

**General Discord and Bad Harmony:  
U.S. Export Controls in Space**

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ABSTRACT

Space companies conducting international transactions that involve U.S.-origin technologies are subject to U.S. export controls that determine the content, destination and parties of an export. More than any other, the space industry is subject to those regulatory controls and their impact on otherwise legitimate business opportunities.

This paper provides an introduction to U.S. export regulatory controls and their application to the space and aerospace industries. This discussion also provides a guideline on how to proceed in the event of a violation of these regulatory controls and a potential investigation by the U.S. government.

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INTRODUCTION

At the core of U.S. anti-terrorist efforts are complicated controls, enforced by the U.S. Department of Homeland Security, that are designed to deprive terrorist entities of funds and technology. As a result of the wide breadth of these laws, U.S. export control laws regulate virtually every international transaction. Certain technology and services (such as those related to space industries) are subject to stringent controls that create licensing obligations and significant penalties for violations.

Export controls are often referred to as “non-proliferation initiatives,” as their goal is to impede the proliferation of weapons-applicable or -specific technologies, also referred to as “*dual-use*” or “*munitions*” and the funds required for their application. The term “munitions” is not limited to military items. The term includes any technology that according to the U.S. government has been specifically designed or modified for military application.<sup>1</sup>

Aerospace and space technology, commodities and services may be

designated as *munitions* even if designed for commercial application. For example, all commercial communication satellites are classified as *munitions*, and certain will be considered significant military equipment if they are intended for use by the armed forces of a foreign country.<sup>2</sup>

Weapons-applicable technologies refer to those that are commercial in nature, but have a “dual use.”<sup>3</sup> That is, they can be used to enhance, or are necessary for, an offensive or defensive weapons system. Dual-use technologies can include virtually any know-how, from communications switches to software. Whether a particular technology is “dual-use” will depend on the use to which it can be applied.<sup>4</sup>

These non-proliferation controls affect with whom U.S. persons can do business and the type of technology that can be exported without express government approval. To be effective, these controls have to reach to the street-level of commerce, that is, from the largest to the smallest company and from a seller of used military radios to a large space firm.

As an adjunct to U.S. Homeland Security controls and related foreign policy initiatives, these controls have been given broad reach. Penalties for non-compliance are severe, reflecting the national security imperative behind the regulations. Perhaps most difficult for businesses, the laws render illegal otherwise legal commercial conduct. Making matters more complicated, these laws are enforced simultaneously by a number of agencies, with at times seemingly conflicting regulations.

This article reviews U.S. export controls and their application to the space and aerospace industries, providing general guidelines regarding how to approach an inadvertent violation and subsequent governmental investigation of a company’s international transactions by the U.S. government. Understanding of these export controls and the implementation of an effective compliance program are the first steps to ensure compliance with U.S. export regulatory controls and to prevent a potential investigation into a company’s international business activities. While eventual penalties can be significant, experience shows that the cost of defense and remedial measures can often exceed by many times the penalty paid.

#### APPLICATION OF U.S. EXPORT CONTROL LAWS TO THE SPACE INDUSTRY

U.S. export control laws regulate with whom a U.S. person can do business, how that business is done and what may be exported. These controls capture virtually *every* aspect of international commerce, including the space industry. If a U.S. company conducts business with a non-U.S. person, the U.S. company needs to anticipate the impact of U.S. export control laws. Alternatively, if a non-U.S. company is procuring U.S.-origin technology (in any form) or participating in a joint effort with a U.S. firm, export controls have to be accommodated.

U.S. export control laws are enforced and administered by several U.S. agencies with at times overlapping jurisdiction.

As authorized by the President of the United States pursuant to Section 38 of

the Arms Export Controls Act, 22 U.S.C. 2778,<sup>5</sup> the State Department, through the Directorate of Defense Trade Controls (“DDTC”), enforces the regulatory controls regarding the export of *munitions* (also known as “defense articles”) and related services and technology. DDTC administers the International Traffic in Arms Regulations, 22 C.F.R. 120 et seq., (“ITARs”), which implement the statutory law governing the export of “defense articles” and “defense services.”<sup>6</sup>

Items designated as “defense articles” and “defense services” are listed on the United States Munitions List, 22 C.F.R. 121, (the “Munitions List”). The State Department, in collaboration with the Department of Defense, determines which items to include in the Munitions List.

