

DEPARTMENT OF DEFENSE**Office of the Secretary**

[Transmittal No. 06-17]

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 21 July 1996.

FOR FURTHER INFORMATION CONTACT: Ms. J. Hurd, DSCA/DBO/ADM, (703) 604-6575.

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

Representatives, Transmittal 06-17 with attached transmittal, policy justification, Sensitivity of Technology and Section 620C(d).

Dated: October 27, 2005.

L.M. Bynum,

*OSD Federal Register Liaison Officer,
Department of Defense.*

BILLING CODE 5001-06-M



DEFENSE SECURITY COOPERATION AGENCY

WASHINGTON, DC 20301-2800

25 OCT 2005

In reply refer to:
I-05/012156


The Honorable J. Dennis Hastert
Speaker of the House of Representatives
Washington, D.C. 20515-6501

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. 06-17, concerning the Department of the Air Force's proposed Letters(s) of Offer and Acceptance to Greece for defense articles and services estimated to cost \$3.1 billion. Soon after this letter is delivered to your office, we plan to notify the news media.

You will also find attached a certification required by subsection 620C(d) of the Foreign Assistance Act of 1961, as amended, that this action is consistent with the principles set forth in subsection 620C(b) of that Act as codified in section 2373 of title 22, United States Code.

Sincerely,


Richard J. Millies
Deputy Director

Enclosures:

1. Transmittal
2. Policy Justification
3. Sensitivity of Technology
4. Section 620C(d)

Same ltr to:

House

Committee on International Relations
Committee on Armed Services
Committee on Appropriations

Senate

Committee on Foreign Relations
Committee on Armed Services
Committee on Appropriations

Transmittal No. 06-17**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:** Greece
- (ii) **Total Estimated Value:**
- | | |
|---------------------------------|----------------------|
| Major Defense Equipment* | \$2.5 billion |
| Other | \$.6 billion |
| TOTAL | \$3.1 billion |
- (iii) **Description and Quantity or Quantities of Articles or Services under Consideration for Purchase:**

Major Defense Equipment (MDE)

40 F-16C/D Block 52+ aircraft with F100-PW-229 engines and APG-68(V)9 radars;
42 Joint Helmet Mounted Cueing Systems;
40 AN/AVS-9 Generation III Aviation Night Vision Goggles;
190 LAU-129/A Launchers;
48 Link-16 Multifunctional Information Distribution System-Low Volume Terminals (MIDS-LVT);
3 Link-16 Ground Stations;
10 LANTIRN Targeting pods;
11 Reconnaissance pods;
2 Reconnaissance Ground Stations;
40 APX-113 Advanced Identification Friend or Foe (IFF) systems;
43 AN/ALQ-187 Advanced Self-Protection Integrated Suites;
6 spare F100-PW-229 engines;
3 APG-68(V)9 spare radar sets;
4 AGM-154C Joint Standoff Weapons;
6 Joint Direct Attack Munitions
(3 BLU-10 and 3 MK-84 bomb bodies);
4 Wind Compensated Munitions Dispenser;

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

Associated support equipment, software development/integration, modification kits, capability to employ a wide variety of munitions, spares and repair parts, flight test instrumentation, publications and technical documentation, personnel training and training equipment, U.S. Government and contractor technical and logistics personnel services, and other related requirements to ensure full program supportability will also be provided. The estimated cost is \$3.1 billion.

- (iv) **Military Department: Air Force (SNY)**
- (v) **Prior Related Cases, if any:**
FMS case SNX - \$1.8 billion - 3Oct00
FMS case SBD - \$1.2 billion - 31Dec92
- (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: 25 OCT 2005**

POLICY JUSTIFICATION**Greece - F-16C/D Block 52+ Aircraft**

The Government of Greece has requested a possible sale of

Major Defense Equipment (MDE)

- 40 F-16C/D Block 52+ aircraft with F100-PW-229 engines and APG-68(V)9 radars;**
- 42 Joint Helmet Mounted Cueing Systems;**
- 40 AN/AVS-9 Generation III Aviation Night Vision Goggles;**
- 190 LAU-129/A Launchers;**
- 48 Link-16 Multifunctional Information Distribution System-Low Volume Terminals (MIDS-LVT);**
- 3 Link-16 Ground Stations;**
- 10 LANTIRN Targeting pods;**
- 11 Reconnaissance pods;**
- 2 Reconnaissance Ground Stations;**
- 40 APX-113 Advanced Identification Friend or Foe (IFF) systems;**
- 43 AN/ALQ-187 Advanced Self-Protection Integrated Suites;**
- 6 spare F100-PW-229 engines;**
- 3 APG-68(V)9 spare radar sets;**
- 4 AGM-154C Joint Standoff Weapons;**
- 6 Joint Direct Attack Munitions (3 BLU-10 and 3 MK-84 bomb bodies);**
- 4 Wind Compensated Munitions Dispenser;**

