

January 1997

EXPORT CONTROLS

Change in Export Licensing Jurisdiction for Two Sensitive Dual-Use Items



**National Security and
International Affairs Division**

B-272258

January 14, 1997

The Honorable Floyd Spence
Chairman
The Honorable Ronald V. Dellums
Ranking Minority Member
Committee on National Security
House of Representatives

The U.S. export control system for items with military applications is divided into two regimes. The Department of State licenses munitions items, which are designed, developed, configured, adapted, or modified for military applications, and the Department of Commerce licenses most dual-use items, which are items that have both commercial and military applications. Although the Commerce licensing system is the primary vehicle to control dual-use items, some dual-use items are controlled under the State system. In March 1996, the executive branch announced a change in licensing jurisdiction for two items—commercial jet engine hot section technology and commercial communications satellites—from State to Commerce.¹ In October and November 1996, Commerce and State published regulations implementing this change, with Commerce defining enhanced export controls to apply when licensing these two items. Commerce's regulations are interim regulations, effective on publication, and Commerce allowed for a 45-day public comment period on its regulations.

In response to your request, we reviewed the implications of this change in export licensing jurisdiction. Specifically, we (1) assessed the military sensitivity of the two items, (2) determined the executive branch's rationale for the change in jurisdiction, (3) compared the licensing systems that the two Departments use to control exports, and (4) analyzed proposed changes in Commerce controls for these two items.

Background

The Department of State controls munitions items under the authority provided in the Arms Export Control Act. State promulgates the International Traffic in Arms Regulations (ITAR) and establishes, with the concurrence of the Department of Defense, the U.S. Munitions List. State and Defense can include a dual-use item on this list, as provided by the ITAR, if it "is specifically designed, developed, configured, adapted, or

¹Hot section technology is the technical information required for the design, production, manufacture, maintenance, or modification of the engine hot section.

modified for a military application, and has significant military or intelligence applicability such that control under [the ITAR] is necessary.”

The Department of Commerce controls dual-use items under a system established under the Export Administration Act.² Commerce imposes export controls on the items within its jurisdiction through the Export Administration Regulations and establishes the Commerce Control List in consultation with other agencies and in parallel with U.S. commitments in international control regimes. In arriving at a licensing decision, Commerce provides license applications for the review of other agencies, including Defense, State, the Department of Energy, and the Arms Control and Disarmament Agency. A December 1995 executive order states that Commerce may refer all applications for a validated license to these agencies for review.³ If an agency disagrees with Commerce’s initial licensing decision, it can appeal the decision to interagency review committees.

In March 1993, we reported that jurisdiction over commercial jet engine hot section technology and space-related items, such as communications satellites, was a long-standing issue between State and Commerce.⁴ In November 1990, the President ordered the removal of dual-use items from the U.S. Munitions List and State’s licensing controls, unless significant national security interests would be jeopardized. Pursuant to this order, State led an interagency review, including officials from Defense, Commerce, and other agencies, to determine which dual-use items should be removed from the munitions list and transferred to Commerce’s jurisdiction and which warranted retention on the munitions list. This review was conducted between December 1990 and April 1992. As part of this review, an interagency working group identified and established performance parameters for the militarily sensitive characteristics of communications satellites. If a satellite met or exceeded these parameters, the satellite would be controlled by State, otherwise it would be licensed by Commerce. As a result of the interagency review, over two dozen

²Although the Export Administration Act lapsed on August 20, 1994, Commerce is currently acting under the authority conferred by Executive Order 12924 of August 19, 1994. In the executive order, the President invoked his authority, including authority under the International Emergency Economic Powers Act, to continue the system of controls that the United States had maintained under the Export Administration Act. This has been extended by two presidential notices issued in 1995 and 1996.

³Many items on the Commerce Control List can be exported under a general license to particular destinations. Commerce is not notified of and does not review these exports. Selected items require that exporters obtain Commerce approval through an individual validated license for each export.

⁴Export Controls: Issues in Removing Militarily Sensitive Items from the Munitions List (GAO/NSIAD-93-67, Mar. 31, 1993).

dual-use items were removed from the munitions list and placed under Commerce's jurisdiction, including approximately half of the commercial communications satellites. Jurisdiction for hot section technology, however, was not resolved as a result of the interagency review.

The executive branch's recent decision to change the export licensing jurisdiction for commercial jet engine hot section technology addresses a long-standing disagreement as to whether State or Commerce should control its export. Until this decision, Commerce had claimed jurisdiction over hot section technology of commercial engines not derived from military technology, while State and Defense had maintained that hot section technology for commercial engines that is derived from military engines is the same technology used in military fighter engines and is of such sensitivity that ITAR control was appropriate. Now, all hot section technology for commercial engines, including certain civil and military engines that share the same hot section technology and are evolving together, will be controlled by Commerce. All commercial communications satellites, including those with militarily sensitive characteristics, will be licensed by Commerce.