The State Department has established certain policy principles to determine whether certain technology or the transfer of that technology, as applicable, is to be considered a “defense article” or “defense service.” When analyzing a commodity or service, DDTC will determine if the article or service:

- (1) Is specifically designed, developed, configured, adapted or modified for a military application, and
- (2) Does not have predominant civil applications, and
- (3) Does not have a performance equivalent to that of an article or service used for civilian applications.<sup>7</sup>

A technology may also be designated as a “defense article” or “defense service”

if it is “specifically designed, developed, configured, adapted, or modified for a military application.”<sup>8</sup> The intended use of the article or service is not a relevant factor when designating an article or service as a “defense article” or “defense service.”<sup>9</sup>

If an exporter or a recipient of U.S.-origin technology has doubts regarding the adequate classification of an article or service, it files a commodity jurisdiction request with DDTC to obtain a ruling regarding whether the State or Commerce Departments has jurisdiction over the technology. The commodity jurisdiction request should include a description of the article or service, a history of the product’s design, development and use, brochures and other documentation related to the article or service.<sup>10</sup>

Usually, the objective of a commodity jurisdiction request is to demonstrate to the State Department that the article or service in question should be controlled by the Commerce Department, that is, it is *not* a defense article. The reason for this is that the licensing restrictions under the Commerce Department are less stringent than under the State Department.<sup>11</sup> To reach that objective, the commodity jurisdiction request should be able to demonstrate that the article has a civilian application and it has a performance equivalent, as defined by form, fit and function, to that of an article used for civilian applications.<sup>12</sup>

The State Department has the ability to designate a technology a *munition* or defense article if, in the agency’s opinion, national security concerns warrant the control. The State Department’s designation of an item as

a defense article is not judicially reviewable. *See* 22 U.S.C. 2778(h).

A broad array of technologies may qualify as *munitions*. Most articles, services and technologies related to the aerospace and space industries are controlled by the State Department. For example, Category IV of the Munitions List includes launch vehicles, space launch vehicle power plants and all related technical data.<sup>13</sup> Category VIII includes, among others, aircrafts, inertial navigation systems, developmental aircraft, engines and controlling parts, components and associated equipment specifically designed or modified for military use.<sup>14</sup>

In addition, Category XXI of the Munitions List provides that the DDTC can designate any technology a *munition* if, in the opinion of the DDTC, the technology has "substantial military applicability and . . . has been specifically designed or modified for military purposes."<sup>15</sup>

Exports of most technology listed on the Munitions List will require a license from the State Department, unless there is an applicable license exemption. The ITARs provide exemptions from the licensing requirements for the export of certain technology.<sup>16</sup> Generally speaking, however, most exports of technology related to the space and aerospace industries will require an export authorization from the State Department. These restrictions need to be strictly followed to avoid a violation and costly investigative and defense efforts. Consequently companies need to be aware of these requirements to continue conducting business in compliance with U.S. laws.

In addition to the State Department export regulations, the Commerce Department, through the Bureau of Industry and Security ("BIS"), enforce the Export Administration Regulations ("EARs") which control the export of most commodities and services, including "dual-use" items.<sup>17</sup> The vast majority of exports of items controlled by BIS can occur under a general license or "general exception" to the licensing controls.<sup>18</sup> High-end technology and related services, however, risk falling into a controlled category given their potential military use.

Technologies controlled by the EARs are listed in the Commerce Control List ("CCL").<sup>19</sup> Unlike the ITARs which only contain broad categories of commodities or services, the CCL has discrete categories of technologies that are controlled, these categories referred to as Export Control Classification Numbers ("ECCNs").<sup>20</sup> The ECCNs contain specific technological descriptions that allow an exporter to determine if the technology is controlled for export.<sup>21</sup>

There is often overlap between the export jurisdiction of the State and Commerce Department. As a general rule, if there is an overlap on the jurisdiction of an article or service between the State Department and the Commerce Department, the State Department prevails in such disputes.

