## Public Comments
Notice of Inquiry: Request for Comments Regarding Controls on Military Aircraft and Military Gas Turbine Engines on the Commerce Control List (80 F. Reg. 11315, March 2, 2015)

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RESPONSE TO REQUEST FOR COMMENTS RE: USML CATEGORY VIII AND CCL CATEGORY 9

On March 2, 2015, the Department of State, Directorate of Defense Trade Controls (“DDTC”) and the Department of Commerce, Bureau of Industry & Security (“BIS”) issued Federal Register notices soliciting comments from industry on the implementation of Export Control Reform (“ECR”) with respect to military aircraft and military gas turbine engines and setting the deadline for such comments as May 1, 2015.¹

Aerospace and defense industry representatives, acting through the Aerospace Industries Association (“AIA”), respectfully submit the following comments. Thank you for your consideration. We hope that these comments will help DDTC and BIS continue to improve the U.S. export control system.

EXECUTIVE SUMMARY – IMPROVEMENTS TO CREATE A MORE “POSITIVE” USML

On December 10, 2010, DDTC notified the public of its intent to revise the U.S. Munitions List (“USML”) “to create a ‘positive list’ that describes controlled items using, to the extent possible, objective criteria rather than broad, open-ended, subjective, or design intent-based criteria.”² DDTC further stated that, “A ‘positive list’ is one that describes controlled items using objective criteria such as horsepower, microns, wavelength, speed, accuracy, hertz or other precise descriptions . . .”³ Three years later, on October 15, 2013, DDTC took great strides towards achieving this goal when it issued the first wave of ECR covering USML Categories VIII and XIX.⁴

Nevertheless, despite these efforts, USML Categories VIII and XIX still contain many entries that use “broad, open-ended, subjective, design intent-based” language that ECR was intended to address, and such terms are either not defined (e.g., “military”), or they are defined to be so broad that they could potentially capture every item on the USML (e.g., “mission system”).

³ Id.
These entries create uncertainty for industry, and they work together to negate many of the intended benefits of ECR with respect to aircraft.

For example, although BIS created ECCN 9A610.a to control “‘military aircraft’ ‘specially designed’ for a military use that are not enumerated in USML paragraph VIII(a),” and ECCN 9A012 to cover “non-military ‘unmanned’ aerial vehicles” (“UAV”), these ECCNs are nearly empty categories. This is because almost every aircraft that could fall into either of these entries is pulled back onto the USML for one or more of the following reasons:

- “Military” and “non-military” are not defined, and industry has no objective criteria to determine whether a UAV falls under USML Category VIII(a)(5) or ECCN 9A012;
- All Optionally Piloted Vehicles (“OPV”), ones that can fly with or without a human pilot, fall under USML Category VIII(a)(13) regardless of the classification of the aircraft that is converted into an OPV and regardless of the aircraft’s capabilities;
- The aircraft contains one or more “mission systems” that cause it to fall under USML Category VIII(a)(11);5 or
- The aircraft flies “intelligence, surveillance, and reconnaissance” (“ISR”) missions, and the lack of a definition for “military” necessitates classification under USML Category VIII(a)(7).

Even in the rare cases in which an Original Equipment Manufacturer (“OEM”) exports an aircraft under ECCN 9A610.a, the customer generally transforms the aircraft into an ITAR-controlled defense article immediately after receipt by incorporating a “mission system.” This creates havoc for companies trying to comply with export license requirements to ship aircraft to our customers overseas, while also providing after-market maintenance, repair and overhaul (“MRO”) services in line with the applicable export laws.

The comments below seek to address these issues by proposing practical solutions to create certainty for industry while enabling the U.S. government to continue to control the products and technologies that U.S. government officials have determined warrant such control. We would like to clarify that these comments do not recommend that DDTC “de-control” anything; rather, we respectfully request that DDTC and BIS continue to improve the USML and the Commerce Control List (“CCL”) to create more “positive” lists based on clearly-defined, objective criteria.

To this end, these comments comprise three parts:

- **PART 1** – DDTC and BIS should create objective criteria to define which UAVs and OPVs fall on the USML in Categories VIII(a)(5) and VIII(a)(13), respectively, and which

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5 As explained in Part 2, Section V, the Note at the end of USML Category VIII does not solve this issue, and in fact, it hinders industry’s ability to sell spare and replacement parts, or provide warranty and maintenance services, along with our aircraft.
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fall on the CCL in ECCN 9A012; the terms “military” and “non-military” are broad, subjective, and design intent-based, and, therefore, contrary to ECR.

- **PART 2** – DDTC should remove Category VIII(a)(11) from the USML because “mission systems” are controlled adequately elsewhere on the USML, and VIII(a)(11) creates an unnecessary burden for industry.

- **PART 3** – DDTC should exclude EAR-controlled aircraft from USML Category VIII(a)(7) and control the defense articles that provide ISR capabilities in the USML entries into which these items fall.

We appreciate DDTC’s and BIS’s consideration of these issues, and we look forward to discussing them with you further.

Thank you
PART 1 – DDTC AND BIS SHOULD CREATE OBJECTIVE CRITERIA TO DEFINE WHICH UAVS AND OPVs FALL ON THE USML AND WHICH FALL ON THE CCL; THE TERMS “MILITARY” AND “NON-MILITARY” ARE BROAD, SUBJECTIVE, AND DESIGN-INTENT-BASED, AND, THEREFORE, CONTRARY TO ECR.

I. DDTC and BIS Should Define Objective Criteria Regarding Which UAVs Fall on the USML and Which Fall on the CCL

USML Category VIII(a)(5) controls “unarmed military unmanned aerial vehicles,” and ECCN 9A012 controls “non-military unmanned aerial vehicles.” (Emphasis added.) However, neither the ITAR nor the EAR define the terms “military” or “non-military.” Therefore, a company that wishes to market an unarmed UAV system to (1) U.S. and foreign armed forces, and (2) commercial customers, as many companies do, has no objective criteria to determine whether the UAV system falls under the ITAR or the EAR and whether the company should apply for a license from DDTC or BIS. This uncertainty causes confusion, wastes time, and prevents industry from securing potential business opportunities.

Based on the order of review and the fact that the ITAR trumps the EAR, absent a CJ determination stating otherwise, a company would almost always have to classify a UAV system with potential military application under USML Category VIII(a)(5), rendering ECCN 9A012 a virtual empty set. Moreover, even if the company wanted to apply for a CJ determination to move an unarmed UAV system from the ITAR to the EAR, it is not clear what characteristics and capabilities one would discuss in the CJ application because the factors that DDTC would use to consider the CJ request are unknown. (At present all we could say is that a UAV is not a “military” UAV because we do not think it is a “military” UAV. This type of a circular, conclusory argument is unlikely to persuade the U.S. government.)

However, it would be counter to the stated principles of ECR to determine that an unarmed UAV system is “military” under USML Category VIII(a)(5) simply because it was initially designed for use by armed forces, or if the U.S. military was the first to operate the system. Rather, industry respectfully requests that DDTC and BIS create objective criteria to define which UAVs are controlled on the USML and which on the CCL. The criteria for classifying UAV systems should focus on the capabilities of the UAV platform (i.e., payload and range) rather than on what the UAV system can carry (e.g., the resolution of ISR sensors). This is because, as discussed further below in Parts 2 and 3, the ISR sensors, military navigation and communications equipment, and other defense articles that an aircraft, manned or unmanned, can carry are already controlled adequately in other Categories of the USML and CCL. As explained below it is not necessary to create a secondary ITAR category to capture EAR aircraft, manned or unmanned, that carry such items.