Results in Brief

The items transferred to Commerce's control, commercial jet engine hot section technology and commercial communications satellites, are militarily sensitive items. Hot section technology gives U.S. fighter aircraft the ability to outlast and outperform other aircraft, a key element in achieving air superiority. Because of the military significance of this technology, State does not allow the export of the most advanced hot section technology for either military or commercial use. Commercial communications satellites being transferred to Commerce's jurisdiction contain militarily sensitive characteristics, such as crosslink capabilities that transmit data from one satellite to another without going through a ground station and thus permit very secure communications. Defense and State officials expressed concern about the potential for improvements in missile capabilities through disclosure of technical data related to integrating the satellite with the launch vehicle and the operational capability that specific satellite characteristics could give a potential adversary. State has approved the export of commercial communications satellites for foreign launch with conditions for safeguarding sensitive technologies for certain destinations such as China.

The executive branch's decision to transfer licensing jurisdiction reflects Commerce's position that all hot section technology and communications

satellites for commercial use should be under Commerce's jurisdiction. Transferring jurisdiction also makes U.S. national controls for these items consistent with international trade commitments to control them as dual-use items. Jet engine and satellite manufacturers support the change in jurisdiction, viewing the Commerce system as more responsive to the needs of business.

The State and Commerce export control systems differ. State has broad authority to deny a license, and it can deny simply with the explanation that it is against U.S. national security or foreign policy interests. Commerce controls items to achieve specific national security and foreign policy objectives. National security controls are aimed at preventing items from reaching certain destinations such as China and Russia. Foreign policy controls are aimed at achieving specific objectives, including antiterrorism, regional stability, and nonproliferation.

In recognition of the military sensitivity of these items, Commerce is implementing new and expanded control procedures. These changes include establishing a new foreign policy control known as a "significant item" control. These new control procedures are intended to allow Commerce to control and deny, where appropriate, exports of the two items to all destinations. This is particularly important for control of hot section technology—exports of the most sensitive hot section technology have not been permitted, even to close allies.

According to Commerce and other executive branch officials, the change in jurisdiction is not intended to change U.S. licensing policy—that is, what destinations and end users the United States will approve export licenses for. Rather, it is intended only to change the procedures under which licensing decisions will be made. Whether the current licensing policy will be maintained with the change in jurisdiction is uncertain. The underlying objectives of the two systems differ. The Arms Export Control Act gives State the authority to use export controls primarily to protect U.S. national security without regard to economic or commercial interests. Under the Export Administration Act, on the other hand, Commerce weighs economic and trade interests along with national security and foreign policy concerns. These differences in the underlying basis for decisions create uncertainty as to whether the changed procedures for making licensing decisions will result in changes in licensing policy. Uncertainty is also created by the newness of the "significant item" control because it is not clear how it will be applied.

The Two Items Are Militarily Sensitive

Commercial Jet Engine Hot Section Technology

A jet engine is composed of three sections: the cold section, or the fan and compressor, which is where the air enters the engine; the hot section, comprised of the combustor and portions of the turbine, which are the components exposed to combustion gases; and the warm section, or exhaust nozzle, which is where the exhaust gases leave the engine. The turbine is one of the more critical components of jet engines because it extracts energy from combustion gases and converts it into the engine's mechanical force. Hot section gas turbine technology that is used to manufacture military engines incorporate advanced design concepts, materials, and manufacturing processes that help keep the turbine cool while the engine operates at extremely hot temperatures.

The key to achieving greater engine performance is to increase the temperature of operation within the engine's hot section. Increased engine effectiveness enhances the performance of the aircraft and leads to improved survivability, lethality, reliability, and sustainability. According to Defense officials, the U.S. military has air superiority over other countries in large part because of the advanced technology used to build hot sections for military engines. U.S. fighter aircraft have the ability to outlast and outperform other foreign-built aircraft, which translates into a significant combat advantage over possible adversaries.

Hot section technology required for military aircraft also has applications for engines used on commercial aircraft. Commercial engines require different performance parameters than military engines, but higher operating temperatures provide greater fuel efficiency. According to officials at Commerce, Defense, and State and industry representatives, the core elements of hot section technology are similar for both military and commercial jet engines. Although all agree that it is almost impossible to distinguish between military and commercial hot section technology, they differ in opinion on the applicability of commercial hot section technology to military uses. Defense and State officials informed us that exporting commercial hot section technology gives a foreign manufacturer information allowing it to build either a commercial or military engine if it is willing to make certain trade-offs in manufacturing, such as sacrificing durability to achieve higher performance and temperatures. Commerce officials maintain that if a foreign manufacturer decides to adapt

commercial hot section technology to military use, it can make a military engine, but it will not have sufficient experience to allow it to make an engine equal to or exceeding U.S. military capabilities. Engine manufacturers agree that selected hot section technology for commercial engines should be protected for both competitive interest and national security, but they believe that certain technical data transfers to foreign partners facilitate cooperative engine development, production sharing, operational maintenance, and repair.

Because of the military importance of hot section technology and the similarity between commercial and military technology, Defense officials are concerned about the diffusion of technology and availability of hot section components that could negatively affect the combat advantage of U.S. aircraft and pose a threat to U.S. national security concerns. To protect national security interests, Defense officials review applications referred by State to determine whether the export would undermine the U.S. lead in hot section technology and, consequently, U.S. air superiority.⁵ Defense and State have not approved the export of the most advanced hot section technology for either military or commercial use, although certain exports have been allowed under government-to-government agreements with U.S. allies that restrict transfer beyond the government.

