

Air Self-Defense Force's F-4 aircraft are being decommissioned as F-35s are added to the inventory. Japan 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 prime contractors will be Lockheed Martin Aeronautics Company, Fort Worth, Texas; and Pratt and Whitney Military Engines, East Hartford, Connecticut. There are no known offset agreements proposed in connection with this potential sale.

Implementation of this proposed sale will require multiple trips to Japan involving U.S. Government and contractor representatives for technical reviews/support, programs management, and training over a period of 25 years. U.S. contractor representatives will be required in Japan to conduct Contractor Engineering Technical Services (CETS) and Autonomic Logistics and Global Support (ALGS) for after-aircraft delivery.

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

TRANSMITTAL NO. 20-18

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-35A Conventional Take Off and Landing (CTOL) aircraft is a single-seat, single-engine, all-weather, stealth, fifth-generation, multirole aircraft. The F-35B Short Take-Off and Vertical Landing (STOVL) variant is capable of operating from short airfields and ships. Both variants contain sensitive technology including the low observable airframe/outer mold line, the Pratt and Whitney F135 engine, AN/APG-81 radar, an integrated core processor central computer, a mission systems/electronic warfare suite, a multiple sensor suite, technical data/documentation, and associated software. Sensitive elements of the F-35A and F-35B are also included in operational flight and maintenance trainers. Sensitive and classified elements of the F-35A CTOL and F-35B STOVL aircraft include hardware, accessories, components, and associated software for the following major subsystems:

a. The Pratt and Whitney F135 engine is a single 40,000-lb thrust class engine designed for the F-35 and assures highly reliable, affordable performance. The engine is designed to be utilized in all F-35 variants, providing unmatched commonality and supportability throughout the worldwide base of F-35 users. The STOVL propulsion configuration consists of the main engine, diverterless supersonic inlet, a three (3) Bearing Swivel Module, Roll Posts and Duct Assembly System, and Lift Fan.

b. The AN/APG-81 Active Electronically Scanned Array (AESA) is a high processing power/high transmission power electronic array capable of detecting air and ground targets from a greater distance than mechanically scanned array radars. It also contains a synthetic aperture radar (SAR), which creates high-resolution ground maps and provides weather data to the pilot, and provides air and ground tracks to the mission system, which uses it as a component to fuse sensor data.

c. The Electro-Optical Targeting System (EOTS) provides long-range detection and tracking as well as an infrared search and track (IRST) and forward-looking infrared (FLIR) capability for precision tracking, weapons delivery, and bomb damage assessment (BDA). The EOTS replaces multiple separate internal or podded systems typically found on legacy aircraft.

d. The Electro-Optical Distributed Aperture System (EODAS) provides the pilot with full spherical coverage for air-to-air and air-to-ground threat awareness, day/night vision enhancements, a fire control capability, and precision tracking of wingmen/friendly aircraft. The EODAS provides data directly to the pilot's helmet as well as the mission system.

e. The Electronic Warfare (EW) system is a reprogrammable, integrated system that provides radar warning and electronic support measures (ESM) along with a fully integrated countermeasures (CM) system. The EW system is the primary subsystem used to enhance situational awareness, targeting support and self-defense through the search, intercept, location and identification of in-band emitters and to automatically counter IR and RF threats.

f. The Command, Control, Communications, Computers and Intelligence/Communications, Navigation, and Identification (C4I/CNI) system provides the pilot with unmatched connectivity to flight members, coalition forces, and the battlefield. It is an integrated subsystem designed to provide a broad spectrum of secure, anti-jam voice and data communications, precision radio navigation and landing capability, self-identification, beyond visual range target identification, and connectivity to off-board sources of information. It also includes an inertial navigation and global positioning system (GPS) for precise location information. The functionality is tightly integrated within the mission system to enhance efficiency.

g. The aircraft C4I/CNI system includes two data links, the Multi-Function Advanced Data Link (MADL) and Link 16. The MADL is designed specifically for the F-35 and allows for stealthy communications between F-35s. Link 16 data link equipment allows the F-35 to communicate with legacy aircraft using widely-distributed J-series message protocols.

h. The F-35 Autonomic Logistics Global Sustainment (ALGS) provides a fully integrated logistics management solution. ALGS integrates a number of functional areas, including supply chain management, repair, support equipment, engine support, and training. The ALGS infrastructure employs a state-of-the-art information system that provides real-time, decision-worthy information for sustainment decisions by flight line personnel. Prognostic health monitoring technology is integrated with the air system and is crucial to predictive maintenance of vital components.