#### DETERMINING WITH WHOM TO CONDUCT BUSINESS

In addition to controlling what is exported, the U.S. federal government has specific restrictions on with whom a U.S. party can conduct business.

Violations of these laws present the easiest prosecutions, as they require only a demonstration that trade took place with a prohibited party.

The Treasury Department's Office of Foreign Assets Control ("OFAC") interprets and implements controls brought under the Trading with the Enemy Act, 50 U.S.C. App. 5(b), the International Economic Emergency Powers Act, 50 U.S.C. §§ 1701-1705, and several other laws directed at specific countries.<sup>22</sup> OFAC prohibits or restricts trade with a list of countries and an ever-growing directory of individuals and companies.<sup>23</sup> In addition, as discussed below, the State Department and the Commerce Department issue different lists of parties with which trade is prohibited.

Trading with prohibited parties listed by any of these agencies can result in criminal and administrative penalties. Depending on circumstances, mere proposals or mis-directed efforts at compliance can result in criminal or administrative charges.

The primary list of concern for U.S. companies is the list of embargoed countries and the Specially Designated National and Blocked Persons List (the "SDNL") maintained and enforced by the Treasury Department.<sup>24</sup> When the U.S. government determines that a party is a buyer for an embargoed country, the U.S. government "specially designates" this party as a national of that country. Inclusion on the SDNL can occur at any time, even during the pendency of a transaction with a U.S. company.

Post-September 11, another Treasury list, the Specially Designated Global Terrorist List ("SDGTL") has grown in

importance. As the federal government identifies individuals or companies that are allegedly "associated with" terrorist-supporting entities, these individuals and companies can be put on the SDGTL. These individuals or companies can include international trading partners of a company with which trade has been conducted legally for years.<sup>25</sup>

The country embargoes vary depending on the country in question, but generally prohibit any trade with any person or entity in the embargoed destination.<sup>26</sup> The rules, however, are ambiguous in many respects. A U.S.-owned subsidiary outside the United States can deal directly with Iran, or other sanctioned countries, as long as no U.S. person facilitates or approves the transaction.<sup>27</sup> This is true even if the foreign subsidiary is directly controlled by the U.S. parent, as long as no U.S. person participates in the transaction.<sup>28</sup>

The State Department may prohibit any person from participating in international commerce that involves the export of defense articles, including technical data, in furnishing defense services.<sup>29</sup> The State Department compiles the names of parties who have lost their export privileges on the Debarred Parties List.<sup>30</sup>

The Commerce Department also prohibits trade with certain parties. The Commerce Department aims its prohibitions at parties who have violated U.S. export control laws (e.g., received illegally exported technology)<sup>31</sup> or entities engaged in proliferation activities.<sup>32</sup> The latter category would include, for example, government-owned facilities in the PRC or Pakistan, private concerns identified as buyers for

proliferation projects, and hundreds of other entities world-wide. U.S. persons cannot engage in any export-related activity with these listed persons. These activities include, by way of example, financing, services of any sort, shipping, management functions, *etc.* that could assist with an export transaction.<sup>33</sup> Trade with any party on these lists, or mere participation in a transaction with them, can result in criminal and/or administrative charges.

In addition to the lists of prohibited parties described above, the Commerce Department also maintains a list of recipients of U.S. exports who have (for one reason or another) not allowed the United States to verify that they are using the technology in the manner reported.<sup>34</sup> These parties constitute the Unverified List. While trade with these parties is not prohibited, trading with them absent some demonstrable assurance of non-proliferation leaves the U.S. party open to the allegation that it knowingly self-blinded to a proliferation risk.<sup>35</sup>

#### PENALTIES FOR VIOLATING U.S. EXPORT CONTROLS

Violating the regulations discussed above may result in the imposition of criminal or civil penalties, or both. Willful violations of the State Department regulations can lead to fines of up to \$1,000,000 or ten years' imprisonment.<sup>36</sup> Civil violations can result in penalties up to \$500,000.<sup>37</sup>