In addition to protecting the export of state-of-the-art hot section technology, Defense also makes recommendations on the advisability of exporting selected individual parts that make up the hot section (i.e., the blades, discs, and combustor lines). These parts are exposed to combustion gases and, in state-of-the-art engines, they must have the ability to sustain very high temperatures. According to Defense officials, allowing the export of the most advanced components would allow foreign manufacturers to assemble hot sections that match the capabilities of U.S. engines used in fighter aircraft. State defers to Defense's recommendations on license applications for these parts. Licensing of these components is not affected by the change in jurisdiction and remains with State.

Communications Satellites

Commercial communications satellites are intended to facilitate civil communication functions through various media, such as voice, data, and video. Commercial satellites often carry Defense data as well. In contrast, military communications satellites are used exclusively to transfer

⁵Pursuant to the December 1995 executive order stating that Commerce may refer license applications to Defense and other agencies, Defense also reviews applications received by Commerce.

information related to national security and have characteristics that allow the satellites to be used for such purposes as providing real-time battlefield data and relaying intelligence data for specific military needs.

Satellites used for either commercial or military communications may contain one or more of nine militarily sensitive characteristics. A description of the characteristics is provided in table 1. Satellites with characteristics exceeding certain parameters are considered militarily sensitive.

Table 1: Militarily Sensitive Characteristics Integrated in Commercial Communications Satellites

| Characteristic or component | Definition | Military sensitivity of characteristics exceeding certain performance parameters |
|-----------------------------|--|--|
| Antijam capability | Antennas and/or antenna systems with the ability to respond to incoming interference by adaptively reducing antenna gain in the direction of the interference. | Ensures that communications remain open during crises. |
| Antenna | Allows a satellite to receive incoming signals. | An antenna aimed at a spot roughly 200 nautical miles in diameter or less can become a sensitive radio listening device and is very effective against ground-based interception efforts. |
| Crosslinks | Provide the capability to transmit data from one satellite to another without going through a ground station. | Permit the expansion of regional satellite communication coverage to global coverage and provide source-to-destination connectivity that can span the globe. It is very difficult to intercept and permits very secure communications. |
| Baseband processing | Allows a satellite to switch from one frequency to another with an on-board processor. | On-board switching can provide resistance to jamming of signals. |
| Encryption devices | Scramble signals and data transmitted to and from a satellite. | Allow telemetry and control of a satellite, which provide positive control and deny unauthorized access. Certain encryption capabilities have significant intelligence features important to the National Security Agency. |
| Radiation-hardened devices | Provide protection from natural and man-made radiation environment in space, which can be harmful to electronic circuits. | Permit a satellite to operate in nuclear war environments and may enable its electronic components to survive a nuclear explosion. |
| Propulsion system | Allows rapid changes when the satellite is in orbit. | Military maneuvers require that a satellite have the capability to accelerate faster than a certain speed to cover new areas of interest. |
| Pointing accuracy | Provides a low probability that a signal will be intercepted. | High performance pointing capabilities provide superior intelligence-gathering capabilities. |
| Kick motors | Used to deliver satellites to their proper orbital slots. | If the motor can be restarted, the satellite can execute military maneuvers because it can move to cover new areas. |

Source: Departments of Commerce and Defense.

Jurisdiction over commercial communications satellites that did not have any of these militarily sensitive characteristics changed to Commerce in October 1992 as a result of the interagency review begun in 1990. Those

with any of the nine components remained under State's jurisdiction, as did the individual components themselves and all sensitive technology to design, develop, or manufacture a satellite. The regulations move commercial satellites with one or more of the nine characteristics to Commerce, while the export of individual systems and components not incorporated in a satellite remain under State's jurisdiction, as does the technology to design, develop, and manufacture the satellite. Certain kick motors that are not embedded in satellites, however, will be subject to Commerce's jurisdiction when they are to be used for specific satellite launches, provided that a kick motor is neither specifically designed or modified for military use nor capable of being restarted after the satellite is in orbit.

In reviewing export license applications, Defense and State officials examine the potential for the export of satellite technologies. The process of planning a satellite launch takes place over several months, and there is concern that technical discussions between U.S. and foreign representatives may go beyond that needed for the launch and lead to the transfer of information on militarily sensitive components. Officials say they are particularly concerned about the technologies to integrate the satellite to the launch vehicle because this technology can also be applied to launch ballistic missiles to improve their performance and reliability. They also expressed concern about the operational capability that specific characteristics, in particular antijam capability, crosslinks, and baseband processing, could give a potential adversary.

State has approved the exports of commercial communications satellites and established detailed security guidelines and conditions to address concerns about the disclosure of technologies associated with the launch vehicle and militarily sensitive characteristics for launches from China and sites in the former Soviet Union. These conditions require that safeguards be applied to prevent the disclosure of technology beyond that needed for integration and launch of the satellite, as provided for in safeguard agreements between the United States and these countries. For launches in China and Russia, State also requires a technical assistance agreement, which is a signed contract between the U.S. firm and the foreign government that specifies what technical assistance and data can be provided. In addition, State requires that exporters fund the travel costs of Defense personnel traveling to oversee the satellite launches. In licensing communications satellites already under its jurisdiction, Commerce also places conditions on the export license on the type of technical

information that can be transferred but does not require exporters to fund the travel costs of Defense personnel overseeing the launch.

