Huntington Ingalls Industries

December 8, 2015

C. Edward Peartree
Office of Defense Trade Controls Policy
Bureau of Political-Military Affairs
U.S. Department of State
2401 E Street, NW
Washington, DC 20037

Subject: Review of USML Categories VI, VII, XIII and XX in response to Federal Register Notice Vol. 80, No. 196, October 9, 2015

Dear Mr. Peartree:

Huntington Ingalls Industries (HII) welcomes the opportunity to provide comment in response to the subject Federal Register Notice relating to Export Control Reform (ECR) and changes to the International Traffic in Arms Regulations (ITAR) and, more specifically, the U.S. Munitions List (USML). HII is America's largest military shipbuilding company and builder of the most complex ships in the world for more than 129 years in Virginia and 77 years in Mississippi. We are the sole builder of U.S. Navy aircraft carriers and amphibious warships, and one of two builders constructing nuclear-powered submarines and DDG 51 class destroyers. We also construct National Security Cutters for the U.S. Coast Guard. The USML categories that control the majority of HII's products and technologies are VI and XX, and the comments provided herein will focus on these two categories.

General Comments on ECR

HII, in general, has experienced little disruption to its export activity since ECR became effective on January 6, 2014 for Categories VI and XX. Due to the nature of our exporting activity, HII continues to obtain export authorizations under the ITAR for most of its technologies. Our main export activities consist of technical exchanges along our supply chain and assistance involving foreign parties for products that fall under the USML Category VI and XX as well as under ECCNs 8A609 and 8A620 that will be installed on USML-controlled Category VI and XX vessels. The requirement to comply with the current (and future proposed) defense service definition continues to keep our total number of ITAR authorizations relatively the same.

The transition to the Commerce Control List (CCL) of lower level ship related parts and components that the Department of State has determined no longer warrant control on the USML has eliminated the need for obtaining DSP-5 export licenses to ship those parts and components to the U.S.

Navy while in a foreign location. HII is able to utilize the benefits of license exception GOV[1] under the Export Administration Regulations (EAR) as it provides more flexibility than previously realized under ITAR exemption § 126.4 for shipments by or for U.S. Government Agencies. To this end, HII supports Directorate of Defense Trade Controls (DDTC) efforts in updating license exemption § 126.4 to allow similar flexibility as provided by GOV[2]. It is believed that the benefits of aligning the ITAR exemption with the EAR exception not only fall to industry but will also allow the government to spend its time and effort on reviewing those export requests that pose a greater risk than the shipment of parts to the U.S. Government.

HII concurs with AIA's position related to the general application of subparagraph (x)[3]. Although the utility of subparagraph (x) can be found when the end platform is a USML-controlled item, the same cannot be said when the end platform is a CCL-controlled commodity that happens to incorporate a USML-controlled part. Paragraph (x) does not provide relief when the end item is not subject to the ITAR and may result in multiple licenses from both agencies.

Comments on a potential gap of coverage between ECCN 8A609.a and VI(b)(3)

It is believed that the ECR changes left a gap in coverage for armed coastal, patrol, roadstead, and Coast Guard and other patrol craft with mounts or hard points for firearms of less than .50 caliber.

ECCN 8A609.a currently reads:	USML Category VI(b) currently reads:
a. Surface vessels of war "specially designed" for a military use and not enumerated or otherwise described in the USML. **Note 1:** 8A609.a includes: (i) Underway replenishment ships; (ii) surface vessel and submarine tender and repair ships, except vessels that are "specially designed" to support naval nuclear propulsion plants; (iii) non-submersible submarine rescue ships; (iv) other auxiliaries (e.g., AGDS, AGF, AGM, AGOR, AGOS, AH, AP, ARL, AVB, AVM, and AVT); (v) amphibious warfare craft, except those that are armed; and (vi) unarmored and unarmed coastal, patrol, roadstead, and Coast Guard and other patrol craft with mounts or hard points for firearms of .50 caliber or less.	(3) Vessels armed or specially designed to be used as a platform to deliver munitions or otherwise destroy or incapacitate targets (e.g., firing lasers, launching torpedoes, rockets or missiles, or firing munitions greater than .50 caliber);

[1] See § 740.11 Governments, International Organizations, International Inspections under the Chemical Weapons Convention, and the International Space Station (GOV).
[2] Reference Federal Register Notice Vol. 80, No. 99, May 22, 2015.
[3] Reference Aerospace Industries Association's (AIA) May 1, 2015 comments to DDTC and BIS (page 20) in response to Notice of Inquiry; Request for Comments Regarding Review of United States Munitions List Categories VIII and XIX, 80 Fed. Reg. 11314 (DDTC) and Notice of Inquiry: Request for Comments Regarding Controls on Military Aircraft and Military Gas Turbine Engines on the Commerce Control List, 80 Fed. Reg. 11315 (BIS).

These types of armed vessels aren't captured in ECCN 8A609.a which only includes unarmed patrol boats. Alternately, the USML does not positively list vessels capable of firing munitions <.50 caliber; VI(b)(3) specifically addresses .50 caliber or more. USML VI(b)(4) includes vessels that incorporate "Mission Systems"; however, firearms are not defined as a "Mission System" in the Note to paragraph (4), eliminating it as an option. The Government may wish to explore where these types of vessels are to be captured, as the migration to a positive USML and application of the Order of Review results in these vessels defaulting to ECCN 8A992 with a low level of control. HII does not believe this is intended.

Comments and request for clarification on VI(b)(4) and the definition of "Mission Systems"

USML Category VI(b) identifies additional vessels captured on the USML. Specifically subparagraph (4) captures vessels incorporating any mission systems controlled under the ITAR. In line with comments provided to DDTC by AIA, HII requests the removal of Category VI(b)(4) from the USML because "Mission Systems" are controlled adequately elsewhere on the USML.

