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Billing Code

DEPARTMENT OF DEFENSE

Office of the Secretary

[Transmittal No. 21-14]

Arms Sales Notification

AGENCY: Defense Security Cooperation Agency, Department of Defense (DoD).

ACTION: Arms sales notice.

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

FOR FURTHER INFORMATION CONTACT: Neil Hedlund at neil.g.hedlund.civ@mail.mil or (703) 697-9214.

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 21-14 with attached Policy Justification and Sensitivity of Technology.

Dated: October 13, 2021.

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 24, 2021

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. 21-14, concerning the Air Force's proposed Letter(s) of Offer and Acceptance to the Government of the Philippines for defense articles and services estimated to cost $2.43 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,

Heidi H. Grant
Director

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

Transmittal No. 21-14

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 the Philippines

(ii) Total Estimated Value:

Major Defense Equipment*	$1.12 billion
Other	$1.31 billion
TOTAL	$2.43 billion

Funding Source: National Funds

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

Major Defense Equipment (MDE):
Ten (10) F-16C Block 70/72 Aircraft
Two (2) F-16D Block 70/72 Aircraft
Fifteen (15) F100-PW-229EEP Engines or F110-GE-129D Engines
Fifteen (15) Improved Programmable Display Generators (iPDG)
Fifteen (15) AN/APG-83 Advanced Electronically Scanned Array (AESA) Scalable Agile Beam Radars (SABR)
Fifteen (15) Modular Mission Computers 7000AH
Fifteen (15) LN-260 Embedded GPS/INS (EGI) with SAASM and PPS
Twenty-four (24) Advanced Medium Range Air-to-Air Missiles (AMRAAM) AIM-120C-7/C-8 or equivalent
One (1) AIM-120 Guidance Section
Forty-eight (48) LAU-129 Missile Launchers
Three (3) KMU-572 Laser Joint Direct Attack Munition (LJDAM) Tail Kits
Six (6) Mk-82 500lb Bombs
Six (6) Mk-82 500lb Inert Training Bombs
Six (6) FMU-152 or FMU-139 Fuzes
Six (6) Sniper Advanced Targeting Pods (ATP) or Litening ATP
Fifteen (15) Multifunctional Information Display System Joint Tactical Radio System (MIDS-JTRS) Aircraft Terminals
Fifteen (15) M61A1 Vulcan Anti-Aircraft 20mm Guns

Non-MDE:
Also included are AN/ARC-238 radios; Advanced Identification Friend or Foe with Combined Interrogator Transponder and Mode 5; Joint Helmet Mounted Cueing Systems II (JHMCS II) or Scorpion Hybrid Optical-based Inertial Tacker (HObIT); Integrated Electronic Warfare (EW) Suite; Electronic Combat International Security Assistance Program (ECISAP) support; AN/ALE-47 Countermeasure Dispenser Systems (CMDS); Joint Mission Planning Systems (JMPS) or equivalent; AIM-120 CATM; LAU-118 launchers with Advanced Launcher Interface Computer (ALIC); LAU-117 missile launchers; DSU-38 Precision Laser Guided Sensor for LJDAM; Harpoon interface adapter kits; PGU-28 High Explosive Incendiary (HEI) ammunition; PGU-27 ammunition training rounds (non HEI); Cartridge Actuated Devices/Propellant Actuated Devices

(CAD/PAD); ARD-446 impulse cartridges; ARD-863 impulse cartridges; BBU-36/B impulse cartridges; BBU-35/B impulse cartridges; MK-124 smoke flares; MJU-7/B Flare Cartridge L463; BRU-61 Bomb Racks; BRU-57 bomb racks; MAU-12 bomb racks and TER-9A triple ejection racks; weapons support, test equipment, and missile containers; chaff and flare; Night Vision Devices (NVD) and support equipment and spares; secure communications; cryptographic equipment; aircraft and personnel support and test equipment; integration and test; weapons, ammunition, pylons, launcher adaptors, weapons interfaces, fuel tanks, and attached hardware; travel pods, precision measurement equipment laboratory, calibration, and simulators; spare and repair parts, repair and return services; maps, publications, and technical documentation; studies and surveys; classified / unclassified software and software support; personnel training and training equipment; facilities and facility management, design and/or construction services; U.S. Government and contractor engineering, technical and logistics support services; and other related elements of logistical and program support.