Rationale for Changing Licensing Jurisdiction

Export control of dual-use items has been a matter of contention over the years between Commerce and State. State claimed jurisdiction for both commercial and military hot section technology because State and Defense maintained that (1) the technology and manufacturing processes applied to the hot sections of military and commercial engines are basically the same and originated in military programs and (2) diffusion of critical hot section technology for commercial engines would accelerate other countries' abilities to design and manufacture engines, including military engines, of equal capability to those manufactured in the United States. Commerce claimed jurisdiction for commercial hot section technology not derived from military technology.

Commerce has argued that since the international Coordinating Committee for Multilateral Export Controls classified communications satellites and other space-related items as dual use, the entire category, except strictly military items, should be transferred to its jurisdiction.⁶ State and Defense insisted that the decision should be made on an item-by-item basis as part of the interagency review begun in 1990. Therefore, an interagency working group comprised of all concerned agencies was assembled to conduct an item-by-item review. The working group decided in 1992 to move approximately half the commercial communications satellites (those that did not have one or more of the nine ITAR performance characteristics) to the Commerce Control List.

According to Commerce officials, the executive branch's decision reflects Commerce's long-held position that all commercial hot section technology and commercial communications satellites should be under its jurisdiction. Commerce argues that both items are, by definition, intended for commercial end use and are therefore not munitions. This argument reflects the view that all dual-use items should be subject to export control under Commerce's licensing system because most applications of these items are commercial. Commerce also maintains that transferring jurisdiction to the dual-use list also makes U.S. controls consistent with treatment of these items under multilateral export control regimes. In contrast, State and Defense point out that the ITAR is not based on end use

⁶The United States was a member of this committee, which called for member nations to assert control over munitions, dual-use items, and nuclear items as agreed to by all members. Although this committee ceased to exist in 1994, communications satellites are still controlled multilaterally as dual-use items.

considerations, but on whether an item has been specifically designed for military applications. The executive branch's decision is the result of an interagency review involving State, Commerce, Defense, and the intelligence community in which the agencies developed a common recommendation to the President to clarify the licensing jurisdiction of these items.

Industry Supports the Change in Jurisdiction

Manufacturers of jet engines and communications satellites we talked with support the transfer of the items to the Commerce Control List. They cite the following reasons for favoring Commerce's control:

- Export licensing jurisdiction should be determined solely by an export's commercial application, and since both items are predominantly for commercial end use, they are not munitions and should therefore not be subject to State's licensing process.
- The Commerce process is more responsive to business because time frames are clearly established, the review process is more predictable, and more information is shared with the exporter on the reasons for denials or conditions on the license.
- Under State's jurisdiction, commercial products become subject to certain mandatory sanctions and embargoes that require denial of exports. Some sanctions and embargoes apply only to items on the munitions list and not to items on the Commerce Control List.
- Exports under State's jurisdiction that exceed certain dollar thresholds are subject to congressional notifications, and exporters say this can delay the process. Satellite exports exceed these thresholds.
- The competitive market for commercial aircraft creates the need to establish foreign overhaul and repair facilities and to use foreign expertise to develop and manufacture current and new commercial aircraft engines. Although the jet engine industry agrees in principle that selected high technology know-how should be protected for both competitive and national security reasons, manufacturers believe certain technical data transfers to foreign partners facilitate cooperative engine development, sharing of production, and operational maintenance.
- China is seen as a large and growing market for commercial aircraft engines. Competing in the China market for the 100-passenger airliner requires transfer of technology for the maintenance and production of hot section components of an engine for such an aircraft .
- Some of the militarily sensitive systems or characteristics of communications satellites are no longer unique to military satellites.

Commerce's and State's Licensing Systems Differ

State and Commerce implement different laws to control exports of military and dual-use items. The underlying objectives of these laws differ. State controls munitions items to further the security and foreign policy of the United States. Commerce, on the other hand, weighs U.S. economic and trade interests with national security and foreign policy interests.

Commerce controls the export of dual-use items under the Export Administration Act, as implemented under the Export Administration Regulations. The key provisions of its export control system are discussed in table 2.

Table 2: Key Provisions of Commerce's Export Control System

| Provision | Definition |
|----------------------------|---|
| License categories | An individual validated license authorizes the export of a specific item during a specified period to a designated consignee. A general license requires no application and permits export within the provisions of the Export Administration Regulations. A special comprehensive license consolidates five types of special licenses for such purposes as large-scale exports of a wide variety of items for specified activities, certain multiple exports and re-exports, and other purposes. |
| Reasons for control | National security controls restrict the export and re-export of strategic items worldwide to prevent their diversion to certain destinations, such as China and Russia. Foreign policy controls restrict the export of items to prevent them from reaching countries for reasons that include antiterrorism, regional stability, and nonproliferation. |
| Permanency of controls | Foreign policy controls are not permanent and must be renewed annually by the Secretary of Commerce, as delegated by the President, and reported to Congress. |
| Foreign availability | A determination that an item is comparable in quality to an item subject to U.S. national security export controls and is available from a non-U.S. source in sufficient quantities to render the U.S. export control of that item or the denial of a license ineffective. This determination results in mandatory decontrol of items controlled solely for national security reasons. This provision does not apply to items controlled for foreign policy reasons. |
| De minimis thresholds | Under the Export Administration Regulations, prior written approval from Commerce is not required for the re-export of a foreign-made product incorporating materials of U.S. origin if the U.S. content value is less than 10 percent or 25 percent, depending on the destination, of the product. |
| Judicial review | The Export Administration Act provides for limited administrative review of license denials, but it precludes judicial review. |
| Contract sanctity | If Commerce imposes a new foreign policy control and a contract to manufacture a product for which an exporter has obtained an export license is underway, the contract generally does not have to comply with the new control and the exporter can export the product. |
| Congressional notification | Items are not subject to mandatory congressional notification with the exception of items subject to controls for antiterrorism. |
| Enforcement of sanctions | Although Commerce does not allow the export of certain dual-use items to certain countries when the United States imposes sanctions on those countries, if these items are embedded within larger items that are not subject to sanctions, the larger items can be exported to sanctioned countries. |