However, if DDTC means to keep VI(b)(4), HII requests a clearer explanation of the defense articles described in the Note to paragraph (b)(4) which defines "Mission Systems" to include defense articles with military communication functions. We believe the term 'military communication' is too general and will unnecessarily capture vessels meant to be on the CCL. There are many instances where auxiliary ships in the service of the U.S. Navy and Coast Guard are required to communicate with vessels of war. For instance, auxiliary ships must communicate with Navy vessels to rendezvous for refueling. Various auxiliary vessels are equipped with special radio hardware/systems to allow communication with the Navy and Coast Guard. Although they may incorporate these types of communication systems, their purpose and function are not militarily focused. Additionally, these lower level communication systems do not meet the high level of controls of USML positively listed items (e.g. XI(a)(5)) as they are used solely for secure communications amongst naval vessels.

HII supports a more 'positive list' with clear definitions for terms such as 'military'. We do not suggest de-controlling any of the ships already listed on the USML; however, we are requesting that those ships positively listed on the CCL do not inadvertently shift back to the USML based on varying interpretations of broad terminology. HII requests that DDTC either clearly define 'military communications' with respect to the Note to paragraph (b)(4) or reconsider the inclusion of military communications as a "Mission System" as it believes the control levels of Navy and Coast Guard auxiliary ships belong on the CCL. To assist in establishing a bright line between control lists, HII requests military communication be removed from the definition provided in the Note to paragraph (b)(4).

Proposed: *(b) Other vessels not controlled in paragraph (a) of this category, as follows:*

* * *

(4) Vessels incorporating any mission systems controlled under this subchapter.

Note to paragraph (b)(4): "Mission systems" are defined as "systems" (see §120.45(g) of this subchapter) that are defense articles that perform specific military functions such as by providing ~~military communication,~~ electronic warfare, target designation, surveillance, target detection, or sensor capabilities.

Comments and request for clarification on Naval Nuclear Propulsion Plants VI(e) and XX(b)(1) and Technical Data

For many years, the USML identified naval nuclear propulsion plants and related hardware and technical data with a reference to part § 123.20, along with a strong clarifier at § 125.1(e), outlining jurisdictional controls which read (as amended by 78 FR 40933, dated 8 July, 2013) as follows:

> Previous § 125.1(e) - *"The provisions of this subchapter do not apply to technical data related to articles in Category VI(e), Category XVI, and Category XX(b) of § 121.1 of this subchapter. The export of such data is controlled by the Department of Energy or the Nuclear Regulatory Commission pursuant to the Atomic Energy Act of 1954, as amended, and the Nuclear Non-Proliferation Act of 1978, as amended."*

This provision made it clear that the Department of State licensing authority for exports of technical data does not include nuclear technology related to U.S. naval nuclear propulsion plants. Additionally, the clarity provided in this subparagraph was consistent with § 120.5.

> During ECR efforts to update the USML, § 125.1(e) was re-written[4] as follows:
>
> Current § 125.1(e) - *"For the export of technical data related to articles in Category VI(e), Category XVI, and Category XX(b) of § 121.1 of this subchapter, please see § 123.20 of this subchapter."*

Although the language in § 123.20(a) is still consistent with the previously included language in the old version of § 125.1(e), the removal of the original clarifying provision has cast ambiguity upon subparagraph § 123.20(c) which discusses licensing requirements under the ITAR. As written, and without the clarifier previously found at § 125.1(e), it could be interpreted that the technical data and defense services associated with Categories VI(e) and XX(b)(1) also require export authority by the Department of State, and that double licensing is required when industry is operating under an existing Agreement for Cooperation for Mutual Defense Purposes. HII believes that with a few minor clarifications, any unintended interpretations of jurisdiction and licensing requirements can be addressed. Therefore, it is requested that subparagraph § 123.20(c) be updated to remove references to technical data and services as follows:

> Proposed: § 123.20(c) *"A license for the export of a defense article~~, technical data, or the furnishing of a defense service relating to defense articles~~ referred to in Category VI(e) or Category XX(b)(1) of §121.1 of this subchapter will not be granted unless the defense article~~, technical data, or defense service~~ comes within the scope of an existing Agreement for Cooperation for Mutual Defense Purposes concluded pursuant to the Atomic Energy Act of 1954, as amended, with the government of the country to which the defense article~~, technical data, or defense service~~ is to be exported. Licenses may be granted in the absence of such an agreement only:******"*

In light of the ECR efforts to "positively" list controlled items on the USML, coupled with the recommendation to implement minor clarifications, HII also requests that the technical data catchall subparagraphs be modified to remove capturing naval nuclear propulsion technical data. Recommendations include modifications to VI(g) and XX(d) as identified below:

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[4] Federal Register Notice Vol. 79, No. 47, dated 2 January, 2014.

Proposed: *VI(g) Technical data (see §120.10 of this subchapter) and defense services (see §120.9 of this subchapter) directly related to the defense articles enumerated in* ***paragraphs (a) through (c) and (f)*** *of this category and classified technical data directly related to items controlled in ECCNs 8A609, 8B609, 8C609, and 8D609 and defense services using the classified technical data. (MT for technical data and defense services related to articles designated as such.) (See §§ 123.20 & 125.1(e) of this subchapter for controls of technical data for VI(e) defense articles.)*

Proposed: *XX (d) Technical data (see §120.10 of this subchapter) and defense services (see §120.9 of this subchapter) directly related to the defense articles described in* ***paragraphs (a) through (c) of this category excluding (b)(1).*** *(MT for technical data and defense services related to articles designated as such.) (See §125.4 of this subchapter for exemptions.) (See §§ 123.20 & 125.1(e) of this subchapter for controls of technical data for XX(b)(1) defense articles.)*

Commentary on the use of (x) and request for removal of the Note

Subparagraph (x) currently reads:

(x) Commodities, software, and technical data subject to the EAR (see §120.42 of this subchapter) used in or with defense articles controlled in this category.

NOTE TO PARAGRAPH (x): Use of this paragraph is limited to license applications for defense articles controlled in this category where the purchase documentation includes commodities, software, or technical data subject to the EAR (see §123.1(b) of this subchapter).

HII requests the removal of the Note to Paragraph (x). There are many instances where the export of technical data is not specifically called out in purchase documentation or simply does not have purchase documentation, but would still meet the criteria defined in Paragraph (x). Removal of the Note to Paragraph (x) would further clarify the full scope of opportunities industry has to capitalize on this ECR benefit. We believe the language included in (x) *'used in or with defense articles controlled in this category'* is sufficient.