In addition, as discussed above, the State Department can prohibit a violator from participating directly or indirectly in the export of "defense articles," including technical data or the furnishing of "defense services" for

which a license is required. Such prohibition is known as a "debarment" and could have significant repercussions on a company's activities.<sup>38</sup>

Willful violations of the Department of Treasury regulations can produce fines of up to \$50,000.<sup>39</sup> Individuals also may be imprisoned for not more than 10 years for violations of the Treasury Department regulations.<sup>40</sup> Civil penalties of not more than \$11,000 may be imposed for violations of most Treasury embargoes (*e.g.* Iranian sanctions).<sup>41</sup> Also, civil penalties of not more than \$55,000 per violation also may be imposed for violations of the Treasury regulations regarding the embargo against Cuba.<sup>42</sup>

Willful violations of the Commerce Department regulations can lead to criminal penalties of up to ten years in prison and/or fines of five times the value of the export or \$1,000,000 (for a corporation) and \$250,000 (for an individual).<sup>43</sup> Export violations under the EARs can result in civil penalties of up to \$100,000 and/or denial of export privileges.<sup>44</sup>

Importantly, under all of these regulatory regimes, each export or transaction can produce multiple violations. The penalties are not per "transaction," leaving open the possibility that one export transaction can produce multiple violations and rapidly increase an exporter's liability.<sup>45</sup> The regulators employ the principles of "parsing and stacking" to multiply the number of potential violations. The general rule of thumb is that for each shipment, the regulators can assert about six violations.

## WHAT TO DO IN THE EVENT OF A VIOLATION?

Transactions that violate the regulatory regimes discussed above occur occasionally. It is particularly important for space and aerospace companies to know how to respond in the event of a potential violation or governmental investigation. In the event of an investigation, with an eye to defeating a claim of a knowing or willful violation, it is important to perform the following:

1. Through counsel, work with the federal agents to resolve the investigation at the agency level, determine the particular national security imperative driving the matter. This changes according to the type of violation.

2. Showcase to the federal agents the company's compliance efforts or assist in putting in place compliance controls meeting and exceeding agency expectations. Compliance controls will incorporate recommendations of the governmental agency involved and refer to industry standards of compliance performance found in the *Nunn-Wolfowitz Task Force Report: Industry "Best Practices" Regarding Export Compliance Programs*<sup>46</sup> and related recommendations for internal controls set by the U.S. Federal Sentencing Commission.<sup>47</sup>

3. Examine in detail the regulations under which the alleged violation occurred to determine if a violation occurred. For example, transactions with parties resident in sanctioned countries, such as Iran, Syria, the Sudan, and Cuba, may be

legal given certain conditions. Potentially illegal exports of certain space technologies might implicate Commerce and not State controls, with the other regulatory regime offering possible exemptions to licensing.

4. Examine the organic law underpinning the regulations at question to ensure that the agency is not acting *ultra vires*. In the case of the ITARs,<sup>48</sup> the organic law is the Arms Export Controls Act.<sup>49</sup>

The defense of alleged violations of export controls involve several factors that companies and their defense counsel need to consider. It is imperative to examine in detail compliance efforts taken by the company. If none occurred, it is important to construct a comprehensive system of controls immediately, even during the pendency of an investigation. Such a system will address a key prosecution imperative, that is, to make sure that only trustworthy exporters are involved in international trade.

The company and its counsel need to assess the technology at issue and evaluate its history of control under the State and Commerce Department regimes. The fact that most space and aerospace technology is currently controlled by the State Department does not mean that has always been the case.