While the Export Administration Act provides broad authority to control exports, the national security and foreign policy controls that Commerce has put in place through the Export Administration Regulations provide for control of exports to specific destinations to achieve specific objectives. National security controls are to ensure that exports do not make a contribution to the military potential of specified countries such as China and Russia. Foreign policy controls can be imposed on all destinations and include the regional instability control and missile technology control. Exports controlled for regional instability reasons are

reviewed to determine whether the exports could contribute directly or indirectly to any country's military capabilities in a manner that would alter or destabilize a region's military balance contrary to the foreign policy interests of the United States.

State controls munitions items under the Arms Export Control Act. State requires individual licenses for all exports under its jurisdiction, with the exception of certain Defense exports. State has broad authority to deny a license, and it can deny simply with the explanation that it is against U.S. national security or foreign policy interests. State's controls are permanent and do not need to be renewed periodically, and there are no provisions for foreign availability findings or re-exporting under de minimis thresholds. The Arms Export Control Act does not preclude judicial review of a licensing decision but no court has reversed a licensing decision by State. State has the authority to revoke a license for an export if it believes it to be against U.S. national security interests, even after a contract to manufacture the product to be exported is underway. All applications to export items that exceed certain values, including all commercial communications satellites, are subject to congressional notification prior to approval.

Commerce and State enforce several types of unilateral U.S. sanctions on exports, including two domestic laws with particular significance for exports of commercial communications satellites and jet engine hot section technology. These are (1) the amendments to the Export Administration Act and Arms Export Control Act made by the National Defense Authorization Act for fiscal year 1991 (P.L. 101-510, Title XVII) regarding sanctions for activities related to specified trade in items on the Missile Technology Control Regime annex and (2) the sanctions in effect since 1990 on exports of munitions to and satellites for launch in China as a result of the Tiananmen Square incident that are published in the Foreign Relations Authorization Act for fiscal years 1990 and 1991 (P.L. 101-246, Title IX, as amended).

The United States is a member of the Missile Technology Control Regime, a group formed in 1987 whose members coordinate their national export controls to limit the proliferation of missiles "capable of delivering nuclear weapons." This group is composed of the United States and 27 other countries. The United States implements its export control policies partly based on the regime's annex, which lists 20 items of missile-related goods and technologies, divided into two categories. Category I covers missile systems and their major subsystems and production equipment, and

category II covers materials, components, production, and test equipment. Under the missile sanctions amendments to the Export Administration Act and Arms Exports Control Act, State determines whether sanctionable trade in items within category I or II of the Missile Technology Control Regime annex has occurred.

If the sanctionable trade was in category I items, the laws require Commerce to deny the export of all items controlled under the Export Administration Act and State to deny the export of all items controlled under the Arms Export Control Act, in addition to certain other sanctions. If the sanctionable trade was in category II items, the laws require Commerce to deny the export of items listed in the annex that are controlled under the Export Administration Act and State to deny the export of items listed in the annex that are controlled under the Arms Export Control Act. In addition, the sanctions for trade in category II items permit the denial of exports of items not listed in the annex. An example of such an item is commercial communications satellites, which contain items listed in the annex. The National Security Council left the decision of how to treat such exports to Commerce and State. Thus, when the United States imposed category II sanctions on China in 1993, exports of commercial communications satellites controlled by State were not approved while exports of those satellites controlled by Commerce were not affected.

The Tiananmen Square sanctions include prohibitions on the export of items on the munitions list and the export of satellites for launch from launch vehicles owned by China. The President can waive these prohibitions if such a waiver is in the national interest.⁷ Waivers have been granted allowing Commerce and State to approve the export of commercial communications satellites for launch from Chinese launch vehicles. Exports of hot section technology controlled by State are prohibited by the Tiananmen Square sanctions, while exports of hot section technology controlled by Commerce are not prohibited.

Items Transfer to Commerce Licensing Jurisdiction

In October and November 1996, Commerce and State published changes to their respective regulations transferring licensing jurisdiction for commercial jet engine hot section technology and commercial communications satellites to Commerce. Commerce's interim regulations provide enhanced controls for the items. Additional controls are being

⁷Missile sanctions are also subject to certain exceptions and waivers.

implemented through an executive order and a presidential decision directive issued in October 1996.