In conclusion, HII supports the monumental efforts undertaken to implement ECR and applauds DDTC's approach to fine-tuning the regulations. If you have any questions regarding these comments, please contact me at (757) 380-3683 or at sandra.cross@hii-co.com.

Sincerely,

Sandra Cross

Sandra R Cross
Corporate Director, International Trade Compliance
Huntington Ingalls Industries, Inc.

AIRBUS
GROUP

Request for Comments:

Public Notice 9313

Review of USML Category VI, VII, XIII and XX

Email to DDTCpubliccomments@state.gov

Airbus Group offers the following comments in response to Public Notice 9313 pertaining to the review of USML Category VI, VII, XIII and XX.

The current text of Cat XIII captures under the USML all TT&C cryptographic, inadvertently capturing TT&C encryption for commercial telecommunication satellites.

We believe that the controls of the USML are only warranted for encryption that a) is classified or b) meets the requirements of CNSSP12 (i.e. approved by the National Security Agency for satellites providing services to the U.S. Government).

Therefore, we suggest that the text of Cat XIII be modified by the addition of a note as follows:

Cat XIII – Materials and Miscellaneous Articles

.....

(b) Information security or information assurance systems and equipment, cryptographic devices, software, and components, as follows:

(1) Military or intelligence cryptographic (including key management) systems, equipment, assemblies, modules, integrated circuits, components, and software (including their cryptographic interfaces) capable of maintaining secrecy or confidentiality of information or information systems, including equipment or software for tracking, telemetry, and control (TT&C) encryption and decryption;

.....

Note to paragraph (b) (1): cryptographic items for tracking, telemetry, and control (TT&C) encryption and decryption of commercial telecommunication satellites designed to meet the requirements of CNSSP12 are controlled under the ITAR unless equipped with commercial keys for ground test solely. In that case, such items could be categorized under EAR.

AIRBUS
GROUP

It is our analysis that the text of the EAR already accommodates for this without change of text: The corresponding Space segment hardware would be controlled as 9A515.x, ground segment hardware would be controlled as 9A515.b text, encryption software (including keys) would be controlled under 9D515.a.

For further information, please contact Corinne Kaplan at 703-466-5741 or Corinne.Kaplan@eads-na.com.

Respectfully,

Pierre Cardin

SVP, Group Export Compliance Officer

Alexander Groba

Coordinator U.S. Regulations

regulations.gov

Comment on DOS-2015-0054

Site Data

Regulatory Agenda

Agency Report Required by Statute

This is a Comment on the **U.S. Department of State** (DOS) Proposed Rule: **Review of United States Munitions List Categories VI, VII, XIII and XX**

For related information, **Open Docket Folder**

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December 8, 2015

Mr. C. Edward Peartree, Director
Office of Defense Trade Controls Policy
Directorate of Defense Trade Controls
Department of State
SA–1, 12th Floor
Washington, DC 20522–0112

Subject: Review of USML Categories VI, VII, XIII and XX

Reference: Federal Register/ Vol. 80, No. 196/ Friday, October 9, 2015/ Notice of Inquiry: Request for Comments Regarding Review of United States Munitions List Categories VI, VII, XIII, and XX

Dear Mr. Peartree,

Thank you for the opportunity to provide comments on the *Request for Comments Regarding Review of United States Munitions List Categories VI, VII, XIII, and XX*, published June 3rd 2015. The Boeing Company ("Boeing") appreciates the level of effort required to accomplish the challenging objectives of Export Control Reform ("ECR") and we hope our comments further your intent in this regard.

Overall we have found Categories VI, VII, XIII and XX clear with respect to their controls. We have identified a few sections however, where additional clarification to the regulatory text would be helpful to prevent redundancy, vagueness, or inconsistent application. These address: VI(b)(4), VII(c), and XX(a)(7) mission systems, VI(f)(4) control and monitoring systems for autonomous unmanned vessels, XIII(b) military or intelligence articles, XIII(d)(2) carbon/carbon billets and preforms, XIII(h)(2) thermal engine energy conversion devices, and the XIII(m) ten interpretations. Finally, we share a concern regarding the classification of XIII(j)(2) materials and coatings.

Specific Comments:

1. **VI (b)(4), VII(c), and XX(a)(7): "Mission systems"**

Consistent with our comments submitted concerning Category VIII[1], ("Review of USML Categories VIII and XIX", May 1, 2015), we wish to highlight redundancy regarding the control

[1] March 2, 2015, "Notice of Inquiry, Request for Comments Regarding Review of United States Munitions List Categories VIII and XIX." 80 Fed. Reg. 11314 and 80 Fed. Reg. 11315

of "mission systems". The United States Munitions List ("USML") controls mission systems under VI(b)(4), VII(c), and XX(a)(7) as follows:

> VI(b)(4): Vessels incorporating any mission systems controlled under this subchapter."
>
> VII(c): Ground vehicles and trailers equipped with any mission systems controlled under this subchapter.
>
> XX(a)(7): (a) Submersible and semi-submersible vessels that are: (7) Equipped with any mission systems controlled under this subchapter; or...
>
> *Mission systems* are defined for VI(b)(4), VII(c), and XX(a)(7) according to §120.45(g) as "systems" that are "defense articles that perform specific military functions such as by providing military communication, electronic warfare, target designation, surveillance, target detection, or sensor capabilities".

These three controls are redundant since mission systems are by definition defense articles whose export, re-export or transfer already require International Traffic in Arms ("ITAR") authorization. For example, military communication systems such as radios are already addressed in USML Category XI – Military Electronics.

Additionally, in cases where *mission systems* are incorporated into a non-ITAR item, the "see through" rule would apply. Under existing procedures exporters would use a Bureau of Industry and Security ("BIS") authorization for the platform and also obtain the appropriate Directorate of Defense Trade Controls ("DDTC") license for the defense article wherein DDTC retains control over the defense article export. Even prior to ECR exporters have been required to seek ITAR authorizations for any defense article that is incorporated into a non-ITAR item.