AIA understands that BIS’s Transportation and Related Equipment Technical Advisory Committee (“TransTac”) has created an Unmanned Aerial System Technical Working Group to examine what technologies unique to UAV systems may warrant ITAR control, and we look forward to their findings.
II. DDTC and BIS Should Apply the Same Objective Criteria Discussed Above to Optionally-Piloted Vehicles and Revise USML Category VIII(a)(13) Accordingly

USML Category VIII(a)(13) controls all “Optionally Piloted Vehicles (OPV) (i.e., aircraft specially designed to operate with and without a pilot physically located in the aircraft).” We see no reason to control OPVs differently from UAVs, and the same factors that cause a UAV to be controlled on the USML vs. the CCL should apply equally to OPVs.

Although OPVs currently fall under the ITAR, the technology required to “develop,” “produce,” and/or “use” a “non-military” UAV already falls under the EAR. In other words, the technology required to make an aircraft fly without a pilot is not ITAR-controlled; one could do it using EAR-controlled technology.

Nevertheless, if a company were to convert an ECCN 9A991.b general aviation airplane into an OPV and have a seat for a pilot to take the controls, the aircraft would fall under the ITAR as a USML Category VIII(a)(13) defense article; however, if the company removed the pilot’s seat to create a UAV, the aircraft would fall under the EAR as an ECCN 9A012 non-military UAV.

This creates an odd situation, and we would request that DDTC and BIS address this by using the same objective criteria discussed above with respect to UAVs to determine which OPVs fall on the ITAR and which on the EAR. We do not see a reason to control OPVs at a higher level of control than UAVs with similar payload and range just because an OPV could be piloted by a human.

III. In Addition to Clarifying Which UAVs/OPVs Fall on the USML and CCL, DDTC Could Add Sub-Paragraphs to Certain Entries in Category VIII(a) to Include “Unmanned and Optionally-Piloted Variants Thereof.”

In addition to adding objective criteria to clarify which UAVs and OPVs fall on the USML vs. the CCL, DDTC could simply eliminate USML entries VIII(a)(5) and VIII(a)(13) and instead add sub-categories to other sections of USML Category VIII(a) to include unmanned and optionally-pilots variants of certain aircraft. For example, to cover unmanned and optionally-piloted bombers and fighters, DDTC could add new USML sub-paragraphs to USML Category VIII(a) and VIII(b), as follows:

**Category VIII – Aircraft and Related Articles**

(a) Aircraft as follows:

*(1) Bombers;

(a) Manned;

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6 See ECCN 9E001, ECCN 9E101, and ECCN 9E102.
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(b) Unmanned or optionally-piloted variants (MT if the aircraft has a range equal to or greater than 300 km)

*(2) Fighters, fighter bombers, and fixed-wing attack aircraft;

(a) Manned;

(b) Unmanned or optionally-piloted variants (MT if the aircraft has a range equal to or greater than 300 km)

This would allow DDTC to control unmanned aircraft that have specific military functions in the USML Categories that already cover the specific military functions that DDTC would like to control.

We do not, however, recommend that DDTC add such a sub-paragraph to USML Category VIII(a)(7), which covers “military [ISR] aircraft” because “military” is not defined, and this entry does not explain what specific ISR capabilities DDTC wishes to control. Rather, for reasons discussed below in Part 3, we recommend that DDTC enumerate the specific military ISR aircraft that fall under USML Category VIII(a)(7) and exclude from this entry EAR-controlled aircraft that perform ISR roles. We also recommend that DDTC control ISR defense articles used on EAR platforms in the USML Categories into which the ISR defense articles fall, e.g., USML Categories XI and XII. Otherwise USML Category VIII(a)(7) would render ECCN 9A610.a and 9A012 virtual empty categories because a large number of aircraft that would fall under these CCL entries often perform ISR missions for U.S. and foreign militaries and could, therefore, be pulled back onto the USML.

IV. DDTC and BIS Should Clarify What Specific Factors Make Certain UAV Launching, Recover, and Landing Systems ITAR-Controlled, and When such Systems Fall under ECCN 9A610.u

Although certain UAVs take off and land like manned aircraft, other variants use launching, recovery, and landing systems, especially in environments where a traditional runway is not an option. However, these systems have valid dual-use applications, and they are not uniquely military.

The USML and CCL currently contain multiple overlapping entries into which the same UAV launching, recover, and landing system could fall, and it is not clear why some are ITAR-controlled and others EAR-controlled:

• USML Category VI(f)(6) controls “catapults for launching aircraft”;

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USML Category VIII(d) controls “ship-based launching and recovery equipment . . . and land-based variants thereof”;

USML Category VIII(h)(6) controls UAV “airborne launching systems”; and

ECCN 9A610.u controls “Apparatus and devices ‘specially designed’ for the . . . non-ship-based launching of UAVs or drones.”

Industry respectfully requests that DDTC and BIS clarify that all UAV launching, recovery, and landing systems fall under ECCN 9A610.u (or another CCL category) or clarify when to use ECCN 9A610.u and when to use the various USML Categories identified above.
PART 2 – DDTC SHOULD REMOVE CATEGORY VIII(a)(11) FROM THE USML BECAUSE “MISSION SYSTEMS” ARE CONTROLLED ADEQUATELY ELSEWHERE ON THE USML, AND VIII(a)(11) CREATES A SIGNIFICANT BURDEN FOR INDUSTRY.

I. USML Category VIII(a)(11) Is Not Necessary Because “Mission Systems” Are Already Controlled Adequately Elsewhere on the USML

In addition to the subparagraphs of USML Category VIII(a) that control aircraft due to their inherent capabilities (such as fighters and bombers), USML Category VIII(a)(11) controls aircraft that are otherwise subject to the EAR, but which “incorporat[e] any mission system controlled under [the ITAR].”

Note 1 to VIII(a)(11) defines “mission systems” 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.” (Emphasis added.) By definition, therefore, a “mission system” is a defense article that is controlled already somewhere else on the USML.

For example, an AN/ARC-210 Talon Programmable Digital Communication System (“AN/ARC”) is a “mission system” because it is a “system” that falls under USML Category XI(a)(5). At times our businesses (and our customers) incorporate AN/ARC systems into aircraft that we manufacture which are otherwise subject to the EAR. We respectfully submit that it is not necessary to control the ECCN 9A991.b aircraft that incorporate AN/ARC systems under USML Category VIII(a)(11) because DDTC already controls the AN/ARC system in USML Category XI.

This issue is further complicated by the fact that the definition of “mission system” uses the broad, open-ended phrase “such as,” i.e., “defense articles that perform specific military functions such as . . . .” This means that any defense article can be a “mission system” if (1) it is a “system,” i.e., has more than one part, and (2) it performs any “specific military function.”

Because every defense article could be assumed to perform a “specific military function” otherwise it should not be on the USML, if a defense article comprises two or more parts, which is almost always the case, it would be a “mission system” as this term is currently defined. However, this cannot have been DDTC’s intent, otherwise there would not have been a need to

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8 We recognize that similar language exists in USML Categories VI(a)(4), VII(c), and XX(a)(7) with respect to vessels, ground vehicles and trailers, and submersibles, respectively. We respectfully submit that the same arguments discussed herein apply equally to the other categories that involve “mission systems;” however, since DDTC and BIS have only requested comments on USML Category VIII and CCL Category 9, we have limited our comments to aircraft and aircraft parts.

9 A “system” is “a combination of parts, components, accessories, attachments, firmware, software, equipment, or end-items that operate together to perform a function.” 22 C.F.R. § 120.45(g).