As a result of the change in licensing jurisdiction, State returned four applications for exports of commercial communications satellites without action. Two of these applications involved launches in China, one involved a launch in French Guiana, and the fourth involved a launch from a Russian-controlled facility in Kazakhstan. The exporters were advised by State to resubmit their license applications to Commerce and, in two cases, to request a separate license from State for items remaining subject to State licensing (e.g., rocket fuel).⁸ As a result of the change in jurisdiction, these exports will not be subject to certain sanctions or to congressional notification requirements. They will be subject to the controls put in place through Commerce's interim regulations.

Commerce's new controls make the following changes for commercial jet engine hot section technology and commercial communications satellites:

- The items must be exported under individual validated licenses and will not be eligible for special comprehensive licenses or general licenses.
- Pursuant to the December 1995 executive order, Commerce may refer license applications to Defense, State, and other agencies for review. According to Commerce officials, all applications for the two items will be subject to full interagency review.
- The items will be controlled for national security reasons to all destinations. National security controls have been focused on preventing exports to certain destinations.
- A new "significant item" control will be created for these two items. This new foreign policy control will require a license for all destinations, except Canada. Although most foreign policy controls define specific and limited policy objectives, the policy objective for this control—consistency with U.S. national security and foreign policy interests—is broadly stated. Commerce officials stated that this control gives them broad discretion to deny an export.
- Technical information that can be transferred under a satellite license is more clearly defined.
- The two items transferring to Commerce's jurisdiction will not be subject to mandatory decontrol or licensing as a result of a foreign availability finding, as is normally the case for items controlled solely for national security reasons. Commerce officials stated that mandatory licensing and decontrol do not apply to items controlled for foreign policy and that the

⁸According to Commerce officials, a separate license from State will not be required.

provisions of the Export Administration Regulations requiring mandatory decontrol or licensing of items controlled for national security can be waived if the President determines that such a waiver is in the national interest. Rather than seek a presidential waiver on a case-by-case basis, a presidential decision directive has been issued saying that, in advance, mandatory decontrol or licensing is not in the national interest. Regulations providing the exporter with the ability to request a foreign availability finding and consideration of foreign availability in arriving at licensing decisions will still apply to these items.

- De minimis provisions will not apply to the two items. In the case of hot section technology, the de minimis provision provides that any technology prepared or engineered abroad for the design, construction, operation, or maintenance of any plant or equipment that uses U.S.-origin hot section technology will be subject to U.S. export control regulations.
- Contract sanctity provisions will not apply.

In addition, procedures for interagency review of Commerce's initial decisions on individual licenses have been modified for these items. These procedures provide for participation by reviewing agencies, including State and Defense. Commerce makes initial licensing decisions unless reviewing agencies are not in agreement. In those cases, decisions are made by an interagency group known as the Operating Committee, which is chaired by Commerce and includes representatives from Defense, State, Energy, and the Arms Control and Disarmament Agency. Under normal procedures, the chair of the Operating Committee, a Commerce official appointed by the Secretary of Commerce, decided to approve or deny a license and to include conditions on the license, after considering input from other committee members.⁹

Under revised procedures for these two items, the decision to deny or approve a license, and conditions for approval, will be made by a majority vote of the members of the Operating Committee. The executive order that establishes procedures for interagency review of Commerce license applications was revised in October 1996 to implement this procedural change.

⁹An agency disagreeing with a decision made by the Operating Committee can appeal it to the Advisory Committee on Export Policy, which is composed of members at the assistant-secretary level from the same agencies represented in the Operating Committee and makes its decision based on majority vote. If the dissenting agency disagrees with this decision, it can be appealed to the Export Administration Review Board, which is composed of the secretaries of the same agencies represented in the Operating Committee and also makes its decision based on majority vote. If the dissenting agency still disagrees with the decision, it can then be appealed to the President. In practice, decisions are rarely escalated beyond the Advisory Committee on Export Policy.

Implications of Change Are Uncertain

These regulatory and procedural changes are intended to allow Commerce to control and deny, when appropriate, exports of the two items to all destinations. This is particularly important for control of hot section technology. Exports of the most sensitive hot section technology have not been permitted, even to close allies. State approved exports of commercial communications satellites with conditions on the safeguard of the satellite and associated technology. According to Commerce and other executive branch officials, the change in jurisdiction is not intended to change U.S. licensing policy—what destinations and end users the United States will approve licenses for—but only the procedures under which licensing decisions will be made.

Whether the current licensing policy will be maintained with the change in jurisdiction is uncertain. The underlying objectives of the two systems differ. The Arms Export Control Act gives State the authority to use export controls primarily to protect U.S. national security without regard to economic or commercial interests. Under the Export Administration Act, on the other hand, Commerce weighs economic and trade interests along with national security and foreign policy concerns. The importance attached to economic and commercial interests is reflected in Commerce's role in the process as the representative of commercial interests. Defense, as the voice for national security concerns, is one of several agencies in Commerce's licensing system. Under State's licensing system, Defense is one of two agencies involved in licensing decisions. According to State, State denies an export if Defense raises significant national security concerns.

These differences in the underlying basis for decisions create uncertainty as to whether the changed procedures for making licensing decisions will result in changes in licensing policy. Uncertainty is also created by the newness of the "significant item" control because it is not clear how it will be applied.

