the F/A–18E/F Super Hornet aircraft and weapons and to provide supply support management, inventory control and equipment familiarization.

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

TRANSMITTAL NO. 17–49

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 F/A–18E/F Super Hornet is a single-seat and two-seat, twin engine, multi-mission fighter/attack aircraft that can operate from either aircraft carriers or land bases. The F/A–18E/F Super Hornet fills a variety of roles: air superiority, fighter escort, suppression of enemy air defenses, reconnaissance, forward air control, close and deep air support, and day and night strike missions. The F/A–18E/F Weapons System is considered SECRET.

2. The AN/APG–79 Active Electronically Scanned Array (AESA) Radar System is classified SECRET. The radar provides the F/A–18E/F Super Hornet aircraft with all-weather, multi-mission capability for performing air-to-air and air-to-ground targeting and attack. Air-to-air modes provide the capability for all-aspect target detection, long-range search and track, automatic target acquisition, and tracking of multiple targets. Air-to-surface attack modes provide high-resolution ground mapping navigation, weapon delivery, and sensor cueing. The system component hardware (Antenna, Transmitter, Radar Data Processor, and Power Supply) is UNCLASSIFIED. The Receiver-Exciter hardware is CONFIDENTIAL. The radar Operational Flight Program (OFP) is classified SECRET. Documentation provided with the AN/APG–79 radar set is classified SECRET.

3. The AN/ALR–67(V)3 Electronic Warfare Countermeasures Receiving Set is classified CONFIDENTIAL. The AN/ALR–67(V)3 provides the F/A–18E/F aircrew with radar threat warnings by detecting and evaluating friendly and hostile radar frequency threat emitters and providing identification and status information about the emitters to onboard Electronic Warfare (EW) equipment and the aircrew. The Operational Flight Program (OFP) and User Data Files (UDF) used in the AN/ALR–67(V)3 are classified SECRET. Those software programs contain threat parametric data used to identify and establish priority of detected radar emitters.

4. The Multifunctional Informational Distribution System-Joint Tactical Radio System (MIDS-JTRS) is classified CONFIDENTIAL. The MIDS-JTRS is a secure data and voice communication network using Link–16 architecture. The system provides enhanced situational awareness, positive identification of participants within the network, secure fighter-to-fighter connectivity, secure voice capability, and ARN–118 TACAN functionality. It provides three major functions: Air Control, Wide Area Surveillance, and Fighter-to-Fighter. The MIDS-JTRS can be used to transfer data in Air-to-Air, Air-to-Surface, and Air-to-Ground scenarios. The MIDS Enhanced Interference Blanking Unit (EIBU) provides validation and verification of equipment and concept. EIBU enhances input/output signal capacity of the MIDS-JTRS and addresses parts obsolescence.

5. The Joint Helmet Mounted Cueing System (JHMCS) 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. In close combat, a pilot must currently align the aircraft to shoot at a target. JHMCS allows the pilot to simply look at a target to shoot. 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. The system uses a magnetic transmitter unit fixed to the pilot's seat and a magnetic field probe mounted on the helmet to define helmet pointing positioning. A Helmet Vehicle Interface (HVI) interacts with the aircraft system bus to provide signal generation for the helmet display. This provides significant improvement for close combat targeting and engagement. Hardware is UNCLASSIFIED; technical data and documents are classified up to SECRET.

6. The AN/ALQ–214 is an advanced airborne Integrated Defensive Electronic Countermeasures (IDECM) programmable modular automated system capable of intercepting, identifying, processing received radar signals (pulsed and continuous) and applying an optimum countermeasures technique in the direction of the radar signal, thereby improving individual aircraft probability of survival from a variety of surface-to-air and air-to-air Radio Frequency (RF) threats. The system operates in a standalone or Electronic Warfare (EW) suite mode. In the EW suite mode, the AN/ALQ–214 operates in a fully coordinated mode with the towed dispensable decoy, Radar Warning Receiver (RWR), and the onboard radar in the F/A–18E/F Super Hornet in a coordinated, non-interference manner sharing information for enhanced information. The AN/ALQ–214 was designed to operate in a high-density Electromagnetic Hostile Environment with the ability to identify and counter a wide variety of multiple threats, including those with Doppler characteristics. Hardware within the AN/ALQ–214 is classified CONFIDENTIAL.