The current construct of the VI(b)(4), VII(c), and XX(a)(7) controls goes much farther than the "see through" rule however. It has the effect in some cases of transforming an Export Administration Regulations ("EAR") platform into a defense article simply because it contains a *mission system*. This can create problems related to defense services and licensing as well as Congressional Notification ("CN") thresholds. If a USML XI(a)(5) communications capability is deemed a *mission system* and incorporated into an 8A609 platform the entire platform would become ITAR controlled under VI(b)(4). If DDTC considers services performed on any part of the aircraft to be "defense services", a position that Boeing does not agree with, then a license is required for any person anywhere that works on the vessel no matter how minor or attenuated from the communications system. Basic in-service maintenance like replacing a fuel hose (or other EAR-controlled item) will require a Technical Assistance Agreement, representing a burden to industry as well as to DDTC. In accordance with a Frequently Asked Question on the DDTC website, CN values for VI(b)(4) items must include the platform value, thus the incorporation of a

$1 million defense article into an EAR-controlled platform can easily trigger the $50 million CN threshold, leading to additional cost and delay.

The VI(b)(4), VII(c), and XX(a)(7) controls are also vague given the phrase "*specific military functions*" is not defined. The definition of *mission systems* provides examples but no definitive list. Therefore the potential exists for differing interpretations which does not support the goal of stable and consistent regulatory interpretations.

- **Recommendation:** Given the redundancy, potential for over-control and vagueness of the VI(b)(4), VII(c), and XX(a)(7) controls outlined above, DDTC should delete VI(b)(4), VII(c), and XX(a)(7) and their associated Notes defining mission systems. Instead, reliance upon the standard ITAR requirements for export of the ITAR-controlled *mission systems* themselves should suffice.

2. VI(f)(4) Control and monitoring systems for autonomous unmanned vessels

Systems for autonomous behavior are a rapidly developing area of technology, not isolated to vessel platforms. VI(f)(4) addresses control and monitoring systems for autonomous unmanned vessels. As currently written however, it is not limited to vessels within this subchapter, namely only vessels of war.

- **Recommendation:** Modify the text of VI(f)(4) as follows:

  *(4) Control and monitoring systems for autonomous unmanned vessels **controlled under this subchapter** capable of on-board, autonomous perception and decision-making necessary for the vessel to navigate while avoiding fixed and moving hazards, and obeying rules-of-the road without human intervention;

3. XIII(b) Military or Intelligence Articles

XIII(b) addresses articles used in information security and information assurance which are specifically military or intelligence oriented thus controlling certain cryptographic or cryptanalytic systems, equipment, assemblies, modules, integrated circuits, components, and software. The terms *military* and *intelligence* however are not defined making it difficult to discern when such articles are deemed military or intelligence related. Military or intelligence systems could be interpreted as meeting a military or intelligence purpose; or instead simply any such equipment used by the military or intelligence community. Furthermore, it could be interpreted as such equipment which was developed for or with funding from military or intelligence entities. As a matter of clarification we recommend the "specially designed" construct be applied as it is an

understood and established concept within the ITAR and its use here would be consistent with other categories of the USML, for example XI(b)[2].

- **Recommendation:** To address the potential for inconsistent interpretation and application of XIII(b), the following changes are recommended:

  (b) Information security or information assurance systems and equipment, cryptographic devices, software, and components **that are "specially designed" for military or intelligence purposes**, as follows:

  (1) ~~Military or intelligence e~~**C**ryptographic (including key management) systems, equipment, assemblies, modules, integrated circuits, components, and software (including their cryptographic interfaces) capable of maintaining secrecy or confidentiality of information or information systems, including equipment or software for tracking, telemetry, and control (TT&C) encryption and decryption;

  (2) ~~Military or intelligence~~ **eC**ryptographic (including key management) systems, equipment, assemblies, modules, integrated circuits, components, and software (including their cryptographic interfaces) capable of generating spreading or hopping codes for spread spectrum systems or equipment;

  (3) ~~Military or intelligence e~~**C**ryptographic systems, equipment, assemblies, modules, integrated circuits, components and software;

4. XIII(d)(2) Carbon/Carbon Billets and Preforms

The listing for XIII(d)(2) addresses control of certain carbon/carbon billets and their preforms. As written however, it could be interpreted to capture preforms other than those for carbon/carbon billets.

Recommendation: Modify the text of XIII(d)(2) as follows:

(d) Materials, as follows:

(2) Carbon/carbon billets and preforms **for carbon/carbon billets** that are reinforced with continuous unidirectional fibers, tows, tapes, or woven cloths in three or more dimensional planes (MT if designed for rocket, SLV, or missile systems and usable in rockets, SLVs, or missiles capable of achieving a range greater than or equal to 300 km).

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[2] XI*(b) Electronic systems, equipment or software, not elsewhere enumerated in this sub-chapter, specially designed for intelligence purposes that collect, survey, monitor, or exploit, or analyze and produce information from, the electromagnetic spectrum (regardless of transmission medium), or for counteracting such activities.

5. XIII(h)(2) Thermal Engine Energy Conversion Devices

Among the miscellaneous articles addressed in Category XIII are energy conversion devices to include *thermal engines* as follows:

> (h)(2) Thermal engines specially designed for platforms or soldier systems specified in this subchapter;

ECR changes have introduced the term *thermal engine* not only here in XIII(h)(2) but also VIII(h)(24). However, as we highlighted in our response letter to the Category VIII Notice of Inquiry cited above, it has been used without definition and as a result made it difficult to understand the intended control. It is commonly understood that energy conversion devices change one form of energy into another. In the past paragraph (h) was aimed at devices that produced electrical energy from nuclear, thermal, or solar energy, or from chemical reaction.[3] As such it may support definition of a thermal engine as a heat engine however, if DDTC intends to control specially designed heat engines in this listing, there is significant overlap with gas turbine engines already covered under Category XIX.

- **Recommendation:** The vagueness of the term *thermal engine* and the overlap of its use in both Cat VIII and XIX as currently written warrant a review of the intended control with respect to thermal engine energy conversion devices.