In addition, the company and its counsel need to determine if any multi-lateral export control accords address the technology to see if the United States is consistent in its treatment of the technology in such agreements and the threatened prosecution. For example, the *Wassenaar Arrangement on Export Controls for Conventional Arms and*

*Dual-Use Goods and Technologies*<sup>50</sup> reflects how the United States has agreed to control certain technology exports in cooperation with numerous allies.<sup>51</sup> Similarly, the Australia Group accords on the export of chemicals reflects the United States' position with respect to specific export requirements.<sup>52</sup> If a disparity in treatment is discovered, it may be possible to assert that the regulation is *ultra vires* or the product of mistake.

Another course of action is to consider filing a commodity jurisdiction request with the State Department, following the procedure discussed above. The State Department can take anywhere from months to weeks to process a commodity jurisdiction request, depending on the complexity of the request. It is advised that counsel inexperienced in these matters consult with a specialist prior to filing such a request. There are arguments that can be made that might prove persuasive in obtaining a favorable ruling. For example, asserting a commercial equivalent of a technology alleged to be a Munitions List item may defeat State Department jurisdiction claims.

It is important to work closely with the federal agents in the event of an investigation related to a potential violation. An assurance of future compliance is key to addressing the U.S. government's concerns. Unlike other areas of white-collar defense, export controls are driven by national security. This means that assurances with respect to compliant conduct and assistance with resolving concerns over an illegal export can assist significantly in case resolution.

If a defense article or other controlled technology were exported without a license, the company should concentrate its efforts in getting the technology back, or at least find out its location and current use. National security drives this type of federal investigation, and therefore, locating, isolating or returning the allegedly illegally exported technology removes from the government's concerns the risk that the technology is being put to a proliferation purpose. If the technology cannot be recovered, plan on providing the government with detailed information concerning the recipient to address these concerns.

As discussed above, facing prosecution for potential violation of export laws may lead to expensive administrative penalties. The primary goal of the initial defense effort in case of a violation is to quash the criminal investigation and have the matter considered by the administrative agency. In addition, the initial defense efforts should lay the ground work for favorable administrative consideration. At the level of administration consideration, compliance efforts and resources spent to remedy the situation may be considered mitigating factors when negotiating a penalty.

Accordingly, a company under investigation for violation of federal regulatory controls needs to allocate resources for both the traditional criminal defense and to make changes required to show efforts at remediation and compliance at the agency level.

#### CONCLUSION

Companies involved in the space and aerospace industries or any other area of



international trade need to be aware of the export regulatory regimes that control their business. National security is at the core of those regulations and the consequences of failing to comply may be costly. Defense of a matter brought under those controls requires an understanding of the regulations, as well as the policy driving the investigation. At the end, the key to resolution is compliance, whether prior to or after the alleged incident.

<sup>1</sup> 22 C.F.R. §121.1 (2003)

<sup>2</sup> See 22 C.F.R. § 121.1 (2003) (Category XV)

<sup>3</sup> 15 C.F.R. § 772.1 (2004)

<sup>4</sup> 15 C.F.R. § 772.1 (2004)

<sup>5</sup> 22 C.F.R. 120.1 (2003)

<sup>6</sup> For a detailed explanation of the ITARs, see <http://www.pmdtc.org/>.

<sup>7</sup> 22 C.F.R. 120.3 (2003)

<sup>8</sup> 22 C.F.R. §120.3 (2003)

<sup>9</sup> 22 C.F.R. §120.3 (2003)

<sup>10</sup> 22 C.F.R. §120.4 (2003)

<sup>11</sup> The stringent nature of these controls may have an impact on the U.S. aerospace industry. For example, Alcatel Space has developed a satellite with technology that is not controlled by the U.S. Department. The satellite is scheduled to be shipped to China. See *Alcatel Considers Cutting All U.S. Spacecraft Parts*, SPACENEWS, Sept. 6, 2004, at 4.

<sup>12</sup> 22 C.F.R. §120.4 (2003)

<sup>13</sup> 22 C.F.R. §121.1 (2003). *Technical data* means "information that is required for the design, development, production, manufacture, assembly, operation, repair, testing, maintenance or modification of defense articles. 22 C.F.R.120.10 (2003)

<sup>14</sup> 22 C.F.R. §121.1 (2003)

<sup>15</sup> 22 C.F.R. §121.1 (2003)

<sup>16</sup> 22 C.F.R. §§125.4-125.5 (2003)

<sup>17</sup> See generally 15 C.F.R. §§ 730 *et seq.*

<sup>18</sup> See generally 15 C.F.R. §732.1 (2004)

<sup>19</sup> See 15 C.F.R. 774, Supp. 1 (2003).