7. LAIJ–127E/A and/or F/A Guided Missile Launchers designed to enable F/A–18E/F Super Hornet aircraft to carry and launch missiles. It provides the electrical and mechanical interface between the missile and launch aircraft as well as the two-way data transfer between missile and cockpit controls and displays to support preflight orientation and control circuits to prepare and launch the missile.

8. The AIM–9X–2 Block II Sidewinder missile represents a substantial increase in missile acquisition and kinematics performance over the AIM–9M and replaces AIM–9X Block I missile configuration. The missile includes a high off-boresight seeker, enhanced countermeasure rejection capability, low drag/high angle of attack airframe and the ability to integrate the Helmet Mounted Cueing System. The software algorithms are the most sensitive portion of the AIM–9X–2 missile. The software continues to be modified via a pre-planned product improvement (P31) program in order to improve its counter-countermeasure capabilities. No software source code or algorithms will be released. The missile is classified as CONFIDENTIAL.

9. The AIM–9X–2 will result in the transfer of sensitive technology and information. The equipment, hardware, and documentation are classified CONFIDENTIAL. The software and operation performance are classified SECRET. The seeker/guidance control section and the target detector are CONFIDENTIAL and contain sensitive state-of-the-art technology. Manuals and technical documentation that are necessary or support operational use and organizational management are classified up to SECRET. Performance and operating logic of the counter-countermeasures circuits are classified SECRET. The hardware, software, and data identified are classified to protect vulnerabilities, design and performance parameters and similar critical information.

10. The AN/AAQ–33 SNIPER Pod is a multisensor, electro-optical targeting pod incorporating infrared, low-light television camera, laser range finder/target designator, and laser spot tracker. It is used to provide navigation and targeting for military aircraft in adverse weather and using precision-guided weapons such as laser-guided bombs. It offers much greater target resolution and imagery accuracy than previous systems.

11. The AN/PVS–9 Night Vision Goggles (NVG) provide imagery sufficient for an aviator to complete night time missions down to starlight and extreme low light conditions. The AN/PVS–9 is designed to satisfy the F/A–18E/F mission requirements for covert night combat, engagement, and support. The third generation light amplification tubes provide a high-performance, image-intensification system for optimized F/A–18E/F night flying at terrain-masking altitudes. The AN/PVS–9 NVG's are classified as UNCLASSIFIED but with restrictions on release of technologies.

12. The AN/ALE–47 Countermeasures Dispensing Systems is classified SECRET. The AN/ALE–47 is a threat-adaptive dispensing system that dispenses chaff, flares, and expendable jammers for self-protection against airborne and ground-based Radio Frequency (RF) and Infrared Threats. The AN/ALE–47 Programmer is classified CONFIDENTIAL. The Operational Flight Program (OR) and Mission Data Files (MDF) used in the AN/ALE–47 are classified SECRET. Those software programs contain algorithms used to calculate the best defense against specific threats.

13. The AN/ARC–210 Radio's Line-of-sight data transfer rates up to 80 k/s in a 25 kHz channel creating high-speed communication of critical situational awareness information for increased mission effectiveness. Software that is reprogrammable in the field via Memory Loader/Verifier Software making flexible use for multiple missions. The AN/ARC–210 has embedded software with programmable cryptography for secure communications.

14. The AN/APX–111 Combined Interrogator/Transponder (CIT) with the Conformal Antenna System (CAS) is classified SECRET. The CIT is a complete MARK-XII identification system compatible with Identification Friend or Foe (IFF) Modes 1, 2, 3/A, C and 4 (secure). A single slide-in module that can be customized to the unique cryptographic functions for a specific country provides the systems secure mode capabilities. As a transponder, the CIT is capable of replying to interrogation modes 1, 2, 3/A, C (altitude) and secure mode 4. The requirement is to upgrade Canada's Combined Interrogator/Transponder (CIT) AN/APX–111 (V) IFF system software to implement Mode Select (Mode S) capabilities. Beginning in early 2005, EUROCONTROL mandated the civil community in Europe to transition to a Mode S only system and for all aircraft to be compliant by 2009. The Mode S Beacon System is a combined data link and Secondary Surveillance Radar (SSR) system that was standardized in 1985 by the International Civil Aviation Organization (ICAO). Mode S provides air surveillance using a data link with a permanent unique aircraft address. Selective Interrogation provides higher data integrity, reduced Radio Frequency (RF) interference levels, increased air traffic capacity, and adds air-to-ground data link.