6. XIII(j)(2) Coatings

Category XIII addresses controls for equipment, materials, coatings, and treatments. Industry practice has generally interpreted materials, coatings, and treatments as raw materials. As such, when they are applied, incorporated or modified during manufacturing processes they become so fully integrated as to be undistinguishable or inseparable from the item under manufacture. For example, should they be incorporated into a commodity controlled by an ECCN such as 9A610.x, the jurisdiction and classification of the item would retain its item-level control, 9A610.x. Alternatively, if the item under manufacture is a part otherwise controlled in VIII(h)(1) and incorporated a XIII(j)(2)[4] coating, the classification of the part would remain VIII(h)(1).

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[3] *Old ITAR Language:* (h) Energy conversion devices for producing electrical energy from nuclear, thermal, or solar energy, or from chemical reaction that are specifically designed, developed, modified, configured or adapted for military application.

[4] *XIII(j)(2) Equipment, materials, coatings, and treatments that are specially designed to modify the electro-optical, radiofrequency, infrared, electric, laser, magnetic, electromagnetic, acoustic, electro-static, or wake signatures of defense articles or 600 series items subject to the EAR through control of absorption, reflection, or emission to reduce detectability or observability (MT for applications usable for rockets, SLVs, missiles, drones, or UAVs capable of achieving a range greater than or equal to 300 km, and their subsystems. See note to paragraph (d) of this category).

It has recently come to our attention that this is not a view held by DDTC regarding all materials, coatings, and treatments. Rather, a higher standard has been expressed regarding (j)(2), one that turns on the ability to discern any property of the material, coating, or treatment through inspection or testing of the commodity after its application to an item is complete (*i.e.*, the paint has dried). This standard would require an ITAR authorization regardless of the jurisdiction of the commodity to which the material, coating, or treatment was applied, classify the commodity as XIII(j)(2), and any discernible properties with respect to these coatings to be controlled as technical data under XIII(1).

This alternative standard presents several challenges. First, it has not been published by DDTC and therefore is not broadly understood or applied under the ITAR. Second, it is a difficult standard to apply and one which requires assessing the ability to discern through inspection or testing any property of the material, coating, or treatment for every part, component, or other such commodity incorporating a material or coating controlled by XIII(j)(2). In addition, this interpretation means that many military aircraft parts and components that would otherwise be classified as ECCN 9A610 or VIII(h)(1) become ITAR Significant Military Equipment ("SME"). Prior to Export Control Reform these parts were not designated as SME.

- **Recommendation:** Request DDTC publish guidance as appropriate to clarify the appropriate standard to use for classification of parts incorporating XIII(j)(2) materials, coatings, and treatments.

One result of classifying parts or components according to their XIII(j)(2) materials, coatings, or treatments is confusion between materials and commodities, which could have far-ranging implications.

- **Recommendation:** To address this, DDTC could create commodity controls in the relevant USML or CCL part and component subcategories. For example, a commodity control could be added to Cat VIII to address aircraft parts and components incorporating XIII(j)(2) materials, coatings, or treatments. In parallel a related control note could also be added to 9A610 to direct exporters to review XIII(j)(2) when considering classification of military aircraft parts and components under the EAR. This would ensure that exporters do not misclassify commodities and associated technical data given it is not intuitive for example, to look for airplane part listings in Category XIII.

7. XIII(k) Tooling and Equipment

We understand the USG is considering addition of specific language to address tooling for Category VIII(h)(1) and XIX(f). We'd like to highlight the language found in XIII(k)(1) for tooling, namely "tooling and equipment *specially designed for production of low observable (LO)*

components;", emphasis added. This is an excellent example of a limited control using clear language to address tooling and may be appropriate for other USML Categories.

Recommendation: If new tooling controls are imposed for VIII(h)(1) and XIX(f), we recommend using narrowly scoped language to capture only specific tooling and equipment of concern.

8. **XIII(m) Interpretations**

Ten interpretations are provided in XIII(m) to "explain and amplify terms used in this category and elsewhere in this subchapter". These interpretations read as if they were definitions or notes. Some apply to this category alone, others elsewhere in this subchapter.

Recommendation: Re-write and incorporate those interpretations which are definitions into Part 120, for example (m)(1-4), and (m)(8). For those which are more appropriate to be written as notes, these interpretations should be written as such and embedded where appropriate to their subject, for example (m)(4), (m)(6), (m)(7), (m)(9) and (m)(10).

Thank you for the opportunity to provide comments. Please do not hesitate to contact me if you have any questions or need additional information. I can be reached at 703–465–3312 or via email at bryon.l.angvall@boeing.com.

Sincerely,

Bryon Angvall

Bryon Angvall
Director, Global Trade Controls

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Arlington, VA 22202

December 8, 2015

Mr. C. Edward Peartree
Director, Office of Defense Trade Controls Policy
Directorate of Defense Trade Controls
U.S. Department of State
Washington, DC 20522-0112

Subject: Response to the Amendment to the International Traffic in Arms Regulations: Revision of U.S. Munitions List Categories VI, VII, XIII, & XX - 80 FR 61138

Dear Mr. Peartree:

DRS Technologies, Inc. appreciates the opportunity to comment on revisions to the ITAR related to USML Categories VI, VII, XIII, and XX. The final rules as implemented were a significant step in helping to achieve the Presidents published objectives regarding reforming the U.S. export control system. We do have several recommendations regarding the revised categories that we believe will help U.S. industry to compete in commercial markets by only regulating defense articles, as well as changes to improve the clarity of the current lists.

1. VI(a): Warships and other combatant vessels…., or foreign origin vessels specially designed to provide functions equivalent to those of the vessels listed above;

> We recommend the phrase "foreign origin" be deleted. Any vessel, of U.S. or foreign origin so designed would appear to merit control under this subparagraph.

2. VI(b)(1): High-speed air cushion vessels for transporting cargo and personnel, ship-to-shore and across a beach, with a payload over 25 tons.