10 An overview of the AN/ARC system is available at https://www.rockwellcollins.com/Data/Products/Communications_and_Networks/Communication_Radios/AN-ARC-210_Talon_Programmable_Digital_Communication_System.aspx
define “mission system,” and DDTC could have drafted USML Category VIII(a)(11) to control simply “Aircraft incorporating any defense article controlled under this subchapter,” rather than “Aircraft incorporating any mission system controlled under this subchapter.” This language leads to significant confusion among companies trying to comply with USML Category VIII.

For these reasons and the reasons discussed in detail below, we respectfully submit that it is not necessary to have a USML entry that controls EAR aircraft that contain “mission systems” when USML entries for the “mission systems” already exist. DDTC’s long-standing “see through” rule dictates that an ITAR authorization is required to export, re-export, or transfer an aircraft that incorporates a “mission system,” such as an AN/ARC system, and as discussed in the next section, a process to obtain the necessary export authorizations already exists. In other words, the requirement to obtain an export license to ship a USML Category XI AN/ARC system does not go away if we incorporate the AN/ARC into an ECCN 9A991.b aircraft, and so there is no reason to create a separate USML entry for the aircraft.11

Therefore, USML Category VIII(a)(11) is unnecessarily redundant. It controls aircraft that incorporate defense articles which are already controlled on the USML via the “see through” rule. This type of secondary control does not enhance U.S. national security, but it does create significant burdens for industry with respect to licensing, Congressional Notification value thresholds, and how to determine what services provided in connection with the aircraft constitute “defense services,” as discussed further below.

II. DDTC and BIS Already Have a Process to License EAR-Controlled Aircraft that Incorporate ITAR-Controlled Items

USML Category VIII(a)(11) is not necessary, because the U.S. government already has a process to license EAR-controlled aircraft that incorporate ITAR-controlled components: (1) obtain a license from BIS to export the aircraft, if needed; and (2) obtain a license from DDTC to export the components on the aircraft that are ITAR-controlled. Although this process requires two export licenses from two different U.S. government agencies, as discussed in the sections that follow, this two-license process is actually easier for industry to manage than one license under USML Category VIII(a)(11).

In 2014, an aircraft OEM obtained an EAR license to export EAR-controlled military trainer aircraft to a country in Oceania. These aircraft are propeller-driven trainer aircraft that do not fall under any of the subparagraphs of USML Category VIII(a). 12 The OEM also obtained a DSP-5 to export certain USML Category X and XI defense articles along with the aircraft.

11 It is also confusing that the ITAR do not designate USML Cat. VIII(a)(11) as Significant Military Equipment (“SME”) when many of the “mission systems” that cause an aircraft to fall under this USML Category are SME. To the extent that DDTC retains USML Cat. VIII(a)(11), which we do not recommend, we would ask DDTC to clarify this issue and explain whether industry should obtain DSP-83s for VIII(a)(11) aircraft that incorporate SME “mission systems.”

12 In 2014, DDTC confirmed that the aircraft are EAR-controlled via CJ Determination.
This case provides an example of how DDTC effectively controlled ITAR-controlled defense articles used on EAR aircraft without using USML Category VIII(a)(11): The OEM applied for a DSP-5 export license to export the USML Category X and XI defense articles; DDTC reviewed the license request, staffers it to the U.S. export community, and considered the agency’s export policy for such items to the country in question; and, after consulting with the staffing agencies, DDTC approved the DSP-5. It was not necessary to have a secondary USML Category, such as VIII(a)(11) to control the aircraft that incorporated the ITAR defense articles.

If DDTC, or another U.S. government agency, did not want the OEM to export the defense articles with the EAR-controlled aircraft, DDTC could have denied the DSP-5 license for such defense articles. All the relevant agencies in the export community had the opportunity to review and comment on the license application through the normal staffing process, providing full visibility as to the ITAR equipment incorporated into the EAR-controlled aircraft that the OEM sought to export to its foreign customer.

Additionally, another OEM recently won a contract to export helicopters outfitted with crew seat armor and cockpit floor armor to a country in Asia. The helicopters fall under ECCN 9A991.b, and so no export license from BIS is required for the sale, but DDTC issued a DSP-5 in early February 2015 to cover USML Category XIII(e)(5) armor installed on the aircraft. This provides another example in which DDTC considered and licensed ITAR-controlled items on an EAR aircraft without using VIII(a)(11).

These examples show that DDTC and BIS have adequate means to control the export of EAR-controlled aircraft that contain USML defense articles, and they provide further evidence that USML Category VIII(a)(11) is unnecessary.

### III. USML Category VIII(a)(11) Leads to Inefficient Staffing and Unnecessary Congressional Notification Requirements

USML Category VIII(a)(11) should be repealed because it leads to inefficient staffing and an overinflated value that causes unnecessary notifications to Congress, which in turn causes costly delays to industry in obtaining export licenses necessary to conduct our business.

First, when a company applies for an export license, we understand that the license is assigned to a Licensing Officer in the Office of Defense Trade Controls Licensing (“DTCL”) based on the USML Category(ies) that the application covers. We understand that USML Category VIII(a)(11) licenses are directed to Division V, which governs licensing for USML Category VIII defense articles. However, because the “mission systems” that cause aircraft to fall under USML Category VIII(a)(11) more often than not fall under a different USML Category, e.g., Categories XI and XII, frequently Division V is not the appropriate group within DTCL to
review the application. Rather, it would be more efficient to staff the cases to the DTCL Division that handles the USML Category(ies) that govern the mission system(s).

Second, DDTC stated in the FAQs section of the agency’s website and in response to a recent general correspondence request issued to one OEM that the Congressional Notification value for license applications involving USML Category VIII(a)(11) defense articles should be the value of the entire aircraft, rather than the value of the mission systems that cause the EAR-controlled aircraft to fall under the ITAR.

For example, an OEM recently applied for a DSP-5 license to export ECCN 9A991.b helicopters to a foreign military in Asia. Although the helicopters are subject to the EAR under ECCN 9A991.b, some of the aircraft will include USML Category XI defense articles that qualify as “mission systems.” The total value of the helicopters with the USML equipment installed exceeds the applicable Congressional Notification threshold of $50 million; however, the total value of all of the USML articles on the aircraft is less than $3 million, which is $47 million below the Congressional Notification threshold.

Nevertheless, the Office of Defense Trade Control Policy (“DTCP”) informed the OEM via telephone that Congressional Notification is required for this license. As DDTC is aware, Congressional Notification adds a significant amount of time to the licensing process, and in this case it has affected the OEM’s ability to deliver to its customer on time.

We understand that Congressional Notification is mandated by the Arms Export Control Act (“AECA”) and is, for purposes of this discussion, based on contract value; however, we respectfully submit that DDTC has the authority to include only the value of the actual defense

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13 This issue will continue to exist after DTCL reorganizes on April 20, 2015. In fact, DDTC’s notice on this change states that, “D-Trade will be configured to automatically route cases to the proper division based on the USML commodities on the application.” However, unless USML Category VIII(a)(11) is repealed, D-Trade will automatically route cases to the improper division, i.e., the Sea, Land, and Air Systems Division tasked with USML Category VIII rather than the Divisions that handle most mission systems: the Space, Missile, and Sensor Systems Division or the Electronic and Training Systems Division. See https://www.pmddtc.state.gov/documents/Industry%20Notice%20-%20Reorg%208%20Apr%202015v2.pdf

14 DDTC FAQs available at https://www.pmddtc.state.gov/faqs/ecr.html#o. Responding to a question on how to account for USML Category VIII(a)(11) on a DSP-73, DDTC instructed industry to “Classify the aircraft as the following: ‘Civil model aircraft equipped with [fill in name(s) of specific USML mission system(s)].’ The value for that line must reflect the value for the entire aircraft, to include those mission systems(s) that are responsible for converting the aircraft to Category VIII(a)(11).”