15. The AN/ALE–55 Towed Decoy improves aircraft survivability by providing an enhanced, coordinated on-board/off-board countermeasure response to enemy threats.

16. The Joint Mission Planning System (JMPS) is classified SECRET. JMPS will provide mission planning capability for support of military aviation operations. It will also provide support for unit-level mission planning for all phases of military flight operations and have the capability to provide necessary mission data for the aircrew. JMPS will support the downloading of data to electronics data transfer devices for transfer to aircraft and weapon systems. A JMPS for a specific aircraft type will consist of basic planning tools called the Joint Mission Planning Environment (JMPE) mated with a Unique Planning Component (UPC) provided by the aircraft program. In addition UPCs will be required for specific weapons, communication devices, and moving map displays. The JMPS will be tailored to the specific releasable configuration for the F/A–18E/F Super Hornet.

17. AN/PYQ–10(C) is the next generation of the currently fielded AN/CYZ–10 Data Transfer Device (DTD). The AN/PYQ–10(C) provides automated, secure and user-friendly methods for managing and distributing cryptographic key material, Signal Operating Instructions (SOI), and Electronic Protection data. This course introduces some of the basic components and activities associated with the AN/PYQ–10(C) in addition to hands-on training. Learners will become familiar with the security features of the Simple Key Loader (SKL), practice the initial setup of the SKL, and will receive and distribute electronic keys using the SKL. Hardware is considered CLASSIFIED.

18. Data Transfer Unit (DTU) with CRYPTO Type 1 and Ground Encryption Device (GED). The DTU (MU–1164(C)/A) has an embedded DAR–400ES. Both versions of the DAR–400 are type 1 devices.

19. Accurate Navigation (ANAV) Global Positioning System (GPS) also includes Key loading Installation and Facility Charges. The ANAV is a 24–channel SAASM based pulse-per-second GPS receiver built for next generation GPS technology.

20. KIV–78 Dual Channel Encryptor Mode 4/Mode 5 Identification Friend or Foe (IFF) Crypto applique includes aircraft installs and initial spares, to ensure proper identification of aircraft during coalition efforts. The KIV–78 provides cryptographic and time-of-day services for a Mark XIIA (Mode 4 and 5) IFF Combined Interrogator/Transponder (CIT), individual interrogator, and individual transponder. Hardware is considered CLASSIFIED.

21. High Speed Video Network (HSVN) Digital Video Recorder (HDVR) with CRYPTO Type 1 and Ground Encryption Device (GED). The HDVR has an embedded DAR–400EX and the GED has an embedded DAR–400ES Both versions of the DAR–400 are Type 1 devices.

22. 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.

23. A determination has been made that the Government of Canada 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.

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

ADDITIONAL STATEMENTS

TRIBUTE TO PETER WOLD

● Mr. BARRASSO. Mr. President, today I wish to celebrate the Boys and Girls Clubs of Central Wyoming's 2017 honoree, Peter Wold.

Since 1978, the Boys and Girls Clubs of Central Wyoming has been working to make a positive difference in the lives of children. Their mission is to inspire all youth, especially those who need them the most, to reach their full potential and to be productive, responsible, and caring citizens. Their activities provide the children in our community with a sense of competence, usefulness, and belonging. The Boys and Girls Clubs of Central Wyoming is grateful for Peter's contributions to their critically important mission.

On September 20, 2017, the Boys and Girls Clubs of Central Wyoming will be hosting the 19th Annual Awards and Recognition Breakfast. Every year at this event, the Boys and Girls Clubs honors a member of the community who has made outstanding contributions to both their organization and the city of Casper. It is a wonderful celebration. Peter Wold is a perfect honoree because of his commitment to the youth across the State of Wyoming.

Peter is a successful businessman, philanthropist, and family man. He is a native of Casper, WY. Peter attended Colorado State University and earned a bachelor of science degree in biological science. He started his career at a trout farm in Idaho and later became one of the most influential landmen in the State of Wyoming. Peter followed in his father John Wold's footsteps at Wold Oil Properties, a family owned and operated oil and gas company characterized by consistency and western values. Since 1993, he and his brother Jack Wold have owned and managed the company. Peter is currently the President of Wold Energy Partners and CEO of Wold Oil Properties.