> We recommend this entry be deleted. The N500-2 commercial hovercraft built by SEDAM, a French company that ferries 85 tons of passengers and cargo between France and the UK at speeds up to 70 knots, and is capable of crossing a beach easily exceeds the stated positive criteria for control. The negative implications for US companies are that any US involvement in this commercial hovercraft would be regulated under the ITAR, meaning no U.S. company would be invited to be involved given the very commercial nature of such hovercraft. Ferrying large amounts of passengers and cargo at high speed and crossing a beach are not uniquely military. As such, we urge the department to delete this entry. An additional consideration is that any such vessels that are capable of operating as a vessel identified in VI(a) or are armed would already be captured under either VI(a) or VI(b)(3).

3. VI(b)(4): Vessels incorporating any mission system controlled under this subchapter.

Our concern with this entry is identical to those expressed in our comments submitted earlier this year regarding mission systems in USML Category VIII. What constitutes a mission system such that a vessel would qualify for control under this entry is the subject of significant disagreement both within industry and within the US government. Functions such as providing Military Communication and providing Sensor Capabilities have been interpreted to the point that a single military radio installed on a commercial aircraft or a single infrared gimbal installed on helicopter have resulted in the entire aircraft being considered a defense article, resulting in additional export hurdles that were not present pre-ECR. We recommend this entry be deleted. Assuming the revision we recommend above to VI(a) (re. delete "foreign origin") is accepted, the entries in VI(a) and VI(b)(3) appear to already capture any vessel modified sufficiently to operate as a vessel enumerated in VI(a) or an armed vessel. Deleting VI(b)(4) would then simply eliminate confusion regarding what does and does not constitute a "mission system."

4. VI(f)(4): Control and monitoring systems.....and obeying rules-of-the-road without human intervention.

Our concern with this entry is that "rules-of-the-road" is undefined. We urge the department to add a clarifying note to this entry, providing some guidance as to what is meant by this listed positive criteria.

5. VII(c): Ground vehicles and trailers equipped with any mission systems...

This entry controls vehicles and trailers that contain sensors. The sensors themselves (military communication, target detection, surveillance, etc.) are already controlled under USML categories XI, XII, and XIII. The result of this entry is that a commercial vehicle with such sensors installed becomes itself ITAR controlled, to include all of its very commercial parts, components, etc. Given the sensors themselves are ITAR controlled, we recommend this entry be deleted.

6. VII(g)(13): Test or calibration equipment for the mission systems of the vehicles in this category, except those enumerated elsewhere;

We recommend this entry be deleted. Any such test equipment to be controlled is enumerated elsewhere. Additionally, there is no positive criteria, such as specially designed, for such equipment to be captured here. The result is that purely commercial test or calibration equipment for such systems qualifies for control here.

7. XIII(a): Cameras and specialized processing equipment therefor, photointerpretation, stereoscopic plotting, and photogrammetry equipment which are specially designed....for military purposes.

The positive criteria for this entry is "military purposes." There is no published clarification or further published guidance regarding this positive criteria. We urge the

department to publish a note to this entry further defining the scope of this positive criteria.

We applaud the Department on the work it has done to date reforming the U.S. export control system. We believe these changes will significantly help to better protect U.S. national security and U.S. economic security. We hope the Department will seriously consider our above recommendations.

Should you have any questions in this matter or require additional information, please contact me at (703) 412-0288 or at ghill@drs.com.

Sincerely,

Gregory C Hill

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Submitted Via Email

December 8, 2015

Mr. C. Edward Peartree
Director, Office of Defense Trade Controls Policy
Directorate of Defense Trade Controls
PM/DDTC, SA-1, 12th Floor
Bureau of Political Military Affairs
U.S. Department of State
Washington, D.C. 20522-0112

Attn: Review of USML Categories VI, VII, XIII and XX

Re: Notice in Inquiry; Request for Comments Regarding Review of United States Munitions List Categories VI, VII, XIII and XX (80 Fed. Reg. 61138, Oct. 9, 2015)

Dear Mr. Peartree:

United Technologies Corporation ("UTC") appreciates the opportunity to submit these comments on the implementation of Export Control Reform ("ECR") with respect to United States Munitions List ("USML") Categories VI, VII, XIII, and XX. UTC supports the Administration's goals of creating a positive, transparent and predictable structure within the categories of the USML, and continually aligning this structure and associated export control policies with changing technological and market conditions. As described in more detail below, UTC believes that the existing control text in USML Categories VI, VII, and XIII should be updated and clarified to support these goals.

A. Category XIII(b)(5) – Ancillary Equipment

UTC recommends revising USML Category XIII(b)(5) to replace the undefined term "ancillary equipment" with the defined term "accessories or attachments." If accepted, USML Category XIII(b)(5) would read: "*Accessories or attachments specially designed for the articles in paragraphs (b)(1)-(b)(4) of this category.*" UTC believes that the inclusion of defined terms will help avoid inconsistent classification associated with interpreting an undefined term that is only used once in the International Traffic in Arms Regulations ("ITAR").

B. Category XIII(j)(2) – Signature Modification

Currently, USML Category XIII(j)(2) controls all equipment, materials, coatings, and treatments not elsewhere specified and specially designed to modify the electro-optical,

radiofrequency, infrared, electric, laser, magnetic, electromagnetic, acoustic, electro-static, or wake signatures (*i.e.*, signature reduction) of defense articles or "600-series" items. As written, UTC believes that the use of the phrases "not elsewhere specified" and "to modify" is overly broad and results in the unintended control of defense articles and "600-series" items. At a minimum, the current wording overlaps with other USML entries, hampering proper classification. To avoid confusion and/or unintentional control, UTC recommends the following revisions to subcategory XIII(j)(2): (1) include signature characteristics or create a positive list of items that warrant control, and (2) revise the phrase "not elsewhere specified" to clarify that all other USML entries take precedence.

(1) Include Signature Reduction Characteristics or Create a Positive List of Items that Warrant Control

Signature reduction is a useful feature in almost all military items. Most military items are reviewed for possible detection signatures and, to the extent possible, are modified to achieve some level signature reduction. Signature reduction is achieved through a wide spectrum of techniques that can be highly advanced or very rudimentary. Depending on the techniques used, signature reduction performance characteristics achieved can vary greatly.