(iv) Military Department: Air Force (PI-D-SAF)

(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: **June 24, 2021**

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

POLICY JUSTIFICATION

Philippines – F-16 Block 70/72

The Government of the Philippines has requested to buy ten (10) F-16C Block 70/72 aircraft; two (2) F-16D Block 70/72 aircraft; fifteen (15) F100-PW-229EEP engines or F110-GE-129D engines; fifteen (15) Improved Programmable Display Generators (iPDG); fifteen (15) AN/APG-83 Advanced Electronically Scanned Array (AESA) Scalable Agile Beam Radars (SABR); fifteen (15) Modular Mission Computers 7000AH; fifteen (15) LN-260 Embedded GPS/INS (EGI) with SAASM and PPS; twenty-four (24) Advanced Medium Range Air-to-Air Missiles (AMRAAM) AIM-120C-7/C-8 or equivalent; one (1) AIM-120 Guidance Section; forty-eight (48) LAU-129 missile launchers; three (3) KMU-572 Laser Joint Direct Attack Munition (LJDAM) tail kits; six (6) Mk-82 500lb bombs; six (6) Mk-82 500lb Inert training bombs; six (6) FMU-152 or FMU-139 fuzes; six (6) Sniper Advanced Targeting Pods (ATP) or Litening ATP; fifteen (15) Multifunctional Information Display System Joint Tactical Radio System (MIDS-JTRS) aircraft terminals, and; fifteen (15) M61A1 Vulcan Anti-Aircraft 20mm guns. Also included are AN/ARC-238 radios; Advanced Identification Friend or Foe with Combined Interrogator Transponder and Mode 5; Joint Helmet Mounted Cueing Systems II (JHMCS II) or Scorpion Hybrid Optical-based Inertial Tacker (HObIT); Integrated Electronic Warfare Suite; Electronic Combat International Security Assistance Program (ECISAP) support; AN/ALE-47 Countermeasure Dispenser Systems (CMDS); Joint Mission Planning Systems (JMPS) or equivalent; AIM-120 CATM; LAU-118 launchers with Advanced Launcher Interface Computer (ALIC); LAU-117 missile launchers; DSU-38 Precision Laser Guided Sensor for LJDAM; Harpoon interface adapter kits; PGU-28 High Explosive Incendiary (HEI) ammunition; PGU-27 ammunition training rounds (non HEI); Cartridge Actuated Devices/Propellant Actuated Devices (CAD/PAD); ARD-446 impulse cartridges; ARD-863 impulse cartridges; BBU-36/B impulse cartridges; BBU-35/B impulse cartridges; MK-124 smoke flares; MJU-7/B Flare Cartridge L463; BRU-61 Bomb Racks; BRU-57 bomb racks; MAU-12 bomb racks and TER-9A triple ejection racks; weapons support, test equipment, and missile containers; chaff and flare; Night Vision Devices (NVD) and support equipment and spares; secure communications; cryptographic equipment; aircraft and personnel support and test equipment; integration and test; weapons, ammunition, pylons, launcher adaptors, weapons interfaces, fuel tanks, and attached hardware; travel pods, precision measurement equipment laboratory, calibration, and simulators; spare and repair parts, repair and return services; maps, publications, and technical documentation; studies and surveys; classified / unclassified software and software support; personnel training and training equipment; facilities and facility management, design and/or construction services; U.S. Government and contractor engineering, technical and logistics support services; and other related elements of logistical and program support. The estimated total cost is $2.43 billion.

This proposed sale will support the foreign policy and national security of the United States by helping to improve the security of a strategic partner that continues to be an important force for political stability, peace, and economic progress in South East Asia.

The proposed sale will improve the Philippines' capability to meet current and future threats by enabling the Philippines to deploy fighter aircraft with precision munitions in support of counterterrorism operations in the southern Philippines, increasing effectiveness and minimizing collateral damage. The Philippines is committed to modernizing its military forces and will have no difficulty absorbing this aircraft 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 contractor will be Lockheed-Martin, Greenville, SC. There are no known offset agreements proposed in connection with this potential sale.

Implementation of this proposed sale will require the assignment of U.S. Government and contractor representatives (fewer than 20) to the Philippines to provide technical support for maintenance operations and to conduct flight and maintenance training.

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

Transmittal No. 21-14

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-16 Block 70 weapon system is a fourth generation single-engine supersonic all-weather multirole fighter aircraft and features advanced avionics and systems. It contains the General Electric F110-129 engine, AN/APG-83 radar, digital flight control system, embedded internal global navigation system, Joint Helmet Mounted Cueing Systems (JHMCS) II or Scorpion Hybrid Optical-based Inertial Tacker (HObIT) with Night Vision Device (NVD) capability, internal and external Electronic Warfare (EW) equipment, Advanced IFF, LINK-16 datalink, operational flight trainer, and software computer programs.

2. General Electric F110-129 engine is an afterburning turbofan jet engine which delivers 29,400 lb_f (131 kN) thrust.

3. Improved Programmable Display Generator (iPDG) and color multifunction displays utilize ruggedized commercial liquid crystal display technology that is designed to withstand the harsh environment found in modern fighter cockpits. The display generator is the fifth generation graphics processor for the F-16. Through the use of state-of-the-art microprocessors and graphics engines, it provides orders of magnitude increases in throughput, memory, and graphics capabilities.

4. Scalable Agile Beam Radar (SABR) 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, 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.

5. Modular Mission Computer (MMC) 7000AH is the central aircraft computer of the F-16. It serves as the hub for all aircraft subsystems and avionics data transfer.

6. The Embedded GPS/INS (EGI) with Selective Availability Anti-Spoofing Module (SAASM) is a self-contained navigation system that provides the following: acceleration, velocity, position, attitude, platform azimuth, magnetic and true heading, altitude, body angular rates time tags, and coordinated universal time (UTC) synchronized time. SAASM enables the GPS receiver access to the encrypted P(Y) signal providing protection against active spoofing attacks.

