Billing Code: 5001-06

DEPARTMENT OF DEFENSE

Office of the Secretary

(Transmittal No. 16-10)

36(b)(1) Arms Sales Notification

AGENCY: Department of Defense, Defense Security Cooperation Agency.

ACTION: Notice.

SUMMARY: The Department of Defense is publishing the unclassified text of a section 36(b)(1) arms sales notification. This is published to fulfill the requirements of section 155 of Public Law 104-164 dated July 21, 1996.

FOR FURTHER INFORMATION CONTACT: Sarah A. Ragan or Heather N. Harwell,

DSCA/LMO, (703) 604-1546/ (703) 607-5339.

The following is a copy of a letter to the Speaker of the House of Representatives,

Transmittal 16-10 with attached Policy Justification.

Dated: January 5, 2016.

Aaron Siegel, Alternate OSD Federal Register Liaison Officer, Department of Defense.



DEFENSE SECURITY COOPERATION AGENCY 201 12TH STREET SOUTH, STE 203 ARLINGTON, VA 22202-8408

The Honorable Paul D. Ryan Speaker of the House U.S. House of Representatives Washington, DC 20515

DEC | 8 2015

Dear Mr. 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. 16-10, concerning the Department of the Army's proposed Letter(s) of Offer and Acceptance to the Government of Australia for defense articles and services estimated to cost \$180 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

Vice Admiral, USN

Director

Enclosures:

- 1. Transmittal
- 2. Policy Justification
- 3. Sensitivity of Technology



Transmittal No. 16-10

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</u>: Government of Australia
- (ii) <u>Total Estimated Value:</u>

Major Defense Equipment* \$105 million
Other \$75 million
TOTAL \$180 million

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

Major Defense Equipment (MDE):

Three (3) CH-47F Chinook Helicopters

Six (6) T55-GA-714A Aircraft Turbine Engines

Three (3) Force XXI Battle Command, Brigade & Below (FBCB2)/Blue Force Tracker (BFT)

Three (3) Common Missile Warning Systems (CMWS)

Three (3) Honeywell H-764 Embedded Global Positioning/Inertial Navigation Systems

Three (3) Infrared Signature Suppression Systems

This request also includes the following Non-Major Defense Equipment; AN/APX-123A Identification Friend or Foe (IFF) Transponders, Defense Advanced Global Positioning System (GPS) Receiver (DAGR), AN/ARC-201D SINCGARS Airborne Radio Systems, AN/ARC-220 High Frequency Airborne Communication Systems, AN/ARC-231(V)(C) Airborne VHF/UHF/LOS SATCOM Communications Systems, KY-100 Secure Communication Systems, KIV-77 Common IFF Cryptographic Computers, AN/AVS-6 Aviator's Night Vision Systems, AN/ARN-147 Very High Frequency (VHF) Omni Ranging/Instrument Landing System Receiver, AN/PYQ-10(C) Simple Key Loaders, AN/ARN-153 Tactical Airborne Navigation (TACAN) System, Spare Parts, Tools, Ground Support Equipment, Technical Publications, Contractor and U.S. Government Technical Services.

- (iv) Military Department: Army, VAF
- (v) Prior Related Cases, if any: UDK \$353M May 2010

- (vi) 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</u> <u>Proposed to be Sold</u>: See Annex attached
- (viii) Date Report Delivered to Congress: 18 DEC 2015

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

POLICY JUSTIFICATION

Australia – CH-47F – Aircraft

The Government of Australia has requested a possible sale of:

Major Defense Equipment (MDE):

Three (3) CH-47F Chinook Helicopters

Six (6) T55-GA-714A Aircraft Turbine Engines

Three (3) Force XXI Battle Command, Brigade & Below (FBCB2)/Blue Force Tracker (BFT)

Three (3) Common Missile Warning Systems (CMWS)

Three (3) Honeywell H-764 Embedded Global Positioning/Inertial Navigation Systems

Three (3) Infrared Signature Suppression Systems

This request also includes the following Non-Major Defense Equipment; AN/APX-123A Identification Friend or Foe (IFF) Transponders, Defense Advanced Global Positioning System (GPS) Receiver (DAGR), AN/ARC-201D SINCGARS Airborne Radio Systems, AN/ARC-220 High Frequency Airborne Communication Systems, AN/ARC-231(V)(C) Airborne VHF/UHF/LOS SATCOM Communications Systems, KY-100 Secure Communication Systems, KIV-77 Common IFF Cryptographic Computers, AN/AVS-6 Aviator's Night Vision Systems, AN/ARN-147 Very High Frequency (VHF) Omni Ranging/Instrument Landing System Receiver, AN/PYQ-10(C) Simple Key Loaders, AN/ARN-153 Tactical Airborne Navigation (TACAN) System, Spare Parts, Tools, Ground Support Equipment, Technical Publications, Contractor and U.S. Government Technical Services.