Associated support equipment, software development/integration, modification kits, capability to employ a wide variety of munitions, spares and repair parts, flight test instrumentation, publications and technical documentation, personnel training and training equipment, U.S. Government and contractor technical and logistics personnel services, and other related requirements to ensure full program supportability will also be provided. The estimated cost is \$3.1 billion.

This proposed sale will contribute to the foreign policy and national security objectives of the United States (U.S.) by improving the military capabilities of Greece and enhancing weapon system standardization and interoperability with U.S. forces.

The Government of Greece needs these capabilities for mutual defense, regional security, modernization, U.S. and North Atlantic Treaty Organization (NATO) interoperability. The modernization of Greece's F-16 fleet will increase the effectiveness of its contribution and capabilities to future NATO, coalition, and anti-terrorism operations. This will also enhance Greece's ability to patrol the nation's

extensive coastline and borders against future threats, contribute to the Global War on Terrorism, and to NATO operations. This modernization will be provided in accordance with, and subject to the limitation on use and transfer provided under the Arms Export Control Act, as amended, and as embodied in the Letter of Offer and Acceptance.

This proposed sale will not adversely affect either the military balance in the region or U.S. efforts to encourage a negotiated settlement of the Cyprus questions.

The principal contractors will be:

BAE Advanced Systems	Greenlawn, New York
Lockheed Martin Aeronautics Company	Fort Worth Texas
Lockheed Martin Missiles and Fire Control	Orlando, Florida
L3 Communications	Arlington, Texas
Boeing Corporation (McDonald Douglas Corporation)	St. Louis, Missouri
Raytheon Electronic Warfare Systems Company	Goleta, California
Raytheon Missile Systems	Tucson, Arizona
Northrop-Grumman Electro-Optical Systems	Garland, Texas
Northrop-Grumman Electronic Systems	Baltimore, Maryland
Pratt & Whitney United Technology Company	East Hartford, Connecticut

Offset agreements associated with this proposed sale are expected. They are undetermined at this time but will be defined in negotiations between the purchaser and contractors.

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

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

Transmittal No. 06-17**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. This proposed sale for the F-16C/D Block 52+ will involve the release of sensitive technology to Greece. The highest level of classified information required for release for training, operation, and maintenance is Secret. The F-16C/D Block 52+ aircraft will include the following classified or sensitive components and weapons:

a. The AN/APG-68(V)9 Radar Warning Receiver is the latest model of the APG-68 radar. This model contains the latest digital technology available for a mechanically scanned antenna, including higher processor power, higher transmission power, more sensitive receiver electronics, and an entirely new capability, Synthetic Aperture Radar (SAR), which creates higher-resolution ground maps from a much greater distance than previous versions of the APG-68. The upgrade features a 30% increase in detection range of air targets, a five-fold increase in processing speed, a ten-fold increase in memory, as well as significant improvements in all modes, jam resistance and false alarm rates. Complete hardware is classified Confidential; major components and subsystems are classified Confidential; software is classified Secret; and technical data and documentation are classified up to Secret.

b. The Joint Helmet Mounted Cueing System (JHMCS) is a modified HGU-55/P helmet that incorporates a visor-projected Heads-Up Display to cue weapons and aircraft sensors to air and ground targets. In close combat, a pilot must currently align the aircraft to shoot at a target. JHMCS allows the pilot to simply look at a target to shoot. 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, the system uses a magnetic transmitter unit fixed to the pilot's seat and a magnetic field probe mounted on the helmet to define helmet pointing positioning. A Helmet Vehicle Interface interacts with the aircraft system bus to provide signal generation for the helmet display. This provides significant improvement for close combat targeting and engagement. Hardware is Unclassified; technical data and documents are classified up to Secret.