15 In practice, Congressional Notification can add more than six months to license processing time. One might say that industry should just plan accordingly and apply for licenses further in advance. However, we cannot apply for such licenses until the proper contract documents are in place, and the timing creates significant difficulties for international business when we are competing with foreign OEMs that are not subject to the ITAR. We would appreciate it if DDTC would limit Congressional Notification to the cases that truly warrant it.

Furthermore, we understand that it is DDTC policy to only notify cases when both Houses of Congress are in session. This creates additional delays during congressional recesses, especially during election years when Congress often adjourns for long stretches at a time.

16 See 22 U.S.C. § 2776(c) implemented at 22 C.F.R. § 123.15.
articles when calculating contract value for purposes of Congressional Notification. Artificially inflating this number by including the value of the EAR-controlled aircraft onto which the defense articles are installed leads to unnecessary Congressional Notifications that in no way advance U.S. national security or foreign policy objectives.\footnote{Besides repealing USML Category VIII(a)(11), DDTC could also add a note to the ITAR that for Congressional Notification purposes, only the value of the ITAR mission system and/or defense articles incorporated into the aircraft are reportable, while the value of the civil aircraft platform and any other EAR items is excluded from the reportable value.}

IV. DDTC Should Maintain Its Long-Standing Policy that Only Services Directly Related to a Defense Article Are “Defense Services”

In addition to the inefficient staffing and unnecessary notifications to Congress discussed above, in a Client Alert dated December 8, 2014, former DDTC official Christopher Stagg highlights an issue related to USML Category VIII(a)(11) and “defense services” that could wreak havoc for industry.\footnote{Christopher B. Stagg, Esq., “DDTC Issues Overly Expansive Interpretation of the ITAR for Defense Services (and Presumably Technical Data) available at http://www.staggpc.com/insights/article-ddtc-issues-overly-expansive-interpretation-itar-defense-services.html.} According to Mr. Stagg, a DDTC official recently stated at a training conference in the context of “significant [advisory opinion] decisions likely to be incorporated into upcoming rules,” that, “Services rendered on an aircraft that incorporates a mission system constitute a defense service regardless of the system.”

As an example, Mr. Stagg writes that, if this policy were to become official, “[S]ervices provided to the civilian Boeing 787 aircraft would be considered a defense service by DDTC if the Boeing 787 aircraft incorporates a mission system (a defense article) – even if the services do not involve the incorporated mission system. This means that aircraft maintenance providers would need a technical assistance agreement from DDTC to repair a common part or component, such as a tire on a Boeing 787 aircraft, merely because the aircraft incorporates a mission system.”\footnote{Stagg at 2 (quoting unnamed DDTC official talking about a Power Point slide during the Practising Law Institute’s Coping with U.S. Export Controls and Economic Sanctions program (Dec. 11-12, 2014)).}

This issue has the potential to dwarf the concerns expressed in the sections above. If implemented into law, not only would this contradict the AECA, the ITAR, and long-standing DDTC policy, as Mr. Stagg explains in his Client Alert, but it would also impose untenable costs on industry, significantly increase DDTC’s licensing case load without enhancing U.S. national security or foreign policy objectives, and potentially jeopardize flight safety by deterring customers from obtaining routine maintenance.

DDTC can avoid these issues by: (1) repealing VIII(a)(11) in its entirety as discussed above; (2) clarifying that only services directly related to the “mission system(s)” of an VIII(a)(11) aircraft are “defense services, and that organizational-level maintenance needed to install or un-install a line-replaceable unit (“LRU”) onto an EAR-controlled aircraft is not a “defense service”; and/or (3) release services that are common to ITAR- and EAR-controlled aircraft from the ITAR,
similar to the way that 22 C.F.R. § 120.41(b)(3) releases certain items and software from the definition of “specially designed.” The following sections discuss these issues and possible solutions.

A. Long-Established DDTC Policy Is that Only Services Directly Related to a Defense Article Are “Defense Services;” Arguments to the Contrary May Violate the AECA; and the AECA Does Not Require a Different Interpretation

Many in industry operate with the understanding that only services “directly related” to a defense article are controlled under the ITAR as “defense services,” and activities that are common to (1) an EAR-controlled aircraft that incorporates a defense article, and (2) an EAR-controlled aircraft that does NOT incorporate any such articles, such as changing a tire, are not “defense services.” This is largely due to the fact that such services do not require any ITAR-controlled technical data nor do they otherwise meet the definition of “defense services” in 22 C.F.R. § 120.9. In fact, USML Category VIII(i), the entry of Category VIII that addresses defense services, controls “defense services” which are “directly related to the defense articles described in paragraphs (a) through (h) of this category . . .” 22 C.F.R. § 121.1 (emphasis added).

Mr. Stagg explains the history of DDTC’s long-standing policy on this issue in his Client Alert, and he states on page 4 that DDTC confirmed this policy as recently as the Final Rule implementing ECR issued on April 16, 2013 where, in response to comments from industry regarding the “defense service” provision of USML Category XIX, DDTC stated as follows:

Two commenting parties recommended revising USML Category XIX(g) to control only technical data and defense services directly related to the “military functionality” of a defense article, for otherwise data and services common to commercial engines would be captured. The Department believes the ITAR definitions for “technical data” and “defense service” would preclude this occurrence, and therefore did not accept these recommendations.

However, as discussed above, DDTC recently called this long-standing policy into question when a DDTC official stated at a training conference that, “Services rendered on an aircraft that

\[\text{21} \text{ This issue could also arise with respect to other entries in USML Category VIII(a) besides USML Category VIII(a)(11). For example, one OEM received a CJ determination in 2014 ruling that a turboprop military trainer aircraft that otherwise falls under the EAR is an “attack aircraft” under USML Category VIII(a)(2) because it has pylons controlled by USML Category VIII(h)(6). Saying that services provided to parts of the aircraft besides the pylons are “defense services” would not make any sense for the reasons discussed herein. As discussed in Part 3 below, a similar issue would arise if DDTC were to argue that an EAR-controlled aircraft that incorporates an ITAR-controlled EO/IR sensor package is a “military intelligence, surveillance, and reconnaissance aircraft” under USML Category VIII(a)(7). In that case, only services “directly related” to the ITAR EO/IR sensors should be “defense articles.”} \]

\[\text{22} \text{ AIA understands that certain other companies obtain authorizations from DDTC before performing any services on an ITAR-controlled aircraft, regardless of whether the service is identical to one performed on a non-ITAR-controlled aircraft.} \]


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incorporate a mission system constitute a defense service regardless of the system.” Mr. Stagg explains in his article why DDTC does not have the legal authority to take such a stance under the AECA, and we believe that these arguments have merit.

Nevertheless, DDTC does not need to agree with Mr. Stagg to provide the relief discussed herein. This is because even if Mr. Stagg is wrong and DDTC does have the ability to define “defense services” in this manner, the AECA certainly does not require DDTC to interpret “defense services” to include activities that are not directly related to a defense article. Rather, the AECA defers to DDTC to define “defense service,” and DDTC can maintain the policy that has existed for more than 35 years that only services “directly related” to a defense article are “defense services.”