The total estimated value of MDE is \$105 million. The total overall estimated value is \$180 million.

This proposed sale will enhance the foreign policy and national security objectives of the United States by helping to improve the security of a strategic partner which has been, and continues to be an important force for political stability and economic progress within the Pacific region and globally.

The proposed sale of the CH-47F aircraft will improve Australia's heavy lift capability. Australia will use the enhanced capability to strengthen its homeland defense and deter regional threats. The CH-47F aircraft will replace Australia's retiring CH-47D aircraft. Australia will have no difficulty absorbing these aircraft 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 the Boeing Helicopter Company of Philadelphia, Pennsylvania. There are no known offset agreements at this time associated with this proposed sale.

Implementation of this sale will not require the assignment of any additional U.S. or contractor representatives to Australia.

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

Transmittal No. 16-10

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

> Annex Item No. vii

(vii) Sensitivity of Technology

1. The CH-47F aircraft, which includes two T55-GA-714A engines, has been identified as Major Defense Equipment (MDE). The CH-47F is a medium lift, newly manufactured rotary winged aircraft. The CH-47F has the Common Avionics Architecture System (CAAS) cockpit, which provides aircraft system, flight, mission, and communication management systems. The Navigation System will have two Embedded GPS/INS (EGIs), two Digital Advanced Flight Control System (DAFCS), one ARN- 149 Automatic Direction Finder, one ARN-147 (VOR/ILS marker Beacon System), one ARN- 153 TACAN, two air data computers, one Radar Altimeter system. The communications suite is as follows: two each AN/ARC-231 Multi-mode radios, and two each AN/ARC-201D SINCGARS radios. The Identification Friend or Foe (IFF) will be the APX-123A, which provides the additional functionality of Mode 5 capability. Aircraft survivability equipment (ASE) will not be provided on this LOA. Support and fielding for the CH-47Fs and installed CAAS would require one copy of technical documentation, along with a Contractor Field Representative.

- 2. The AN/APX-123A, Identification Friend or Foe (IFF) Transponder is a space diversity transponder and is installed on several military platforms. When installed in conjunction with platform antennas and the Remote Control Unit (RCU) (or other appropriate control unit), the transponder provides identification, altitude and surveillance reporting in response to interrogations from airborne, ground-based and/or surface interrogators. The transponder provides operational capabilities for Mark XII IFF capabilities of Modes 1, 2, 3/A, C, 4,5 capable and Mode S (levels 1, 2, and 3 capable). Additionally, the AN/APX-123A also provides automated ID, position and latitude of the aircraft, and unencrypted Automatic Dependent Surveillance Broadcast (ADS-B) and is compatible with the Traffic Alert and Collision Avoidance System (TCAS) II equipment. The AN/APX-123A is classified SECRET when loaded with software.
- 3. The AN/ARC-201D is a tactical airborne military VHF radio system consisting of Receiver-Transmitter, Radio RT-1478D/ARC-201D(V), Battery Box CY-8515/ARC-201(V) and; Mounting Base MT-7101/ARC-201D(V). This radio system is capable of secure COMSEC, anti-jam, voice and data communications in any of 2320 channels and two frequency-hopping (FH) modes. The radio is interconnected and interoperated with the aircraft's MIL-STD-1553B bus controller equipment. The AN/ARC-201D is classified SECRET when loaded with software.
- 4. The AN/ARC-220 is a multifunctional, fully digital signal processing (DSP) high frequency (HF) radio intended for airborne applications. Advanced communications features made possible by DSP technology include embedded Automatic Link Establishment (ALE), Serial Tone Data Modem, and Anti-jam Electronic Counter-Counter Measures (ECCM) functions. The AN/ARC-220 Advanced HF Aircraft Communications System is applicable for a variety of tactical rotary-wing and fixed-wing airborne applications. In addition to offering enhanced voice communications capabilities, the AN/ARC-220 is an advanced data communications system capable of providing reliable digital connectivity. The AN/ARC-220 is classified SECRET when loaded with software.
- 5. The AN/ARC-231(V)(C) is a secure communication system that provides Line-of-Sight (LOS) communications and Beyond Line-of-Sight (BLOS) satellite communications (SATCOM), as well Voice and data communications capabilities. In addition to Satellite Communications, the AN/ARC-231(V)(C) provides Secure/Electronic Counter-Counter Measures (ECCM) communications Single Channel Ground and Airborne System (SINCGARS) and HAVE QUICK (HQ) waveforms. The AN/ARC-231(V)(C) is classified SECRET when loaded with software.
- 6. The TSEC KY-100 is COMSEC equipment that has sensitive technology and is classified SECRET if software fill is installed. A separate case with NSA would be required to procure this equipment. The KY-100 is classified SECRET when loaded with software.
- 7. Blue Force Tracker Aviation (BFT-A) within the Force XXI Battle Command Brigade

