



**Billing Code: 5001-06**

**DEPARTMENT OF DEFENSE**

**Office of the Secretary**

**(Transmittal No. 16-43)**

**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:** Pam Young, DSCA/SA&E/RAN, (703) 697-9107.

The following is a copy of a letter to the Speaker of the House of Representatives, Transmittal 16-43 with attached Policy Justification and Sensitivity of Technology.

Dated: December 2, 2016.

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



DEFENSE SECURITY COOPERATION AGENCY  
201 12TH STREET SOUTH, STE 203  
ARLINGTON, VA 22202-6408

NOV 16 2016

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

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. 16-43, concerning the Department of the Air Force's proposed Letter(s) of Offer and Acceptance to the Republic of Korea for defense articles and services estimated to cost \$141 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,



J.W. Rixey  
Vice Admiral, USN  
Director

Enclosures:

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



## Transmittal No. 16-43

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: Republic of Korea

(ii) Total Estimated Value:

Major Defense Equipment*	\$41 million
Other	\$100 million
 TOTAL	 <hr/> \$141 million

(iii) Description and Quantity or Quantities of Articles or Services under Consideration for Purchase: The Government of the Republic of Korea has requested the sale and installation of AN/AAQ-24(V) Large Aircraft Infrared Countermeasures (LAIRCM) systems on up to four (4) A-330 Multi-Role Tanker and Transport (MRTT) aircraft. Each LAIRCM system consists of three (3) Guardian Laser Terminal Assemblies (GLTA), six (6) Ultra-Violet Missile Warning System (UVMWS) Sensors AN/AAR-54, one (1) LAIRCM System Processor Replacements (LSPR), one (1) Control Indicator Unit Replacement (CIUR), one (1) Smart Card Assembly (SCA), one (1) High Capacity Card (HHC), and a User Data Memory (UDM) card.

Major Defense Equipment (MDE):

Twenty-six (26) GLTA AN/AAQ-24(V) (12 + 14 spares)  
Twelve (12) LSPR AN/AAQ-24(V) (4 + 8 spares)  
Fifty-four (54) UVMWS Sensors AN/AAR-54 (24 + 30 spares)

Non-MDE include:

CIURs, SCAs, HHCs, UDM cards, initial spares and repair parts, consumables, support equipment, technical data, engineering change proposals, minor modifications, publications, Field Service Representatives' (FSRs), repair and return, depot maintenance, training and training equipment, contractor technical and logistics personnel services, U.S. Government and contractor representative support, Group A and B installation support, flight test and certification, selective availability anti-spoofing module (SAASM) Global Positioning System, and other related elements of logistics support.

(iv) Military Department: Air Force

(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 Annex Attached.

(viii) Date Report Delivered to Congress: November 16, 2016

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

### POLICY JUSTIFICATION

#### Republic of Korea -Large Aircraft Infrared Countermeasures (LAIRCM) System

The Government of the Republic of Korea (ROK) has requested the sale and installation of AN/AAQ- 24(V) Large Aircraft Infrared Countermeasures (LAIRCM) systems for up to four (4) A-330 Multi-Role Tanker and Transport (MRTT) aircraft. Each LAIRCM system consists of the following major defense equipment (MDE): three (3) Guardian Laser Terminal Assemblies (GLTA), six (6) Ultra-Violet Missile Warning System (UVMWS) Sensors AN/AAR-54, one (1) LAIRCM System Processor Replacement (LSPR), one (1) Control Indicator Unit Replacement (CIUR), one (1) Smart Card Assembly (SCA), one (1) High Capacity Card (HCC), and User Data Memory (UDM) card. The sale includes spares bringing the MDE total to twenty-six (26) GLTAs, twelve (12) LSPRs, and fifty-four (54) UVMWS Sensors AN/AAR-54.