B. Determining that a Service for an Aircraft Can Be a “Defense Service” Regardless of the System to which the Service Pertains Will Impose Untenable Costs on Industry, Increase DDTC’s Case Load, and Potentially Jeopardize Flight Safety

If DDTC decides to redefine “defense services” to include services that are NOT directly related to a defense article, any person who provides any service to an aircraft that incorporates a “mission system” for a non-U.S. customer or anywhere outside of the United States would need to first obtain an export authorization from DDTC. For example, a DSP-5, Technical Assistance Agreement (“TAA”), or General Correspondence (“GC”) approval might be required to fill a gas tank, change a tire, or wash a window.

This is simply not reasonable as it would impose untenable costs on industry, significantly increase DDTC’s licensing case load without enhancing U.S. national security or foreign policy objectives, and potentially jeopardize flight safety by deterring customers from obtaining routine maintenance.

1. Creating an Export Compliance System to Track All Aircraft that Have Mission Systems and Obtain DDTC Approval Prior to Providing Any Service to the Aircraft Would Impose Significant Costs on Industry

As stated above, if “services rendered on an aircraft that incorporates a mission system constitute a defense service regardless of the system,” industry would need to obtain export authorizations from DDTC prior to servicing any such aircraft. To obtain the necessary authorizations, industry would need to identify and track every aircraft that contains a mission system, know when a customer plans to visit a facility for service, and apply for the necessary authorizations a few months in advance.

24 Stagg at 2.


26 See 22 C.F.R. § 124.1; see also, DDTC’s Guidelines for Preparing Electronic Agreements (Revision 4.2) (”DDTC’s Agreement Guidelines”) at §2.1 (“In exceptional cases, DTCL will consider the provision of limited defense services under DSP-5 license in accordance with §124.1(a).”)
This might be manageable (1) if we just started selling aircraft today and did not have decades of past sales, (2) if customers who bought EAR-controlled aircraft were not allowed to add mission systems to their aircraft after purchase without our knowledge and approval, (3) if customers who bought EAR-controlled aircraft were always willing to tell us what mission systems they installed on the aircraft after purchase, especially foreign governments, and (4) if customers were only allowed to bring their aircraft to one of the OEM’s facilities for servicing. However, none of these constraints applies, and thousands of aircraft are flying around the world with ITAR mission systems, many of which did not have the systems when the airplanes left our manufacturing facilities.

Moreover, while certain mission systems require specialized skill sets and significant modifications to an aircraft’s airframe, many can be installed using basic aircraft engineering know-how common to ITAR and non-ITAR systems, and a plane may land at a service facility for routine maintenance with an ITAR-controlled mission system that a customer added to the aircraft after it was originally sold. We have thousands of aircraft in our fleets, some of which were sold decades ago. Identifying and tracking which aircraft contain which mission systems would require collecting information from customers sometimes years after an initial sale and tracking aircraft at the tail-number level, which our IT systems generally are not configured to do.

For example, imagine that Customer One owns a Model A aircraft, Tail Number N1234, that is EAR-controlled under ECCN 9A991, and it does not contain any mission systems. An MRO facility located overseas could service anything on the aircraft without a TAA. However, if Customer Two owns a Model A aircraft, Tail Number N5678, that incorporates a mission system, the MRO facility would need to obtain a TAA to provide the same services to Customer Two that it can provide to Customer One without a TAA, even though the services have nothing to do with the mission system. This would be nearly impossible to administer, and it would require a significant investment in IT systems and personnel, with no additional benefit to U.S. national security or foreign policy objectives.

2. **Requiring Industry to Obtain DDTC Approval Prior to Providing Any Service to an Aircraft that Contains a Mission System Would Overwhelm DDTC’s (and DoD’s) Case Load without Protecting National Security**

While it is difficult to estimate how many new export applications DDTC would receive if it were to formalize the policy change on “defense services” discussed above, we anticipate that the increase would be staggering.\(^{27}\) This is further compounded by the fact that one airplane

\(^{27}\) We respectfully submit that the U.S. government would need to increase its resources to manage such an increase in licensing work because even without such a change in policy the average time needed to review and approve an ITAR application has increased significantly since ECR began.

According to metrics available on DDTC’s website at https://www.pmddtc.state.gov/metrics/index.html, the average number of applications received each month for the twelve-month period prior to ECR and the average number of calendar days needed to process a case was 7,022.2 cases and 18.3 days, respectively. For the first 12 months after ECR from August 2013 to July 2014, the average number of applications received per month decreased to 5,456.5, but the average processing time increased to 21.7 days. For the time period from August 2014 to March 2014, the last month for which data are available, the average number of applications received per month decreased to 4,304.4, but the average processing time increased again to 24 days.
landing at an overseas service facility could require multiple ITAR authorizations: (1) a DSP-5/TAA/GC would be required to authorize the service facility to provide the services; and (2) if DDTC were to consider technical data related to the aircraft to be ITAR-controlled, a DSP-5/TAA might be required to export technical data from the U.S. to the service facility.

The applications for these authorizations would request approval to perform services that are not related (directly or indirectly) to any mission systems on the aircraft, and no ITAR technical data would be needed to perform the services. This could also create the odd situation where DDTC would require a license for the export of technical data and services that BIS does not control for most destinations under the EAR, such as ECCN 9E991 technical data or services. It is difficult to understand how this would further U.S. national security or foreign policy objectives, and it would clog DDTC’s and the Department of Defense’s (“DoD”) license review systems.

3. Requiring Prior Approval from DDTC to Perform Services Unrelated to a Mission System Could Jeopardize Flight Safety by Deterring Routine Maintenance

If DDTC were to require industry to obtain ITAR authorizations prior to providing any service to an aircraft that incorporates a mission system, even when the service is not related to the mission system, customers might be deterred from obtaining routine maintenance in a timely manner, thereby potentially jeopardizing safety of flight. Most, if not all, customers would have difficulty grounding an aircraft for the time needed to obtain an ITAR approval when services needed to maintain the aircraft are not related to any ITAR equipment on board the plane. As DDTC is aware, it often takes several months to obtain a license/TAA, especially during certain times of year, and as discussed above in Section IV.B.1, it would be very difficult to track aircraft to obtain such authorizations in advance. We respectfully ask the agency to reconsider its recent statements on this issue.

C. DDTC Has Several Options to Avoid the Issues Discussed Above

To avoid the issues discussed above, DDTC could: (1) repeal VIII(a)(11) in its entirety; (2) retract the statement referenced in Mr. Stagg’s article (and any related advisory opinions) and clarify that only services directly related to the “mission system(s)” of an VIII(a)(11) aircraft are “defense services,” and that organizational-level maintenance needed to install or un-install an LRU onto an EAR-controlled aircraft is not a “defense service”; (3) release services that are

Comparing these monthly averages, we see that from the 12 months prior to ECR to the time period from August 2014 to March 2015, the average number of applications received each month decreased 38% (from 7,022.2 to 4,304.4); however, the average processing time for each case actually increased 31.5% (from 18.3 to 24 days). We understand that the less complicated cases may have moved from DDTC to BIS due to ECR, leaving DDTC with only the difficult applications to review; however, industry had hoped that such a significant decrease in the number of new cases received each month would translate into a corresponding decrease in average processing times or, at a minimum, roughly the same average number of days needed per case.
common to ITAR- and EAR-controlled aircraft from the ITAR, similar to the way that 22 C.F.R. § 120.41(b)(3) releases certain items and software from the definition of “specially designed”.

The simplest of these three options would be to repeal VIII(a)(11) in its entirety, and this would also solve the problems discussed above with respect to inefficient staffing and unnecessary Congressional Notifications.