Throughout his career, Peter gained valuable experience and knowledge of Wyoming industries, businesses, and communities. Since 1979, he has been managing member of Hole-in-the-Wall Ranch. Peter was a representative on the Bureau of Land Management's National Public Lands Advisory Council. Previously, Peter served as the chairman of the board of directors of the Wyoming Enhanced Oil Recovery Commission and a member of the board of directors of the Independent Petroleum Association of Rocky Mountain States. He is an active member of the Wyoming Association of Professional Landmen and the American Association of Professional Landmen. Peter Wold also served on the corporate boards of Arch Coal Corporations and Oppenheimer Funds.

The Wold family has a proud tradition of public service and helping the people of Wyoming. Peter represented Natrona County in the Wyoming House of Representatives from 1989 to 1992. His passion to give back and sense of duty to the people of Wyoming was instilled in him by his father, John Wold. John Wold served in the Wyoming House of Representatives from 1957 to 1959 and the U.S. House of Representatives from 1969 to 1971. He was the first professional geologist in the U.S. Congress. Peter's son Matthew continued the family tradition of public service when he interned in my Washington, DC, office during the summer of 2007.

Peter Wold continues to devote his time, talents, and resources to help promote programs that develop the mental and physical well-being of youth across Wyoming. In addition to supporting the Boys and Girls Clubs, Peter Wold is also a member of the board of trustees for the YMCA of Natrona County. He played an integral role in getting a new facility to serve the needs of the children, families, and members of the Casper community. Through his work with the Wold Foundation, Peter supports numerous projects and programs aimed at assisting Wyoming youth, such as the Natrona County School District History Day competition and the Little Hands Casper arts education program. His generosity to youth organizations will ensure the future of Wyoming is strong and vibrant.

Peter Wold and his family truly represent the strong Wyoming values of hard work, generosity, and compassion. Peter Wold and his wife, Marla, have three children, Abbie Long and her husband Steve, Matthew Wold and his wife Katie, and Joe Wold and his wife Chelsey, as well as four grandchildren, Hayden, Harper, Ellie, and Annie. Casper and Wyoming are a better place thanks to the contributions of this exceptional family.

It is with great honor that I recognize this outstanding member of our Wyoming community. My wife, Bobbi, joins me in extending our congratulations to Peter Wold for receiving this special award.●

TRIBUTE TO DR. DONALD F. BOESCH

● Mr. CARDIN. Mr. President, I would like to take this opportunity to thank Dr. Donald F. Boesch, who is stepping down as president of the University of Maryland Center for Environmental Science, UMCES, a position he has held for the past 27 years.

Since 1990, Dr. Boesch has led an institution with an excellent reputation for Chesapeake Bay science to global prominence in coastal watershed science and its application, building highly capable research facilities at each of the UMCES's four laboratories. Since 2008, he has also served as vice chancellor for environmental sustainability for the University System of Maryland.

During Dr. Boesch's tenure, UMCES went through remarkable transformations. Research grants more than tripled and significantly diversified with multiple agency and private and philanthropic sponsors. This allowed UMCES scientists to expand their research into new and emerging topics critical to understanding Maryland's environment. He also initiated the Integration and Application Network, which is responsible for the annual ''report card'' on the Chesapeake Bay, to inspire and produce timely syntheses on critical environmental issues and identify practical and effective solutions to the bay's problems.

Thanks to Don's unstinting passion and dedication to environmental issues, UMCES has had a profoundly positive impact on improving the health of Maryland's environment, playing a major role in the university's mission to enhance the quality of life in Maryland and our region. UMCES has become recognized as the State's foremost research authority on environmental matters that are critical to Maryland and the Nation, from enhancing the health of the Chesapeake Bay to restoring our State's oyster population.

Don Boesch has been an extremely effective leader of people. He worked with the University of Maryland Baltimore County and the University of Maryland, Baltimore to form a novel research partnership, the Institute of Marine and Environmental Technology, located on Baltimore's Inner Harbor. He spearheaded the effort to design and construct the state-of-the-art research vessel *Rachel Carson* to help understand and monitor the Chesapeake Bay and coastal Atlantic Ocean. He led UMCES, a longtime partner in graduate education and classroom instruction with the University of Maryland, to receive accreditation to award joint graduate degrees in environmental science.

Don has been involved in research on the Chesapeake Bay for more than 35 years, becoming one of the Nation's most widely recognized and respected experts in applying science to public policies for the protection, sustainable use, and restoration of coastal ecosystems. He has been an official adviser to Federal agencies, the Chesapeake Bay Program, and five Maryland Governors. He is a member of the Governor's Chesapeake Bay Cabinet. He has also served as chair of the Ocean