Billing Code: 5001-06

DEPARTMENT OF DEFENSE

Office of the Secretary

[Transmittal No. 20-42]

Arms Sales Notification

AGENCY: Defense Security Cooperation Agency, Department of Defense.

ACTION: Arms sales notice.

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

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

SUPPLEMENTARY INFORMATION: This 36(b)(1) arms sales notification is published to fulfill the requirements of section 155 of Public Law 104-164 dated July 21, 1996. The following is a copy of a letter to the Speaker of the House of Representatives, Transmittal 20-42 with attached Policy Justification and Sensitivity of Technology.

Dated: July 13, 2020.

Aaron T. Siegel,

Alternate OSD Federal Register Liaison Officer,

Department of Defense.

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

June 15, 2020

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

Dear Madam Speaker:

Pursuant to the reporting requirements of Section 36(b)(1) of the Arms Export Control Act, as amended, we are forwarding herewith Transmittal No. 20-42 concerning the Navy's proposed Letter(s) of Offer and Acceptance to the Government of Canada for defense articles and services estimated to cost $862.3 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
2. Policy Justification
3. Sensitivity of Technology

Transmittal No. 20-42

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*	$204.50 million
Other	$657.80 million
TOTAL	$862.30 million

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

Major Defense Equipment (MDE):
Fifty (50) Sidewinder AIM-9X Block II Tactical Missiles
Fifty (50) Sidewinder AIM-9X Block II Captive Air Training Missiles (CATMs)
Ten (10) Sidewinder AIM-9X Block II Special Air Training Missiles (NATMs)
Ten (10) Sidewinder AIM-9X Block II Tactical Guidance Units
Ten (10) Sidewinder AIM-9X Block II CATM Guidance Units
Thirty-eight (38) APG-79(V)4 Active Electronically Scanned Array (AESA) Radar
Thirty-eight (38) APG-79(V)4 AESA Radar A1 Kits
Twenty (20) Joint Standoff Weapon (JSOW) C, AGM-154C
Forty-six (46) F/A-18A Wide Band RADOMEs

Non-MDE:
Also included are additional technical and logistics support for the AESA radar; upgrades to the Advanced Distributed Combat Training System (ADCTS) to ensure flight trainers remain current with the new technologies; software development to integrate the systems listed into the F/A-18A airframe and install Automated Ground Collision Avoidance System (Auto GCAS); thirty (30) Bomb Release Unit (BRU) - 42 Triple Ejector Racks (TER); thirty (30) Improved Tactical Air Launched Decoy (ITALD); one hundred four (104) Data Transfer Device/Data Transfer Units (DTD/DTU); twelve (12) Joint Mission Planning System (JMPS); one hundred twelve (112) AN/ARC-210 RT-2036 (Gen 6) radios and F/A-18 integration equipment; support equipment; tools and test equipment; technical data and publications; U.S. Government and contractor engineering, technical, and logistics support services; and other related elements of logistical and program support.

(iv) Military Department: Navy (CN-P-LKZ, CN-P-LKW, CN-P-LLE, CN-P-LLA, CN-P-LKY, CN-P-LKX, CN-P-LDD, etc.)