If DDTC were to keep USML Category VIII(a)(11), the agency could clarify that in the context of EAR-controlled aircraft that contain ITAR mission systems, only services directly related to the mission systems are “defense services,” and the value for Congressional Notification considerations is only the value of the defense articles, and not the full value of the EAR-controlled aircraft plus the defense articles. If DDTC elects this option, we respectfully request that DDTC address this in a way that applies to the entire USML and not just to USML Category VIII(a)(11). This is important because the same issue with respect to “defense services” and Congressional Notification values could arise in other contexts. For example, when DDTC determines that an EAR-controlled aircraft is an “attack aircraft” under USML Category VIII(a)(2) because it contains USML Category VIII(h)(6) pylons, only services directly related to the pylons should be “defense services,” and only the value of the VIII(h)(6) pylons should be calculated for Congressional Notification considerations.

V. The Note to USML Category VIII Does Not Solve Any of the Issues Discussed Above; Rather, It Makes It More Difficult for Industry to Sell and Service Aircraft

A. The Note at the End of Category VIII Does Not Solve the Problems Above

One might argue that the ITAR already provide relief from the issues discussed above in the form of a Note at the end of USML Category VIII. However, this is simply not the case. In fact, the Note, which states as follows, actually makes it more difficult for industry to sell and service aircraft.

NOTE: Inertial navigation systems, aided or hybrid inertial navigation systems, Inertial Measurement Units, and Attitude and Heading Reference Systems in paragraph (e) and parts, components, accessories, and attachments in paragraphs (h)(2)-(5), (7), (13), (14), (17)-(19), and (21)-(26) are licensed by the Department of Commerce when incorporated in a military aircraft subject to the EAR and classified under ECCN 9A610. Replacement systems, parts, components, accessories and attachments are subject to the controls of the ITAR.

We understand that the intent of this Note was to provide industry relief from DDTC’s “see-through” rule by stating that EAR-controlled aircraft that incorporate certain USML Cat. VIII defense articles remain subject to the EAR under ECCN 9A610. Unfortunately, this Note does not provide the intended relief, but it does create an additional burden for industry.

28 Although outside of the scope of these comments, we would recommend that DDTC take similar action with respect to the other USML Categories that involve mission systems, i.e., USML Categories VI(a)(4), VII(c), and XX(a)(7), which control vessels, ground vehicles and trailers, and submersibles, respectively.
First, the Note appears to be limited to EAR-controlled aircraft that fall under ECCN 9A610. It states “... when incorporated in a military aircraft subject to the EAR and classified under ECCN 9A610.” (Emphasis added.) However, the majority of EAR-controlled aircraft that incorporate ITAR mission systems fall under ECCN 9A991.b, not ECCN 9A610. It is not clear whether this Note applies to ECCN 9A991.b aircraft, and a plain-text reading is that it does not. This creates the bizarre situation where an ECCN 9A610 aircraft that incorporates one of the defense articles listed in the Note is controlled under ECCN 9A610, but an ECCN 9A991.b aircraft that incorporates the same item is controlled under the ITAR. Perhaps this was intended, but this is very difficult to explain to our businesses and logistically challenging to manage.

Second, the Note only covers defense articles in USML Cat. VIII, when most of the “mission systems” that pull our EAR-controlled aircraft into USML Category VIII(a)(11) are controlled in other USML Categories, such as USML Category XI or Category XII. For the Note to be effective, DDTC and BIS would need to expand it to cover all “mission systems.”

Lastly, and most importantly, the Note states that the defense articles listed are subject to the EAR “when incorporated in a military aircraft subject to the EAR [but]... Replacement systems, parts, components, accessories and attachments are subject to the controls of the ITAR.” This means that we can obtain an export license from BIS (or obtain authorization to use license exception STA) to export an aircraft that incorporates a USML Cat. VIII(h)(13) lithium ion battery or a VIII(h)(18) drive system, but if our customer needs a spare battery or a replacement part, we need to treat the spares and replacement parts as ITAR-controlled defense articles. Accordingly, if we assist our customer in servicing or replacing the items, we would also need to obtain a TAA as services directly related to a defense article would also be “defense services.”

Controlling the items differently when they are incorporated into an aircraft and when they are not is a crucial point for our businesses, because we do not just sell aircraft; rather, we also sell spare and replacement parts, maintenance services, and warehousing and distribution services. We also often need to perform basic, organizational-level maintenance to remove a defense article from an EAR-controlled aircraft and send the item back to the OEM for repair/replacement.

Under the Note, an item’s export control jurisdiction/classification hops from the ITAR to the EAR and back depending on how the item is shipped:

- DDTC controls the item if it is shipped independently from an aircraft;
- DDTC also controls the item if it is incorporated into an ITAR-controlled aircraft, e.g., a USML Category VIII(a)(2) fixed-wing attack aircraft;
- But BIS controls the item if (1) it is incorporated into an ECCN 9A610 aircraft, and (2) the item is enumerated in the Note at the end of USML Category VIII;
However, DDTC controls the item if it is incorporated into an EAR-controlled aircraft and either (1) the aircraft is not an ECCN 9A610 aircraft, or (2) the item is not enumerated in the Note at the end of Category VIII; and

Finally, DDTC controls the item if we remove it from an ECCN 9A610 aircraft and send it back to the OEM for repair/replacement.

This system creates unnecessary complexity without enhancing U.S. national security or foreign policy objectives in any way, and our IT systems generally do not allow a product to have multiple export classifications depending on the method by which it is shipped.

Additionally, the ITAR and EAR have different standards for determining the nationality of a dual-national employee: BIS’s long-standing policy is that “the last permanent resident status or citizenship obtained governs;” however, unless someone is a U.S. person under 22 C.F.R. § 120.15, generally a license from DDTC is required to cover all of a person’s nationalities, including all citizenships and the person’s country of birth. It would be difficult to manage a program if an OEM had foreign persons authorized to work on an EAR-controlled ECCN 9A610 aircraft that incorporated a “mission system” under the EAR’s interpretation of nationality but also had to obtain a license from DDTC for the same individuals with respect to any work related to spare/replacement parts for the “mission systems” on the same aircraft.

Although it might be counter-intuitive, it would be easier to manage our exports if the export control classification of an item remained constant, rather than changing based on the platform into which the item is incorporated or the way the item is shipped. To address this, we respectfully request that DDTC make the Note at the end of Category VIII optional. In other words, it would be helpful if industry could elect to obtain either an ITAR license from DDTC for the defense article or an ECCN 9A610 license from BIS for the aircraft. In either case we would provide the complete details of the items at issue and where they would be used, thereby providing DDTC, BIS, and the U.S. government export community full visibility into the proposed transaction

B. If DDTC and BIS Elect to Continue the Approach Embodied in the Category VIII Note, We Would Recommend Expanding the Note to Cover All “Mission Systems” and Moving the Note to a New 600 Series Entry on the CCL

To the extent that DDTC and BIS elect to continue to use the approach embodied in the Category VIII Note, we recommend that the Agencies expand the Note to cover all “mission systems” instead of just the few USML Category VIII entries that it currently covers and move the Note to the CCL. Specifically, we recommend that BIS create a new ECCN 9A610.b to cover “Aircraft incorporating any ‘mission system’ controlled under the USML not elsewhere enumerated in USML Category VIII(a).”

29 See BIS’s Deemed Export FAQs available at http://www.bis.doc.gov/index.php/policy-guidance/deemed-exports/deemed-exports-faqs; see also, DDTC’s Agreement Guidelines at § 3.5.

30 BIS could also create sub-paragraphs to cover 9A610.b.1 manned and 9A610.b.2 unmanned and optionally-pilots variants, as discussed above in Part 1, Section III.
This would achieve at least four key results:

- It would cover all “mission systems” on the USML and not only the few “mission systems” identified in USML Category VIII.