<sup>20</sup> See 15 C.F.R. 774, Supp. 1 (2003).

<sup>21</sup> For an explanation of the EARs see <http://www.bis.gov/licensing/exportingbasics.htm>.

<sup>22</sup> See generally 31 C.F.R. §§ 500 *et seq.* (2003)

<sup>23</sup> See generally 31 C.F.R. §§ 500 *et seq.* (2003).

<sup>24</sup> For additional information on the embargoes and the SDNL go to <http://www.treasury.gov/offices/enforcement/ofac/sdn/>

<sup>25</sup> See 31 C.F.R. § 594.201 (2003).

<sup>26</sup> Additional information regarding the embargoes can be found at <http://www.treasury.gov/offices/enforcement/ofac/sanctions/>

<sup>27</sup> See

<http://www.treasury.gov/offices/enforcement/ofac/sanctions/t11iran.pdf>

<sup>28</sup> See generally 31 C.F.R. §§ 500 *et seq.* (2003).

<sup>29</sup> 22 C.F.R. 127.7 (2003)

<sup>30</sup> The Debarred Parties List can be found on <http://www.pmdtc.org/debar059intro.htm>

<sup>31</sup> The Commerce Department denied persons list is found at <http://www.bis.doc.gov/dpl/dpl.txt>.

<sup>32</sup> The Commerce Department list of entities engaged in proliferation activities is found at <http://w3.access.gpo.gov/bis/ear/pdf/744spir.pdf>; see also 15 C.F.R. § 744, Supp. 4 (2003).

<sup>33</sup> See generally 15 C.F.R. §§ 730 *et seq.*

<sup>34</sup> See

[http://www.bis.doc.gov/Enforcement/UnverifiedList/unverified\\_parties.html](http://www.bis.doc.gov/Enforcement/UnverifiedList/unverified_parties.html)

<sup>35</sup> The unverified list can be found at [http://www.bxa.doc.gov/Enforcement/UnverifiedList/unverified\\_parties.html](http://www.bxa.doc.gov/Enforcement/UnverifiedList/unverified_parties.html); see generally, 15 C.F.R. § 732, Supp. 3 (2003).

<sup>36</sup> See 22 C.F.R. § 127.3 (2003).

<sup>37</sup> See 22 C.F.R. §127.10 (2003).

<sup>38</sup> See 22 C.F.R. §127.7 (2003).

<sup>39</sup> See 31 C.F.R. §535.701 (2003).

<sup>40</sup> See 31 C.F.R. § 500.701 (2003).

<sup>41</sup> See 31 C.F.R. 535.701 (2003).

<sup>42</sup> See 31 C.F.R. § 500.701 (2003).

<sup>43</sup> See 15 C.F.R. § 764.3 (2003).

<sup>44</sup> See 15 C.F.R. § 764.3 (2003).

<sup>45</sup> See *e.g.*, 22 C.F.R. § 127.10 (2003)

<sup>46</sup> A copy of the report may be found at <http://www.usexportcompliance.com/Papers/nnwnwolfowitz.pdf>

<sup>47</sup> The Federal Sentencing Guidelines Manuals can be found at

<http://www.ussc.gov/GUIDELIN.HTM>

<sup>48</sup> 22 C.F.R. §§ 120 *et seq.* (2003)

<sup>49</sup> 22. U.S.C. §2778.

<sup>50</sup> The Wassenaar Arrangement on Export Controls for Conventional Arms and Dual-Use Goods and Technologies and the names of the

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participating nations can be found at  
<http://www.wassenaar.org/>

<sup>51</sup> *See id.*

<sup>52</sup> For information regarding the Australia Group and the names of the participating nations go to <http://www.australiagroup.net/>