& Below program, BFT-AVN is a network system with varied configurations utilizing integrated UHF/VHF/FM voice/data communications and GPS positioning data that allow integration into various Army, joint, and coalition rotary and fixed-wing aircraft types. The system provides commanders, staffs, and other key personnel situational awareness of aviation assets, including Unmanned Aerial Vehicles. With BFT-AVN, aircrews are able to view positions of friendly forces as well as enemy locations. The system also enables rapid, dynamic tasking and re-tasking of those assets to accomplish aviation missions in complex environments. Another key capability of BFT-AVN is the ability to send and receive data and messages beyond line-of-sight, overcoming the communication challenges of distance and terrain. The BFT-A is UNCLASSIFIED.

Note: The following items are not identified in the CH-47F Security Classification Guide and sensitive technology classification could not be determined. Therefore the assumption is that they may contain sensitive technology.

- 8. The Embedded GPS/INS (EGI) unit CN-1689-(H-764GU) contains sensitive GPS technology. The EGI+429 is a self-contained, all-attitude navigation system providing outputs of linear and angular acceleration, linear and angular velocity, position, attitude (roll, pitch), platform azimuth, magnetic and true heading, altitude, body angular rates, time tags, and Universal Time Coordinated (UTC) synchronized time. The EGI is UNCLASSIFIED/Missile Technology Regime (MTCR) Controlled.
- 9. The AN/ARN-149, Automatic Direction Finder (ADF) Receiver, is a low frequency radio that provides automatic compass bearing on any radio signal within the frequency range of 100 to 2199.5 kHz as well as navigation where a commercial AM broadcast signal is the only available navigation aid. The AN/ARN-149 is UNCLASSIFIED.
- 10. The AN/ARN-153, Tactical Airborne Navigation (TACAN) System, is a full featured navigational system that supports four modes of operation: receive mode; transmit receive mode; air-to-air receive mode; and air-to-air transmit-receive mode. The ARN-153 is UNCLASSIFIED.
- 11. The AN/ARN-147, Very High Frequency (VHF) Omni Ranging/Instrument Landing System Receiver that provides internal MIL-STD-1553B capability and is MIL-E-5400 class II qualified. The ARN-147 is UNCLASSIFIED.
- 12. The KIV-77, is a Common Crypto Applique for Identification, Friend or Foe (IFF) that provides Mode 4/5 capability. The KIV-77 is SECRET when loaded with software.
- 13. The AN/PYQ-10 (C) Simple Key Loader (SKL) is a ruggedized, portable, hand-held fill device used for securely receiving, storing, and transferring electronic key material and data between compatible end cryptographic units (ECU) and communications equipment. The AN/PYQ-10(C) is SECRET when loaded with software.
- 14. The ramifications of this technology in the hands of an adversary are severe. Should a

fill device or cryptographic asset with the accompanying radio system become compromised, it would enable an adversary to intercept our communications, both verbal and encrypted until the COMSEC keys were changed.

- 15. A determination has been made that the recipient country 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.
- 16. All defense articles and services listed in this transmittal have been authorized for release and export to the Government of Australia.

[FR Doc. 2016-148 Filed: 1/7/2016 8:45 am; Publication Date: 1/8/2016]