- It could allow BIS and DoD officials to move cases through the system faster as EAR licenses are subject to a strict timeline;\(^\text{31}\)

- It would eliminate the need for Congressional Notification for most of these cases as only 600 Series Major Defense Equipment is subject to Congressional Notification requirements;\(^\text{32}\)

- It would solve the “defense services” issue identified above in Part 2, Section IV because a service provided to an EAR-controlled aircraft is not a “defense service”;

- It would rectify the SME vs. non-SME discrepancy identified in Footnote 11 above because the CCL does not have SME; and

However, for this approach to succeed, DDTC also would need to modify USML Category VIII(a)(7) to address the fact that “military” is not defined and the entry does not explain which ISR capabilities are controlled as discussed below in Part 3. Without such a fix this alternative solution would not work because USML Category VIII(a)(7) would pull aircraft that perform “military” ISR roles back onto the USML, and a large number of the aircraft that could move to ECCN 9A610.b are ISR aircraft used for or by U.S. and foreign military and quasi-military entities.

VI. **USML Category VIII(x) Does Not Provide Relief Because Sub-Paragraph (x) Applies to EAR Items Used in ITAR Items, and This Is the Opposite Situation.**

During meetings with U.S. government officials at the end of 2014, some asked whether USML Cat. VIII(x) addresses the issues discussed above. Unfortunately, it does not. USML Cat. VIII(x) does not provide relief, because the (x) sub-paragraphs allow industry to include items subject to the EAR on an ITAR license obtained from DDTC if the EAR-controlled items are “used in or with defense articles.” USML Category VIII(a)(11) involves the opposite situation where an ITAR-controlled item is used in or with an EAR-controlled platform.

It would create an odd situation if DDTC were to instruct industry to obtain a DSP-5 permanent export license under USML VIII(h)(13) for a lithium ion battery and tack on the aircraft with which the battery is used as a USML Category VIII(x) commodity. Based on current DDTC policy, this would also likely trigger Congressional Notification requirements, which we do not think would be appropriate for the reasons discussed above in Part 2, Section III.

\(^{31}\) Executive Order 12981 (Dec. 5, 1995) implemented at 15 C.F.R. § 750.4.

\(^{32}\) 15 C.F.R. § 734.5.
AIA Comments to DDTC and BIS re: USML Category VIII and CCL Category 9
May 1, 2015

**PART 3 – DDTC SHOULD ENUMERATE WHICH AIRCRAFT FALL UNDER USML CATEGORY VIII(a)(7); DDTC SHOULD EXCLUDE EAR-CONTROLLED AIRCRAFT FROM THIS ENTRY AND CONTROL THE DEFENSE ARTICLES THAT PROVIDE ISR CAPABILITIES TO EAR AIRCRAFT IN THE USML ENTRIES INTO WHICH THE ISR DEFENSE ARTICLES FALL.**

Even if DDTC and BIS agree with the recommendations above, take action to clarify which UAVs and OPVs warrant ITAR control, and decide to control “mission systems” in their primary USML entries rather than controlling aircraft that contain these systems in the secondary USML Category VIII(a)(11), certain EAR-controlled aircraft may continue to be pulled back onto the ITAR if they are deemed to perform “military intelligence, surveillance, and reconnaissance” missions under USML Category VIII(a)(7). We recommend that DDTC clarify USML Category VIII(a)(7) to focus on aircraft inherently designed to be ISR aircraft and exclude EAR-controlled aircraft that incorporate USML ISR systems. Rather, DDTC should control the USML ISR systems in the USML entries into which these systems fall for all of the reasons discussed above in Part 2:

- The USML ISR systems are already adequately controlled elsewhere on the USML, and it is not necessary to create a secondary USML entry to control EAR aircraft that incorporate such systems;
- DDTC and BIS have a process to license EAR-controlled aircraft that incorporate USML ISR defense articles: obtain a license from DDTC for the ISR defense articles (and any other defense articles on the aircraft) and a separate license from BIS for the aircraft, when such a BIS license is required;
- USML Category VIII(a)(7) leads to inefficient staffing at DDTC and DoD and unnecessary Congressional Notification requirements. Rather the cases should be staffed to the groups that control the ISR systems, and the value for notification purposes should be the value of the ISR defense articles, rather than the value of the EAR aircraft; and
- Only services directly related to the USML ISR systems (and any other defense articles on the aircraft) should be “defense services,” and services common to ITAR- and EAR-controlled aircraft should not be ITAR-controlled.

Although AIA understands that USML Category VIII(a)(7) may have been intended to capture aircraft inherently designed as ISR aircraft for military use, it could potentially capture aircraft that otherwise fall under the jurisdiction of the EAR as ECCN 9A610 or ECCN 9A991 aircraft, or ECCN 9A012 UAVs, but which incorporate certain non-ITAR ISR systems. For example, an OEM could add an EAR-controlled camera to an ECCN 9A991.b aircraft or an ECCN 9A012 UAV. As discussed above in Part 1, Section 1, “military” is not defined, and, therefore, if these aircraft were operated by any branch of the U.S. or foreign armed forces, they could be pulled onto the ITAR as USML Category VIII(a)(7) “military intelligence surveillance and reconnaissance aircraft.” Moreover, since “intelligence, surveillance and reconnaissance” is also not defined, USML Category VIII(a)(7) could lead to absurd results, if taken to its logical extreme: a member of the U.S. armed forces flying on a commercial airline in a window seat could transform the aircraft into a “military intelligence surveillance and reconnaissance aircraft.”
This is contrary to the stated intent of ECR to provide a “positive” list using objective criteria. We respectfully request that DDTC and BIS take the actions recommended above to address this issue.

* * * * *

We appreciate DDTC’s and BIS’s consideration of these issues, and we look forward to discussing these topics with you further.

Thank you
May 1, 2015

Response to Notice of Inquiries in Federal Register Vol 80, No. 40
Department of State Public Notice 9050; Department of Commerce Docket No. 150210135-5182-01

The Aerospace Industries Association (AIA) and our member companies appreciate the opportunity to provide suggested revisions to Category XIX (Gas Turbine Engines and Associated Equipment) of the U.S Munitions List (USML) and the corresponding controls on the Commerce Control List (CCL) for military gas turbine engines. Conducting periodic reviews of the USML and CCL to account for new applications of current technology as well the capabilities of future technology is critical to ensuring the longevity and effectiveness of the Export Control Reform initiative. AIA is encouraged that the Administration shares this view, and we would like to highlight the below potential revisions and updates for possible consideration.

Minor Components:
There are several opportunities to clarify ambiguities in the current ITAR/EAR language around the control of minor components, as well as opportunities to modify and expand the list to simplify the export of minor parts of engines and aircraft. Examples include:

Shims vs Spacers: 9A691.y.6 captures shims, yet the ‘specially designed’ (b)(2) definition releases all spacers. It is unclear how industry would differentiate a shim from a spacer, and what technical reasoning would treat them differently.

Clamps: 9A619.y.5 lists 4 specific types of clamps, but there are other generic clamps that are equally minor, for example ‘half-clamps’, which hold tubes down against a structure. Can the language be modified to capture clamps generically?

Oil and fuel lines: 9A619.y.2 captures Oil lines and tubes and 9A619.y.3 captures Fuel lines and hoses. It’s unclear what differentiates a tube from a hose, or why it would be important to differentiate fuel transfer from oil transfer functions (or any other liquid). It would simplify classification of items to combine these categories into a single group, and include the fittings and adapters common to these lines.

Air lines: 9A619.y.8 captures Air, fuel, and oil manifolds, but air lines are not released like oil and fuel lines in y.2 or y.3 above. Air lines should be included in the categorization above. A single category for all 3 would simplify classification and exports.