Agency Comments and Our Evaluation

The Departments of Defense and Commerce provided written comments on a draft of this report (see apps. I and II, respectively), and the Department of State provided oral comments. Both Defense and State said they had no objections to the report. State also commented that the report fairly and accurately laid out the issues associated with State's position in these matters. Commerce stated that the President's decision to transfer jurisdiction of the two items discussed in this report was based on the unanimous recommendation of Defense, Commerce, and State. Commerce

cited major factors involved in the recommendation and decision: (1) changed military and industrial environment after the Cold War, (2) all U.S. allies treat these items as dual-use goods rather than munitions, (3) since December 1995 all agencies have had the right to participate fully in licensing deliberations, and (4) it made good business sense. Commerce suggested that our characterization of Defense's and State's positions was based on the views of junior staff members at these agencies and ignored the consensus that was ultimately achieved.

Our presentation of the Defense and State positions is based on discussions with senior level officials in these agencies, including Defense's Director of the Defense Technology Security Administration and State's Director of Defense Trade Controls. Neither State nor Defense raised any objections to our presentation of their positions in the draft report and State commented that the report fairly and accurately reflected its position. Further, with respect to Commerce's comment that the transfer of jurisdiction was based on the unanimous recommendation of Defense, Commerce, and State, it should be noted that an interagency group reviewing licensing jurisdiction for commercial communications satellites had recommended that commercial communications satellites with militarily sensitive characteristics continue to be licensed by the State Department. It also recommended further adjustments in the characteristics defining militarily sensitive commercial communications satellites. The Secretary of State upheld these recommendations. It was only after Commerce appealed the Secretary of State's decision to the President, and the President decided to transfer jurisdiction for both commercial communications satellites and commercial jet engine hot section technology to the Department of Commerce that unanimous support for the transfer of jurisdiction came about.

Scope and Methodology

To assess the military sensitivity of the two items, we interviewed and obtained analyses from officials in the Air Force, the Navy, the Office of the Deputy Under Secretary of Defense for Space, the Defense Technology Security Administration, the National Security Agency, the Defense Intelligence Agency, and the Department of State. We also analyzed license applications for the two items submitted to State and referred to Defense to gain an understanding of the concerns at Defense and State related to the export of the items.

To determine the executive branch's rationale for the change in licensing jurisdiction, we interviewed officials at Commerce and State. We also

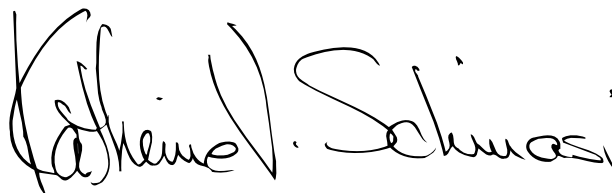
interviewed and obtained documents from representatives of the Aerospace Industries Association, The Boeing Company, General Electric, The Hughes Corporation, Lockheed Martin, and United Technologies Corporation. The Aerospace Industries Association represents manufacturers of engines and spacecraft. Boeing purchases jet engines for its commercial and military aircraft. General Electric and United Technologies are two major engine manufacturers, and Hughes and Lockheed Martin are two major commercial satellite manufacturers. In addition, we reviewed documents at Commerce, Defense, and State related to the development of the interim regulations and analyses done by industry advisory groups.

To evaluate the differences between Commerce's and State's export licensing jurisdictions for the two items, we interviewed and obtained documents from officials at Commerce, Defense, and State. We compared the provisions in the Export Administration Act and the Export Administration Regulations to those in the Arms Export Control Act and the International Traffic in Arms Regulations. In addition, we reviewed the interim final rule changing the jurisdiction to Commerce to evaluate the new controls that Commerce plans to implement to control the two items.

We performed our review from June to November 1996 in accordance with generally accepted government auditing standards.

As arranged with your offices, unless you publicly announce its contents earlier, we plan no further distribution of this report until 10 days after its issue date. At that time, we will send copies to the Secretaries of Defense, the Army, the Navy, and the Air Force and other interested congressional committees. Copies will also be made available to others upon request.

Please contact me at (202) 512-4841 if you or your staff have any questions concerning this report. Major contributors to this report are listed in appendix III.



Katherine V. Schinasi
Associate Director, Defense Acquisitions Issues

Contents

| | |
|---|----|
| Letter | 1 |
| Appendix I Comments From the Department of Defense | 24 |
| Appendix II Comments From the Department of Commerce | 25 |
| Appendix III Major Contributors to This Report | 27 |
| Tables | |
| Table 1: Militarily Sensitive Characteristics Integrated in Commercial Communications Satellites | 8 |
| Table 2: Key Provisions of Commerce's Export Control System | 13 |

Abbreviations

ITAR International Traffic in Arms Regulations

Comments From the Department of Defense



INTERNATIONAL
SECURITY POLICY

OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE
2600 DEFENSE PENTAGON
WASHINGTON, DC 20301-2600



0 1 NOV 1996

Ms. Katherine Schinasi
Associate Director, Defense Acquisitions Issues,
National Security and International
Affairs Division
U.S. General Accounting Office
Washington, D.C. 20548

Dear Ms. Schinasi:

This is the Department of Defense (DoD) response to the General Accounting Office (GAO) draft report, "EXPORT CONTROLS: Change in Export Licensing Jurisdiction for Two Sensitive Dual-Use Items," Dated October 17, 1996 (GAO Code 707174), OSD Case 1242.