(v) Prior Related Cases, if any: CN-P-FFE; CN-P-FEL; CN-P-LKS; CN-P-LKT

(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: **June 15, 2020**

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

POLICY JUSTIFICATION

Canada – Hornet Extension Program Related FMS Acquisitions

The Government of Canada has requested to buy fifty (50) Sidewinder AIM-9X Block II Tactical missiles; fifty (50) Sidewinder AIM-9X Block II Captive Air Training Missiles (CATMs); ten (10) Sidewinder AIM-9X Block II Special Air Training Missiles (NATMs); ten (10) Sidewinder AIM-9X Block II Tactical Guidance Units; ten (10) Sidewinder AIM-9X Block II CATM Guidance Units; thirty-eight (38) APG-79(V)4 Active Electronically Scanned Array (AESA) radar units; thirty-eight (38) APG-79(V)4 AESA Radar A1 kits; twenty (20) Joint Standoff Weapon (JSOW) C, AGM-154C; forty-six (46) F/A-18A Wide Band RADOMEs. Also included are additional technical and logistics support for the AESA radar; upgrades to the Advanced Distributed Combat Training System (ADCTS) to ensure flight trainers remain current with the new technologies; software development to integrate the systems listed into the F/A-18A airframe and install Automated Ground Collision Avoidance System (Auto GCAS); thirty (30) Bomb Release Unit (BRU) - 42 Triple Ejector Racks (TER); thirty (30) Improved Tactical Air Launched Decoy (ITALD); one hundred four (104) Data Transfer Device/Data Transfer Units (DTD/DTU); twelve (12) Joint Mission Planning System (JMPS); one hundred twelve (112) AN/ARC-210 RT-2036 (Gen 6) radios and F/A-18 integration equipment; support equipment; tools and test equipment; technical data and publications; 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 $862.3 million.

This proposed sale will support the foreign policy and national security objectives of the United States by helping to improve the military capability of Canada, a NATO ally that is an important force for ensuring political stability and economic progress and a contributor to military, peacekeeping and humanitarian operations around the world. This sale will provide Canada a 2-squadron bridge of enhanced F/A-18A aircraft to continue meeting NORAD and NATO commitments while it gradually introduces new advanced aircraft via the Future Fighter Capability Program between 2025 and 2035.

The proposed sale of the capabilities, as listed, will improve Canada's capability to meet current and future warfare threats and provide greater security for its critical infrastructure. This sale will provide Canada the ability to maximize the systems' employment and sustainment, significantly enhancing the warfighting capability of the Royal Canadian Air Force's F/A-18 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 prime contractors will be Raytheon Corporation, El Segundo, CA; General Dynamics Mission Systems, Marion, VA; The Boeing Company, St. Louis, MO; and Collins Aerospace, Cedar Rapids, IA. The purchaser typically requests offsets. Any offset agreement will be defined in negotiations between the purchaser and the contractor(s).

Implementation of this proposed sale will require the assignment of contractor representatives to Canada on an intermittent basis over the life of the case to support delivery and integration of items onto the existing F/A-18A aircraft 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. 20-42
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 following are included in this sale:

a. The AIM-9X Block II and Block II+ (Plus) SIDEWINDER Missile represents a substantial increase in missile acquisition and kinematics performance over the AIM-9M and replaces the 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 missile. The software continues to be modified via a pre-planned product improvement (P3I) program in order to improve its counter-countermeasure capabilities. No software source code or algorithms will be released. The missile is classified as CONFIDENTIAL. The AIM-9X will result in the transfer of sensitive technology and information. The equipment, hardware, and documentation are classified CONFIDENTIAL. The software and operational 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.

b. The AN/APG-79 Active Electronically Scanned Array (AESA) Radar System is classified SECRET. The radar provides the F/A-18A 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.

c. The AGM-154 Joint Standoff Weapon (JSOW) is used by Navy, Marine Corps, and Air Force, and allows aircraft to attack well-defended targets in day, night, and adverse weather conditions. AGM-154C carries a BROACH warhead. The BROACH warhead incorporates an advanced multi-stage warhead. JSOW-C uses the GPS Precise Positioning System (PPS), which provides for a more accurate capability than the commercial version of GPS. The JSOW-C incorporates components, software, and technical design information that are considered sensitive. The following JSOW-C components being conveyed by the proposed sale that are considered sensitive and are classified CONFIDENTIAL include the GPS/INS, IIR seeker, OFP software and missile operational characteristics and performance data. These elements are essential to the ability of the JSOW-C missile to selectively engage hostile targets under a wide range of operational, tactical, and environmental conditions.