c. The AN/AVS-9 Night Vision Goggles (NVG), a 3rd generation aviation device offers a higher resolution, high gain, and photo response to near infrared. Features include independent eye-span adjustment; 25-mm eye relief eyepieces which easily accommodate eyeglasses, and a low-profile battery pack. Minus-blue filter screens glare from cockpit instrument lighting; and a class B filter (available with some variants) can accommodate aircraft color displays. Other features include: low-distortion optics and automatic brightness control. The Night Vision Imaging System (NVIS) modification includes cockpit modifications to provide NVG-compatible cockpit lighting that optimizes NVG sensitivity, as well as external lighting capable of operating in a covert mode wherein only NVG-equipped personnel can see the aircraft external lighting. Hardware is Unclassified. Technical data and documentation to be provided is unclassified.

d. The Multifunctional Information Distribution System-Low Volume Terminal (MIDS-LVT) is an advanced Link-16 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. MIDS-LVT is intended to support key theater functions such as surveillance, identification, air control, weapons engagement coordination, and direction for all services and allied forces. The system will provide jamming-resistant, wide-area communications on a Link-16 network among MIDS and Joint Tactical Information Distribution System equipped platforms. The MIDS-LVT and MIDS On Ship Terminal hardware, publications, operational capability, parameters, performance specifications, vulnerabilities to countermeasures, and software documentation are classified Confidential. The classified information to be provided consists of that which is necessary for the operation, maintenance, and repair (through intermediate level) of the data link terminal, installed systems, and related software.

e. The Joint Direct Attack Munitions (JDAM) is a guidance tail kit that converts unguided free-fall bombs into accurate, adverse weather "smart" munitions. With the addition of a new tail section that contains an inertial navigational system and a global positioning system guidance control unit, JDAM improves the accuracy of unguided, general-purpose bombs in any weather condition. JDAM can be launched from very low to very high altitudes in a dive, toss and loft, or in straight and level flight with an on-axis or off-axis delivery. JDAM enables multiple weapons to be directed against single or multiple targets on a single pass. The JDAM All-Up Round and all of its components are Unclassified; technical data for JDAM is classified up to Secret.

f. The APX-113 Combined Interrogator Transponder (CIT) system is already in operation with the Hellenic Air Force F-16s. The IFF transponders allow the F-16 to rapidly identify its own friendly aircraft from enemy or potentially hostile aircraft. The APX-113 is a "third-generation" system, enabling the user to upgrade to

new IFF capabilities such as Mode 5 using plug-in modules and updated software loads. The hardware is classified Secret.

g. The Wind Compensated Munitions Dispenser (WCMD) modifies existing inventories of CBU-87/89/97 by attaching an inertial guidance only (no Global Positioning System) tail kit to the bomb. These weapons are capable of delivery from medium to high altitude when equipped with a WCMD kit. The WCMD weapon corrects for wind effects and errors during the weapon's ballistic fall. The WCMD kit turns these "dumb" bombs into accurate "smart" weapons. Currently, the dispenser is achieving an accuracy of within 30 feet. F-16s are able to employ WCMD from a wide range of altitudes, in adverse weather, using various tactics such as level, dive, and toss bombing, and bombing on coordinates. The highest classification for the weapon is Secret.

h. The LANTIRN system consists of two externally carried pods. These are the AN/AAQ-13 navigation and the AN/AAQ-14 targeting pods. The AN/AAQ-13 navigation pod provides high-speed penetration and precision attack on tactical targets at night and in adverse weather. The navigation pod also contains a terrain-following radar and a fixed infrared sensor, which provides a visual cue and input to the aircraft's flight control system, enabling it to maintain a pre-selected altitude above the terrain and avoid obstacles. This sensor displays an infrared image of the terrain in front of the aircraft, to the pilot, on a head-up display. The navigation pod enables the pilot to fly along the general contour of the terrain at high speed, using mountains, valleys and the cover of darkness to avoid detection. The AN/AAQ-14 targeting pod contains a high-resolution, forward-looking infrared sensor (which displays an infrared image of the target to the pilot), a laser designator-rangefinder for precise delivery of laser-guided munitions, and software for automatic target tracking. For a laser-guided bomb, the pilot aims the laser designator, and the bomb guides to the target. For a conventional bomb, the pilot can use the laser to determine range, then the pod feeds the range data to the aircraft's fire control system. The designator is a four-digit PRF-coded laser that can designate for its own weapons or for other acquisition devices/munitions. These features simplify the functions of target detection and recognition and attack as well as permitting pilots of single-seat fighters to attack targets with precision-guided weapons on a single pass. The hardware is Unclassified but the technical data and documents may be classified up to Secret.