The Department of Defense has reviewed the report and has no objection. Technical corrections were separately provided. The Department appreciates the opportunity to comment on the draft report.

Sincerely,

Mitchel B. Wallerstein
Deputy Assistant Secretary of Defense
Counterproliferation Policy



Comments From the Department of Commerce



THE SECRETARY OF COMMERCE
Washington, D.C. 20230

NOV 13 1996

Ms. Katherine V. Schinasi
Associate Director
Defense Acquisitions Issues
National Security and
International Affairs Division
General Accounting Office
Washington, D.C. 20548

Dear Ms. Schinasi:

Thank you for sending me your draft report, "Change in Export Licensing Jurisdiction for Two Sensitive Dual-Use Items," which concerns the jet engine hot section technology and commercial communications satellites. I understand that you were under considerable time pressure to provide a draft of the report to the House Committee on National Security. I trust that this pressure explains why many of the comments provided to your staff by Bureau of Export Administration officials were not reflected in the draft. I understand that your staff is continuing its review of this matter and is still examining relevant Commerce Department files. Accordingly, I hope that we will have the opportunity to review a subsequent draft before you finalize your report and formally submit it to the Committee.

As was mentioned in the meeting with BXA officials, we do not believe that the draft report adequately reflects the fact that the decision by the President to transfer jurisdiction of these items to Commerce was based on the unanimous recommendation of the Departments of Commerce, Defense, and State. Rather, the report seems to reflect the views of junior staff members of those agencies at an early stage of the debate and to ignore the consensus that was ultimately achieved.

The President's decision and the unanimous recommendation of the involved agencies was based on four major factors. First, the changed military and industrial environment after the end of the Cold War argued for an examination of the export controls on these items. The threats posed by the Cold War had evaporated, and our international challenges will increasingly be economic ones. It is imperative that these two important sectors of the economy remain vibrant and competitive. Advances in the areas of hot section technology and communication satellites are increasingly being led by the civilian side of the economy rather than the military.

**Appendix II
Comments From the Department of
Commerce**

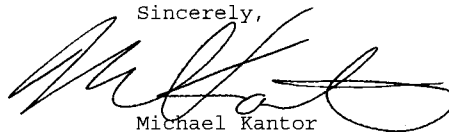
Second, without exception, all our allies treat these items as dual-use goods rather than munitions. It is ironic that in negotiations with our partners in international fora, the United States has consistently agreed to these items being placed on the international dual-use lists but has resisted doing so at home.

Third, the reform of the dual-use licensing system, accomplished through Executive Order 12981 of December 1995, established a system in which all agencies have a right to participate fully in licensing deliberations and may escalate disagreement, if any, to the President. Because of this reform, the Departments of Defense and State both felt that their equities were fully protected and could endorse the transfer of jurisdiction to Commerce.

Fourth, the decision had the support of the business community and many in the Congress, not only for the reasons enumerated above, but also because it makes good business sense to consider these commercial items rather than munitions. As the military has a vested interest in keeping these sectors viable, it made sense to move the jurisdiction to Commerce where the economic aspects of a transaction could be considered along with the security implications.

In addition to these major points, I have enclosed a number of line-by-line suggestions that I trust you will find helpful. As noted above, I also hope that we will have another opportunity to review a subsequent draft based on these comments, the meeting with BXA officials, and the on-going review of our files.

Sincerely,



Michael Kantor

Enclosure

Major Contributors to This Report

National Security and
International Affairs
Division, Washington,
D.C.

Karen S. Zuckerstein
Maria J. Santos
Maria B. Boyreau

Office of General
Counsel

Raymond J. Wyrsh

Ordering Information

The first copy of each GAO report and testimony is free. Additional copies are \$2 each. Orders should be sent to the following address, accompanied by a check or money order made out to the Superintendent of Documents, when necessary. VISA and MasterCard credit cards are accepted, also. Orders for 100 or more copies to be mailed to a single address are discounted 25 percent.

Orders by mail:

U.S. General Accounting Office
P.O. Box 6015
Gaithersburg, MD 20884-6015

or visit:

Room 1100
700 4th St. NW (corner of 4th and G Sts. NW)
U.S. General Accounting Office
Washington, DC

Orders may also be placed by calling (202) 512-6000
or by using fax number (301) 258-4066, or TDD (301) 413-0006.

Each day, GAO issues a list of newly available reports and testimony. To receive facsimile copies of the daily list or any list from the past 30 days, please call (202) 512-6000 using a touchtone phone. A recorded menu will provide information on how to obtain these lists.

For information on how to access GAO reports on the INTERNET, send an e-mail message with "info" in the body to:

info@www.gao.gov

or visit GAO's World Wide Web Home Page at:

<http://www.gao.gov>

**United States
General Accounting Office
Washington, D.C. 20548-0001**

**Bulk Rate
Postage & Fees Paid
GAO
Permit No. G100**

**Official Business
Penalty for Private Use \$300**

Address Correction Requested