i. The F-35 Autonomic Logistics Information System (ALIS) provides an intelligent information infrastructure that binds all the key concepts of ALGS into an effective support system. ALIS establishes the appropriate interfaces among the F-35 Air Vehicle, the warfighter, the training system, government information technology (IT) systems, and supporting commercial enterprise systems. Additionally, ALIS provides a comprehensive tool for data collection and analysis, decision support, and action tracking.

j. The F-35 Training System includes several training devices to provide integrated training for pilots and maintainers. The pilot training devices include a Full Mission Simulator (FMS) and Deployable Mission Rehearsal Trainer (DMRT). The maintainer training devices include an Aircraft Systems Maintenance Trainer (ASMT), Ejection System Maintenance Trainer (ESMT), Outer Mold Line (OML) Lab, Flexible Linear Shaped Charge (FLSC) Trainer, F135 Engine Module Trainer, and Weapons Loading Trainer (WLT). The F-35 Training System can be integrated, where both pilots and maintainers learn in the same Integrated Training

Center (ITC). Alternatively, the pilots and maintainers can train in separate facilities (Pilot Training Center and Maintenance Training Center).

k. Other subsystems, features, and capabilities include the F-35's low observable air frame, Integrated Core Processor (ICP) Central Computer, Helmet Mounted Display System (HMDS), Pilot Life Support System, Off-Board Mission Support (OMS) System, and publications/maintenance manuals. The HMDS provides a fully sunlight readable, binocular display presentation of aircraft information projected onto the pilot's helmet visor. The use of a night vision camera integrated into the helmet eliminates the need for separate Night Vision Goggles (NVG). The Pilot Life Support System provides a measure of Pilot Chemical, Biological, and Radiological Protection through use of an On-Board Oxygen Generating System (OBOGS); and an escape system that provides additional protection to the pilot. OBOGS takes the Power and Thermal Management System (PTMS) air and enriches it by removing gases (mainly nitrogen) by adsorption, thereby increasing the concentration of oxygen in the product gas and supplying breathable air to the pilot. The OMS provides a mission planning, mission briefing, and a maintenance/intelligence/tactical debriefing platform for the F-35.

2. The Reprogramming Center is located in the United States and provides F-35 customers a means to update F-35 electronic warfare databases.

3. The highest level of classification of information included in this potential sale is SECRET.

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

5. A determination has been made that Japan can provide substantially the same degree of protection for the sensitive technology being released as the U.S. Government. This sale is necessary in furthering 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 Japan.

ARMS SALES NOTIFICATION

Mr. RISCH. 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. JAMES E. RISCH,
Chairman, Committee on Foreign Relations,
U.S. Senate, Washington, DC.

DEAR MR. CHAIRMAN: Pursuant to the reporting requirements of Section 36(b)(1) of the Arms Export Control Act, as amended, we are forwarding herewith Transmittal No. 20-36 concerning the Army's proposed Letter(s) of Offer and Acceptance to the Government of Jordan for defense articles and services estimated to cost \$23 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. 20-36

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 Jordan.

(ii) Total Estimated Value:

Major Defense Equipment * \$19 million.

Other \$4 million.

Total \$23 million.

(iii) Description and Quantity or Quantities of Articles or Services under Consideration for Purchase: The Government of Jordan has requested to buy one (1) UH-60M Black Hawk Helicopter in standard U.S. Army configuration with standard Government Furnished Equipment (GFE).

Major Defense Equipment (MOE):

One (1) UH-60M Black Hawk aircraft.

Two (2) T700-GE-701D engines.

One (1) Common Missile Warning System.

Non-MDE: Also included is one (1) AN/APR-39 Radar Signal Detecting Set; one (1) AN/AVR-2B Laser Detecting Set; two (2) AN-ARC-231 Radios; two (2) AN-ARC-201D Radios; one (1) AN/APX-123A Identification Friend or Foe (IFF) Transponder; two (2) Embedded Global Positioning System with Inertial Navigation (EGIs); one (1) Common Missile Warning System User Data Module; Aviation Mission Planning System (AMPS); AMPS software development and support services; and other related elements of logistical, engineering, and program support.

(iv) Military Department: Army (JO-B-YEA).

(v) Prior Related Cases, if any:

(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: July 7, 2020.