UTC believes that the use of the phrase "to modify" in relation to signature, without any clarification, leads to the capture of many items, regardless of signature reduction techniques used and the signature reduction performance characteristics achieved. For example, the radar reflections of a USML Category VIII(a) F-16 aircraft could be reduced by ensuring all external panels and control surfaces have rounded edges and recessed fasteners. The acoustic signature of an ECCN 0A606.a Humvee could be reduced through the addition of an exhaust muffler "specially designed" to reduce engine noise. The electromagnetic interference reduction of ECCN 3A611.a radio equipment could be achieved through the installation of electrical shielding "specially designed" to reduce radio emissions.

In each example, the techniques used to achieve signature reduction are rudimentary. The signature reduction performance characteristics achieved from these signature reduction techniques are fairly inconsequential. Further, the rudimentary techniques used in the last two examples support non-signature reduction benefits such as reduced driver fatigue and reduced radio interference. However, because the items are specially designed "to modify" signature reduction of USML and "600-series" items, they could be captured by the requirements outlined in subcategory XIII(j)(2). UTC does not believe it is the intent of DDTC to capture items that amount to simple modifications and achieve limited signature reduction.

To avoid the unintended control of items modified to achieve limited signature reduction, UTC recommends that USML subcategory XIII(j)(2) be revised to include some measure of performance criteria. Alternatively, UTC recommends that USML subcategory XIII(j)(2) be revised to contain a positive list of items that modify signature reduction such as radar absorbing materials, active electrical/magnetic field suppression, and active mimicry.

(2) Revise the Phrase "Not Elsewhere Specified"

Presently, subparagraph XIII(j)(2) controls equipment, materials, coatings and treatments "not elsewhere specified." The phrase "not elsewhere specified" can be interpreted as "not elsewhere enumerated." This interpretation can result in the unintended capture in XIII(j) of items described, but not enumerated, on the USML. For example, subcategory XIX(f)(1) controls specially designed F135 engine parts, components accessories, attachments and equipment. Although the components in XIX(f)(1) are *described*, they are not *enumerated*, which could lead to confusion in applying the Order of Review. UTC does not believe it is the intention of DDTC to capture these XIX(f)(1) specially designed F135 engine components in subcategory XIII(j)(2). XIII(j)(2) should be limited to controlling equipment, materials, coatings and treatments that are applicable to USML and 600 series items in multiple categories (*e.g.*, radar absorbing coatings or obscuration equipment). In other words, XIII(j)(2) is a catch-all entry that comes after other USML catch-all entries. UTC has submitted a Commodity Jurisdiction ("CJ") request, Case No. 0247-15, which provides a specific example and additional detail.

To ensure that defense articles enumerated or described on the USML are not inadvertently captured by subcategory XIII(j)(2), UTC recommends revising subcategory XIII(j) from "Equipment, materials, coatings, and treatments not elsewhere specified, as follows" to "Equipment, materials, coatings, and treatments not elsewhere enumerated or described, as follows" (emphasis added). This revision will ensure that items are classified in subcategory XIII(j)(2) only when no other USML classification is applicable.

C. Categories VI(f)(9), VII(g)(14), and XIII(f) – Classified Items

(1) Delete or Clarify Subparagraphs VI(f)(9)(iii), VII(g)(14)(iii), and XIII(f)(iii)

UTC recommends that DDTC delete subparagraphs VI(f)(9)(iii), VII(g)(14)(iii), and XIII(f)(iii). Subparagraphs VI(f)(9)(iii) and VII(g)(14)(iii) control any part, component, accessory, attachment, equipment, or system that is being developed using classified information. Subparagraph XIII(f)(iii) controls any enumerated article being developed using classified information. If the production version of the item is classified, paragraph (iii) is superfluous because the defense article, whether in development or production, is already captured by subparagraphs VI(f)(9)(i), VII(g)(14)(i) or XIII(f)(i). If the production version of the item is not security classified, then subparagraph (iii) over-controls an item as SME while in development that becomes non-SME upon entering production. UTC does not believe that it is the intent of DDTC to control items as security classified and SME in development when the item in production could well be unclassified and controlled under a non-SME classification on the USML or the CCL.

If DDTC does not accept the recommendation above, UTC requests clarification of the phrase "being developed using classified information" in subcategories VI(f)(9)(iii), VII(g)(14)(iii), and XIII(f)(iii). Most modern weapon systems, such as military surface vessels and ground vehicles, have security classified capabilities and performance characteristics. For example, the top speed in a particular sea state condition for a surface vessel may be security classified information. These security classified performance requirements impact the design of weapon

systems' subsystems and associated components, but are generally conveyed as derived, unclassified requirements to avoid driving all subsystem and component design activities into security classified processes. For example, to support development of the surface vessels' stability control system, a subsystem of the surface vessel, the security classified top speed/sea state requirement could be converted to unclassified operating range or part-specific values, such as ship attitude sensor ranges and system shock requirements. While each of these unclassified requirements is driven by and traceable to a security classified requirement, they do not directly provide the security classified information.

UTC believes that the intent of the subparagraphs VI(f)(9)(iii), VII(g)(14)(iii), and XIII(f)(iii) is to capture defense articles being developed directly from security classified information and not indirectly through derived unclassified information. A broad definition of the phrase "using classified information" would unintentionally capture all subsystems, parts, and components designed to support the weapon system. To avoid unintentionally capturing defense articles being developed indirectly from security classified information, UTC recommends revising the subparagraphs to read: "Is being developed directly using classified information."

(2) Potential Conflicts with Security Classification Disclosure Requirements

Prior to ECR, a security classified defense article enumerated or described in a USML category would be controlled under the specific category in which it was enumerated or described. In that way, from an export control perspective, security classified items were indistinguishable from similar unclassified items controlled under the same category. Security classified defense articles not enumerated or described in a USML subcategory were controlled in USML Category XVII, a catchall for security classified defense articles and technical data. With the pre-ECR approach, all security classified defense articles were controlled by the ITAR in some form, the majority of which were indistinguishable by USML subparagraph from non-security classified articles.