The sale also includes the following non-MDE items: CIURs, SCAs, HHCs, UDM Cards, initial spares and repair parts, consumables, support equipment, technical data, engineering change proposals, minor modifications, publications, Field Service Representatives' (FSRs), repair and return, depot maintenance, training and training equipment, contractor technical and logistics personnel services, U.S. Government and contractor representative support, Group A and B installation support, flight test and certification, selective availability anti-spoofing module (SAASM) Global Positioning System, and other related elements of logistics support. The estimated cost is \$141 million.

The ROK is procuring the LAIRCM system to defend and protect its future aerial refueling and troop transport capabilities. This helps the ROK Air Force become more capable of sustaining and projecting air power across large distances and transporting its forces and fighter aircraft for both operational and training missions with less reliance on foreign partners, such as the United States. The ROK will have no difficulty absorbing this equipment into its armed forces.

This proposed sale contributes to the foreign policy and national security of the United States. The ROK is one of the major political and economic powers in East Asia and the Western Pacific and a key partner of the United States in ensuring peace and stability in that region. It is vital to U.S. national interests to assist our Korean ally in developing and maintain a strong and ready self-defense capability. This sale

increases the ROK's capability to participate in Pacific regional security operations and improves its national security posture as a key U.S. ally.

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

This sale includes provisions for one (1) FSR to live in Korea for up to two years. Implementation of this proposed sale requires multiple temporary trips to Korea involving U.S. Government or contractor representatives over a period of up to six (6) years for program execution, delivery, technical support, and training.

The principal contractor is Northrop Grumman Corporation, Rolling Meadows, IL. At this time, there are no known offset agreements proposed in connection with this potential sale.

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

Transmittal No. 16-43

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 AN/AAQ-24(V) Large Aircraft Infrared Countermeasures (LAIRCM) is a self-contained, directed energy countermeasures system designed to protect aircraft from infrared-guided surface-to-air missiles. The system features digital technology and micro-miniature solid-state electronics. The system operates in all conditions, detecting incoming missiles and jamming infrared-seeker equipped missiles with aimed bursts of laser energy. The LAIRCM system consists of multiple Ultra-Violet Missile Warning System (UVMWS) Sensors AN/AAR-54, Guardian Laser Turret Assembly (GLTA), LAIRCM System Processor Replacement (LSPR), Control Indicator Unit Replacement (CIUR), and a classified High Capacity Card (HCC), and User Data Memory (UDM) card. The HCC is loaded into the CIUR prior to flight. When the classified HCC is not in use, it is removed from the CIUR and placed in onboard secure storage. LAIRCM Line Replaceable Unit (LRU) hardware is classified SECRET when the HCC is inserted into the CIUR. LAIRCM system software, including Operational Flight Program is classified SECRET. Technical data and documentation to be provided are UNCLASSIFIED.

a. The set of UVMWS Sensor units (AN/AAR-54) are mounted on the aircraft exterior to provide omni-directional protection. The UVMWS detects the rocket plume of missiles and sends appropriate data signals to the LSPR for processing. The LSPR analyzes the data from each UVMWS Sensor and automatically deploys the appropriate countermeasure via the GLTA. The CIUR displays the incoming threat.

b. The AN/AAR-54 UVMWS Sensor warns of threat missile approach by detecting radiation associated with the rocket motor. The AN/AAR-54 is a small, lightweight, passive, electro-optic, threat warning device used to detect surface-to-air missiles fired at helicopters and low-flying fixed-wing aircraft and automatically provide countermeasures, as well as audio and visual warning messages to the aircrew. The basic system consists of multiple UVMWS Sensor units, three (3) GLTAs, a LSPR, and a CIUR. The set of UVMWS units (each A-330 MRTT has six (6)) are mounted on the aircraft exterior to provide omni-directional protection. Hardware is UNCLASSIFIED. Software is SECRET. Technical data and documentation to be provided are UNCLASSIFIED.

2. If a technologically advanced adversary were to obtain knowledge of the specific hardware and software elements, the information could be used to develop countermeasures or equivalent systems which might reduce system effectiveness or be used in the development of a system with similar or advanced capabilities.

3. 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.

4. All defense articles and services listed in this transmittal are authorized for release and export to the Government of the Republic of Korea.