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

POLICY JUSTIFICATION

Jordan—UH-60M Black Hawk Helicopters

The Government of Jordan has requested to buy one (1) UH-60M Black Hawk helicopter in standard U.S. Army configuration with standard Government Furnished Equipment (GFE), including two (2) T700-GE-701D engines and one (1) Common Missile Warning System. Also included is one (1) AN/APR-39 Radar Signal Detecting Set; one (1) AN/AVR-2B Laser Detecting Set; two (2) AN-ARC-231 Radios; two (2) AN-ARC-201D Radios; one (1) AN/APX-123A Identification Friend or Foe (IFF) Transponder; two (2) Embedded Global Positioning System with Inertial Navigation (EGIs); one (1) Common Missile Warning System User Data Module; Aviation Mission Planning System (AMPS); AMPS software development and support services; and other

related elements of logistical, engineering, and program support. The estimated total cost is \$23 million.

This proposed sale will support the foreign policy and national security of the United States by helping to improve the security of a Major Non-NATO Ally that is an important force for political stability and economic progress in the Middle East.

The UH-60M will supplement Jordan's existing Royal Squadron fleet of Black Hawk helicopters and be used to facilitate the movement of the Jordanian Royal Family in a safe and efficient manner. Jordan already has the UH-60M capability and will have no difficulty absorbing this equipment and services 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 Sikorsky Aircraft Company, Stratford, CT and General Electric Aircraft Company, Lynn, MA. There are no known offset agreements proposed in connection with this potential sale.

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

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

TRANSMITTAL NO. 20-36

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 UH-60M Black Hawk is an assault/utility helicopter. The UH-60M weapon system contains communications and identification equipment, navigation equipment, aircraft survivability equipment, displays, and sensors.

2. The AN/APR-39 Radar Signal Detecting Set is a system that provides warning of a radar directed air defense threat to allow appropriate countermeasures. This configuration is 1553 data bus compatible.

3. The AN/AVR-2B Laser Warning Set is a passive laser warning system that receives, processes, and displays threat information resulting from aircraft illumination by lasers on a multi-functional display.

4. The AN-ARC-231 is an airborne Very High Frequency/Ultra High Frequency (VHF/UHF) Line-of-Sight (LOS) and Demand Assigned Multiple Access (DAMA) satellite communications (SATCOM) system. The ARC-231 provides airborne, multi-band, multi-mission, secure anti-jam voice, data, and imagery network capable communications in a compact radio set.

5. The AN-ARC-201D Single Channel Ground and Airborne Radio System (SINGARS) is a tactical airborne radio subsystem that provides secure, anti-jam voice and data communication.

6. The AAR-57(V) Common Missile Warning System (CMWS) detects threat missiles in flight, evaluates potential false alarms, declares validity of threat, and selects appropriate Infrared Countermeasures (IRCM). The system includes Electro-Optical Missile Sensors, an Electronic Control Unit (ECU), Sequencer, and Improved Countermeasures Dispenser (ICMD).

7. Embedded Global Positioning/Inertial Navigation (EGI) System provides Global Positioning System (GPS) and Inertial Navigation System (INS) capabilities to the aircraft. The EGI includes Selective Availability Anti-Spoofing Module (SAASM) security modules to be used for secure OPS Precise Positioning Service (PPS), if required.

8. The AN/APX-123A Identification Friend or Foe (IFF) Transponder is a space diversity

transponder and is installed on various military platforms. When installed in conjunction with platform antennas and the Remote Control Unit (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.

9. The Common Missile Warning System (CMWS) User Data Module (UDM) is a removable Personal Computer Memory Card International Association (PCMCIA) module that is installed in the UDM housing on the CMWS ECU. The UDM contains the Operational Flight Program (OFP), aircraft, threat/countermeasure file library, and mission specific information used in the embedded system.

10. The Aviation Mission Planning System (AMPS) is a hardware and software solution that provides state of the art mission planning tools to enhance situational awareness, command and control, and safety of aircraft pilots and aviation commanders. The system provides a suite of applications that allow users to perform task such as plot flight path waypoints, compute distance and fuel requirements, calculate aircraft configuration against weight and balance limits and perform flight safety validations, and generate briefing materials or pilot information kits.

11. The highest level of classification of defense articles, components, and services included in this potential sale is SECRET.

12. If a technologically advanced adversary were to obtain knowledge of the specific hardware and software elements, 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 advanced capabilities.

13. This sale is necessary in furtherance of the U.S. foreign policy and national security objectives outlined in the Policy Justification. A determination has been made that Jordan can provide substantially the same degree of protection for the sensitive technology being released as the U.S. Government.

14. All defense articles and services listed in this transmittal have been authorized for release and export to Jordan.

ARMS SALES NOTIFICATION

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