d. The Wide Band RADOME (WBR) is a high performance nose radome designed for use with the Active Electronically Scanned Array (AESA) Radar. The WBR is required to leverage the full capability of the AESA Radar. The Radome will provide superior RF performance over broader AESA Radar operational bands which will give the user an advantage in operational scenarios. Specifically, the WBR will provide improved target detection with less interference and reduce jamming vulnerability. Purchasing the AESA without the WBR would significantly reduce the capability of the AESA and the user would gain very little advantage with the AESA.

e. The Upgrades to the Advanced Distributed Combat Training System (ADCTS), provides an aggressive program upgrade the warfighting capability of the F/A-18. The program will introduce new systems and weapons to the aircraft. In order to have pilots ready to utilize the new technologies, it is imperative that the user's Pilot Trainer (ADCTS) undergoes a parallel upgrade effort. The ADCTS is an integral part of the user's Pilot Training Syllabus and this procurement will address this requirement. It will provide pilots the ability to train with the new systems that will be resident in the aircraft in a simulated environment. This procurement will provide pilots the ability to maximize use of the new capabilities that will eventually translate to the operational environment and make the users Air Force a significant contributor to international coalition initiatives.

f. Software Development. The challenge facing the user nation is that in order to add all the new capabilities and weapons to the platform there is a parallel software effort required

to ensure all the new capabilities have a software model that will support their integration and use. The success of the aggressive procurement of the systems and capabilities for the program will be dependent on the ability to develop and test the requisite software. This is a significant effort that will rely on Naval Air Weapons Station China Lake to develop the required products. This will entail development of the product, lab testing and eventually flight testing of the software loads. There will be some mutual software development, but the end result will depend on U.S. Government engineers to provide final check and approval of all software profiles. This FMS case funds this effort. Additionally, the software effort will support Automatic Ground Collision Avoidance System (A-GCAS). This system is also referred to as Automatic Terrain Avoidance Warning System (A-TAWS). This is flight control software that uses a terrain elevation database to calculate the aircraft's relative position above the ground. If it senses that the aircraft is on a collision course with the ground that is outside of normal parameters, it automatically commands the aircraft to roll wings level and recover away from a ground collision

g. The ADM-141C Improved Tactical Air-Launched Decoy (ITALD) is unclassified. The ITALD vehicle is intended to be delivered by sea- and land-based tactical aircraft, to cause an increase in the number of apparent targets to enemy defenses prior to or during air strikes. The ITALD system consists of the flight vehicle, launch rack (Improved Triple Ejector Rack (ITER)), Improved Decoy Tester/Programmer (IDTP), Radio Frequency Payload System Tester (PSST), and shipping/storage container. The ITALD is capable of functioning in the vehicle test mode, mission programming mode (using JMPS with ITALD UPC), GPS almanac uploading mode, captive carriage mode, launch mode, jettison mode, and free-flight mode.

h. 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-18A, with maximum commonality with the most advanced United States Marine Corps configuration of these aircraft.

i. The AN/ARC-210 RT-2036 (Gen 6) Radio's Line-of-sight data transfer rates up to 80 kb/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. Relative to the 5th Generation AN/ARC-210 radios, the 6th generation AN/ARC-210 RT-2036 adds, in addition to newer hardware, the Mobile User Objective System (MUOS) capability. Access to the MUOS satellite constellation can be effectively controlled by withholding the relevant order wire keys from RT-2036 users.

2. If a technologically advanced adversary were to obtain knowledge of the specific hardware or software 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 a system with similar or advance capabilities.

3. A determination has been made that the recipient country, the Government of Canada can provide substantially the same degree of protection for the classified and sensitive technology being released as the United States Government. This sale is necessary in furtherance if the United States Foreign Policy and National Security objectives outlined in the Policy Justification.

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

[FR Doc. 2020-15511 Filed: 7/16/2020 8:45 am; Publication Date: 7/17/2020]