7. The AIM-120-C7 Advanced Medium Air-to-Air Missile (AMRAAM) is a supersonic, air-launched, aerial intercept, guided missile featuring digital technology and micro-miniature solid-state electronics. The missile employs active radar target tracking, 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. This sale will include AIM-120 Guidance Section spares. AMRAAM capabilities include lookdown/shootdown, multiple launches against multiple targets, resistance

to electronic countermeasures, and interception of high-and low-flying maneuvering targets.

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

9. Laser Joint Direct Attack Munitions (JDAM) (GBU-54/56) 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 and adds a Semi-active laser seeker. This allows the weapon to strike targets moving at up to 70 mph. The LJDAM weapon consists of a DSU-38/40 sensor, a JDAM guidance set installed on a bomb body; and fuze. The DSU-38/40 consists of a laser spot tracker (same size and shape as a DSU-33 proximity fuze), a cable connecting the DSU-38/40 to the basic JDAM guidance set, a cable cover, cable cover tie-down straps, modified tail kit door and wiring harness, and associated modified JDAM software that incorporates navigation and guidance flight software to support both LJDAM and standard JDAM missions. FMU-152A/B, FMU-139 (all variants) and dummy fuzes are the standard fuzes to be used with this weapon. The quantities in this notification are for testing ad integration effort.

10. Mk-82 Inert General Purpose (GP) bomb is a 500lb, inert, free-fall, unguided, low-drag weapon.

11. FMU-152 or FMU-139 fuzes are multi-delay sensors compatible with weapon guidance kits, tail kits, high-explosive bombs, and reduced collateral damage weapons, which provide all arming and detonation event functions combined in a single fuze system.

12. Sniper Advanced Targeting Pods (ATP) or Litening ATP is a single, lightweight targeting pod for military aircraft that provides positive target identification, autonomous tracking, Global Positioning System (GPS) coordinate generation, and precise weapons guidance from extended standoff ranges. It incorporates a high definition, mid-wave, Forward-Looking Infrared (FLIR), dual-mode laser, visible-light, High Definition television (HDTV), laser spot tracker, video data link (VDL), and a digital data recorder.

13. Multifunction Information Distribution System Joint Tactical Radio System (MIDS-JTRS) is a four-channel software programmable radio for Link-16 digital voice communications and datalink, Tactical Air Navigation (TACAN), and advanced waveforms. Link-16 is a command, control, communications, and intelligence (C3I) system incorporating high-capacity, jam-resistant, digital communication links for exchange of near real-time tactical information, including both data and voice, among air, ground, and sea elements.

14. M61 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 Gatling gun used to damage/destroy aerial targets, suppress/incapacitate personnel targets, and damage or destroy moving and stationary light material targets.

15. AN/ARC-238 radio with HAVE QUICK II is a voice communications radio system that is equipped with HAVE QUICK II, which employs cryptographic technology. Other waveforms may be included as needed.

16. Advanced Identification Friend or Foe (AIFF) Combined Interrogator Transponder (CIT) is a system capable of transmitting and interrogating Mode V. Mode IV and Mode V anti-jam performance specifications/data, software source code, algorithms, and tempest plans or reports

will not be offered, released discussed, or demonstrated.

17. Joint Helmet Mounted Cueing System II (JHMCS II) or Scorpion Hybrid Optical-based Inertial Tacker (HObIT) is a device used in aircraft to project information to the pilot's eyes and aids in tasks such as cueing weapons and aircraft sensors to air and ground targets. 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. This provides improvement for close combat targeting and engagement.

18. Integrated Electronic Warfare (EW) Suite provides passive radar warning, wide spectrum Radio Frequency (RF) jamming, and control and management of the entire EW system. This system is anticipated to be internal to the aircraft, although mounted pod variants are used in certain circumstances.

19. AN/ALE-47 Countermeasure Dispenser Set (CMDS) provides an integrated threat-adaptive, computer controlled capability for dispensing chaff, flares, and active radio frequency expendables. The system is internally mounted and may be operated as a stand-alone system or may be integrated with other on-board Electronic Warfare (EW) and avionics systems. The AN/ALE-47 uses threat data received over the aircraft interfaces to assess the threat situation and determine a response. Expendable routines tailored to the immediate aircraft and threat environment may be dispensed using one of four operational modes.

20. Joint Mission Planning System (JMPS) or equivalent is a multi-platform PC based mission planning system that uses a set of developed applications built from a Framework, common components, and Unique Planning Components for a particular aircraft allowing aircrews to conduct detailed mission planning to support the full spectrum of missions, ranging from simple training to complex combat scenarios. Aircrews save the required aircraft, navigation, threat, and weapons data on a data transfer device that they load into their aircraft before flight.

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

22. 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.

23. A determination has been made that the Philippines 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 have been authorized for release and export to the Government of the Philippines.

[FR Doc. 2021-22667 Filed: 10/15/2021 8:45 am; Publication Date: 10/18/2021]