i. The ASPIS II is a complete integrated electronic warfare (EW) suite consisting of the ALR-93(V) threat warning system, ALQ-187 jammer, and ALE-47 chaff/flare dispenser. The ALR-93(V) Radar Warning Receiver (RWR) and EW Suite Controller is a computer controlled RWR that provides automatic detection and display of RF signals. The ALQ-187 is a self-protect electronic countermeasures system. It is fully automatic with internally housed radar warning and chaff/flare systems. It detects and defends the aircraft from surface-to-air missiles, anti-aircraft artillery, and air-to-air missiles. The ALE-47 Counter Measures Dispenser System

provides an integrated, reprogrammable, computer controlled system to dispense expendables/decoys to enhance aircraft survivability. ALE-47 provides the aircrew with a "smart" countermeasures dispensing system, allowing the aircrew to optimize the countermeasures employed against anti-aircraft threats. The hardware and the Technical data/documents are classified up to Secret.

j. There are three Reconnaissance pod options for the Greek Air Force. The first is a Recon-Optical, Incorporated produced pod called SHARP (Shared Reconnaissance Pod). The second is produced by BF Goodrich, called the DB-110. Lastly, BAE produces the TARS pod. Both the DB-110 and TARS are integrated for immediate F-16 use. The Hellenic Air Force will be presented with specifics on each pod and will subsequently choose the equipment at a later date.

k. The AGM-154 Joint Standoff Weapon (JSOW) is a low cost, launch and leave, air launched standoff weapon that provides aircraft with a capability to attack well defended targets in day, night, and less-than-ideal weather conditions. The AGM-154C JSOW incorporates component, software, and technical design information that are considered sensitive. The following JSOW components being conveyed by the proposed sale that are considered sensitive and may be classified up to Confidential include:

- a. global positioning system/inertial navigation system
- b. imaging infrared seeker
- c. operation flight program software
- d. missile operational characteristics and performance data

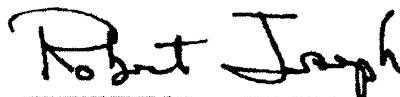
These elements are essential to the ability of the JSOW missile to selectively engage hostile targets under a wide range of operational, tactical and environmental conditions.

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

**CERTIFICATION PURSUANT TO § 620C(d)
OF THE FOREIGN ASSISTANCE ACT OF 1961, AS AMENDED**

Pursuant to § 620C(d) of the Foreign Assistance Act of 1961, as amended (the Act), Executive Order 12163 and State Department Delegation of Authority No. 145, I hereby certify that the sale of defense articles and defense services, to include 40 F-16C/D Block 52+ aircraft with F100-PW-229 engines and APG-68(V)9 radars, 42 Joint Helmet Mounted Cueing Systems, 40 AN/AVS-9 Generation III Aviation Night Vision Goggles, 190 LAU-129/A Launchers, 48 Link-16 Multifunctional Information Distribution System-Low Volume Terminals (MIDS-LVT), 3 Link-16 Ground Stations, 10 LANTIRN Targeting pods, 11 Reconnaissance pods, 2 Reconnaissance Ground Stations, 40 APX-113 Advanced Identification Friend or Foe (IFF) systems, 43 AN/ALQ-187 Advanced Self-Protection Integrated Suites, 6 spare F100-PW-229 engines, 3 APG-68(V)9 spare radar sets, 4 AGM-154C Joint Standoff Weapons, 6 Joint Direct Attack Munitions (3 BLU-10 and 3 MK-84 bomb bodies), 4 Wind Compensated Munitions Dispenser, associated support equipment, software development/integration, modification kits, capability to employ a wide variety of munitions, spares and repair parts, flight test instrumentation, publications and technical documentation, personnel training and training equipment, U.S. Government and contractor technical and logistics personnel services, and other related requirements to ensure full program supportability, to the Government of Greece is consistent with the principles set forth in § 620C(b) of the Act.

This certification will be made part of the notification to Congress in accordance with § 36(b) of the Arms Export Control Act, as amended, regarding the proposed sale of the above-named articles and services and is based on the justification accompanying said notification, of which said justification constitutes a full explanation.



Robert Joseph
Under Secretary of State
for Arms Control and
International Security