Post-ECR, all revised USML Categories that have become effective to date, with the exception of USML Category XX, now include specific subparagraphs capturing security classified defense articles (e.g., VI(f)(9), VII(g)(14), XIII(f)). As a result of the new security classified USML subparagraphs, items that were previously controlled in unclassified USML subparagraphs (e.g., VII(g)) are now classified in security classified USML subparagraphs (e.g., VII(g)(14)(i)) and, therefore, can be distinguished from similar unclassified items.

In the post-ECR environment, conflicts have become more common as a result of different disclosure priorities. For DDTC, disclosure of an item's USML export classification, even when disclosing a security classification, is appropriate and necessary for compliance with the ITAR. Disclosure that an item is security classified is not always compatible with DoD NISPOM/contractual obligations. With regards to certain security classified programs, the individual program may impose contractual requirements dictating that identifying an item as security classified is itself security classified data. For example, a document identifying that an item is classified in USML subparagraph VII(g)(14)(i), could, pursuant to contractual requirements, become a security classified document. As with all security classified documents,

disclosure thereof is significantly restricted. The conflict between DDTC and DoD disclosure priorities creates a difficult management challenge for industry.

Although the conflicting disclosure priorities existed prior to ECR, the increase in items from mixed classified/unclassified USML subparagraphs to new security classified subparagraphs has increased the number of conflicts industry experiences as it relates to disclosure priorities. In order to minimize the aforementioned conflicts, UTC encourages the agencies to reconsider the approach to controlling security classified defense articles in USML paragraphs/subparagraphs that unambiguously identify the articles as classified.

* * *

If you have any questions regarding UTC's comments, please contact the undersigned at 202-336-7467 or peter.jordan@utc.com, or Ari Novis at 860-557-2353 or air.novis@pw.utc.com.

Sincerely,

Peter S. Jordan
Executive Director & Associate General Counsel, International Trade Compliance
United Technologies Corporation

NORTHROP GRUMMAN

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December 8, 2015

Department of State
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Department of Defense Trade Controls
2401 E Street, N.W.
12th Floor, SA-1
Washington, D.C. 20522

ATTN: Mr. C. Edward Peartree
Director, Defense Trade Controls Policy

SUBJECT: Review of USML Categories VI, VII, XIII and XX

Dear Mr. Peartree:

Northrop Grumman Corporation wishes to thank the Department for the opportunity to submit comments in review of the above published rules as we support the Department's objective of establishing a positive United States Munitions List (USML). In response, we provide the following recommendations:

1. Multiple USML category entries for same/similar commodities. We recommend a comprehensive review of all categories/entries in the USML in order to reconcile where multiple USML category entries describe or control the same or similar commodities. Some of these duplicate entries existed prior to Export Control Reform (ECR); however, the number of duplicates has increased as a result of ECR. The following subparagraphs address some of the duplications we have identified, which could potentially result in inconsistent classifications.

a. **Fire control systems.** Fire control computers, stores management systems, armament control processors, etc. are controlled in USML VII(g)(12), VIII(h)(16), and even in the catch-all XX(c); however, fire control systems are also controlled XII(a). Recommend fire control systems be included in USML XII.

b. **Active protection systems.** These systems in VI(f)(7) for shipborne and VII(g)(2) for ground vehicles (both non-SME) are described to include defensive systems that actively detect and track incoming threats and provide countermeasures. Aircraft are treated differently as protection systems are covered in the non-platform specific Category XI, Electronics. Radars that detect and track incoming munitions are captured under XI(a)(3)(xiv) and other electronic combat systems are controlled in XI(a)(4). Category IV(c) also controls apparatus and devices that can detect and monitor rockets, missiles, torpedoes, and other various munitions. Depending on the specific VI(f)(7) shipborne and/or VII(g)(2) ground vehicle countermeasure, it could also be better classified under Category II(a) or (c), IV(a), XI(a)(4)(iii), XII(b), or even XVIII(a). Recommend active protection systems be included in USML XI.

c. **Underwater mine detection systems.** Underwater mine hunting/detecting equipment is controlled in IV(c), VI(f)(8) even if deployed by aircraft, XI(a)(1), and XII(b) if mine detection systems employ lasers. Recommend Underwater mine detection systems be included in USML XI.

d. **Cameras.** USML Cat XIII(a) controls "Cameras and specialized processing equipment therefor... specifically designed... for military applications." This entry overlaps with cameras which are controlled in Cat XII(c). We recommend XIII(a) become reserved and those items which required to be controlled on the USML be captured in the revised USML Cat XII.

e. **USML Cat VII(c).** Prior to ECR, Cat VII(c) only controlled vehicles, trailers, etc. which were designed, modified or equipped to mount or carry weapons in Categories I, II, and IV. Now, Cat VII(c) is expanded to control ground vehicles and trailers equipped with any mission systems controlled under this subchapter [ITAR]. As a result, a TPS-xx, transportable radar system could be controlled under non-SME Cat VII(c) versus controlled under SME Cat XI(a)(3).

f. **Radar Target Generators and simulators *(Broader USML example)*.** "Radar target generators" are controlled in IX(a)(9) and XI(a)(3)(xxviii). Radar simulators are controlled in IX(b)(1) as well as XI(a)3(xxviii). Recommend Radar Target Generators and simulators be included in USML IX.

2. USML Cat XI(c)(1-3) ASICs, PCBs, & multichip modules. (Note: This comment is included in this submission being that control of ASICs, PCBs and multichip modules crosses all USML categories to include VI, VII, XIII and XX) We recommend these entries to be reserved and these items are only to be USML controlled if the function they perform is enumerated on the USML or if they are a caught and not released as part of a USML catch-all paragraph. For example, if an ASIC is programmed to perform digital radio frequency memory than it would be controlled under XI(c)(8) or if a PCB is specially designed part or component of an automatic elevating system for a ground vehicle gun mount than it would be controlled under Cat VII(g)(8). This is the standard for every other entry and should be the same for ASICs, PCBs, and multichip modules as just about every military and commercial electronic device contains one of these items.

Should clarification or subsequent technical discussions be necessary, please contact either Steve Headley at james.headley@ngc.com, (703 280-4806), or myself at thomas.p.donovan@ngc.com (703-280-4045).

Sincerely,

Thomas P Donovan

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Thomas P. Donovan
Director, Export Management
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