Brackets: Brackets whose primary construction is sheet metal and whose function is to position and support wiring, oil, fuel, or air lines, or engine accessories should be released from 9A619.x to 9A619.y,
if not released in specially designed (b)(2). More complicated brackets (such as engine mounts) made from castings or forgings, would maintain 9A619.x control.

*Cables and harnesses:* Wiring harnesses are the electrical equivalent of fuel and oil lines – they transfer electrical signals between sensors and components, and have no military functionality. They should also be released to 9A619.y

**Minor Components of 19.f.1 listed engines:**
Items caught in 19.f.1 but described in ‘.y’ are not currently released from 19.f.1 controls. Modifying the 19.f.1 control to carve out items identified in 9A619.y would complete the release of many low level parts. There are currently suppliers whose products meet the definitions to release parts to 9A619.y, but are still ITAR controlled because of unique use on 19.f.1 listed engines.

**Tooling for 19.f.1 listed engines**
The ITAR definitions in 19.f.1 call out equipment for listed engines as ITAR controlled. EAR 9B619 specifically notes that USML Category XIX(f)(1) controls “parts,” “components,” “accessories,” “equipment,” and “attachments” “specially designed” for the engines described in Category XIX(f)(1), but does not control the commodities enumerated or otherwise described in ECCN 9B619.

Concerns have been raised that this type tooling, in its physical form, may reveal technical data important to the ITAR controlled engine; therefore the tooling deserves control on the ITAR.

Regardless of the outcome of that inquiry, the ITAR needs to specifically echo the resulting note written in the EAR, as the EAR does not have jurisdiction on items controlled in the ITAR, and the current ITAR language does not release these items.

**Development engines and advanced technology programs**
The ITAR does not currently capture development engines where they do not meet the performance criteria in 19.a-19.e. Similarly, 19.g only captures technical data related to a defense article (other than classified data), so technology developed under an advanced technology program, unrelated to a controlled defense article, is not captured on the ITAR, regardless of the future intended purpose of the work.

As a result, an advanced technology compressor demonstrator program for a next generation helicopter engine, or even an augmentor general technology program, funded entirely by DoD funds, may not be captured on the ITAR.

The ITAR should be updated to provide for cases where such technology should be protected.

**Emerging Technologies**
*Additive Manufacturing* is an emerging technology with significant potential to simplify the manufacture of aviation components, and allow more complex design features in components like turbine blades. Some of the technology leadership in this area is in Europe. It is critical that proper controls be developed to enable US industry to work closely with European partners to develop capability, improve national security, and maintain competitiveness.
SiC (Silicon Carbide) bearings are an area of potential future capability where this material system may allow extended operations with loss of lubrication, leading to enhanced durability and safety of commercial and military engines. This same technology, has potential in missiles, where removal of lubrication systems provides weight and range advantage. Future controls in this area need to provide a proper dividing line between legitimate commercial application and missile technology capability.

**Augmentor and nozzle parts**

The ITAR currently captures cooled augmentors in 19.f.2, but does not identify individual parts of these components. Other ITAR categories identify both components and parts (eg. 19.f.1 and 19.f.6). The EAR identifies technology for many augmentor parts within 9E619.b.7. The 2 regulations are written at different levels of detail. Neither the ITAR nor the EAR specifically identifies these augmentor parts in hardware categories. It would benefit industry to make it clear where these parts should be captured.

**Controls technology for 9A619.a engines**

For commercial engines, approximately 75% of the control technology is NLR, leaving specific technologies in categories 9E003.h.1-3. 9A619.a military engines capture controls technology in 9E619.c.6, which broadly captures technology that would be NLR on commercial engines. Whereas the 9A619.a engines are generally older technology engines, and often commercial engine derivatives, the 9E619.c.6 category is capturing technology generally available NLR elsewhere.
Request for Comments Regarding Controls on Military Aircraft and Military Gas Turbine Engines on the Commerce Control List

RIN 0694-XC023

To the Attention of publiccomments@bis.doc.gov

Airbus Group N.V. offers the following comments in response to RIN 0694-XC023 pertaining to controls on military aircraft and military gas turbine engines on the Commerce Control List.

STA and Signature of the Prior Consignee Statement by A5 Governments

For 600 series items, the prior consignee statement is only required to be signed by private sector entities and the signature of the A5 government is not required. Of course, if the A5 government retransfers the items to another entity using STA, then a signature would be required.

We have observed some confusion among various non-U.S. parties that has arisen because the term “Consignee” as used in Part 740.20 is not defined.

Proposed Clarifying Change to the EAR (in bold):

Add the following to either Part 740.20 or Part 770:

Per 740.20(d)(2), the A5 government end-users do not have to execute a Prior Consignee Statement.

De Minimis and Use of STA

For items delivered under license exception STA, De Minimis cannot be used until all the conditions of the Prior Consignee Statement are met. However, 600 series items received under a validated BIS license can use De Minimis per Part 734.4(a)(6). This has led to reluctance by non-U.S. entities to sign Prior Consignee Statements under STA. Moreover, projects that use large quantities of the same part from the same or different suppliers using a mix of BIS licenses and license exception STA have to segregate stock and handle it differently for purposes of De Minimis. This creates a significant compliance problem for no security benefit.
Proposed Change (in bold):

Add the following note to either Part 740.20 or Part 770 – “De Minimis is authorized for items received under license exception STA and integrated into a foreign end-item in an A5 country.”

**Destination Control Statements:**

There is no requirement to include a Destination Control Statement for end items that include EAR 500/600 De Minimis content. This creates a risk related to restrictions on the use of De Minimis for D5 countries.

For example, a non-U.S. manufacturer may receive a system or sub-assembly from an Asian or European supplier for integration into an end-item. That system or sub-assembly may contain EAR 500/600 series De Minimis content from another supplier. The non-U.S. manufacturer would never know about the EAR 500/600 series content since there is no requirement for the re-exporter to disclose this information. If the system is then sent to a D5 country, there is a compliance issue.

Proposed Change to Part 758.6 (in bold):

*The Destination Control Statement (DCS) must be entered on the invoice and on the bill of lading, air waybill, or other export control document that accompanies the shipment from its point of origin in the United States to the ultimate consignee or end-user abroad including all intermediate consignees.*

*The Destination Control Statement (DCS) must contain the following statement for all exports, re-exports and re-transfers of 500 and 600 series items (regardless of whether the content is subject to De Minimis): “This item contains EAR 500/600 series content.”*

**SNAPR and Scope of License:**

BIS licenses contain a proviso that requires the applicant to “communicate to all the end users the scope of the license as represented in the application.” Compliance with this requirement is uneven at best. Many U.S. exporters interpret this to mean that they only have to provide a copy of the license approval to the non-U.S. party. However, neither block 21 (specific end use) nor block 24 (additional information) of the application are reproduced in the license approval.
Proposed Change:
Include Block 21 and Block 24 of the BIS SNAPR license application in the BIS license approval.

SNAPR and Missing Sub-paragraph of the Item ECCN

SNAPR applications and license approvals only provide the primary ECCN -- not the sub-paragraph. For many ECCNs, the sub-paragraphs are very important in that they differentiate license and control requirements among various items within the same ECCN.

Proposed Change:
Require full ECCN and sub-paragraph designations in BIS license applications and include the same information in all BIS license approvals.

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
April 30, 2015

SUBMITTED VIA FEDERAL RULEMAKING PORTAL

Regulatory Policy Division
Bureau of Industry and Security
Room 2099B
U.S. Department of Commerce
14th Street and Pennsylvania Ave NW
Washington, DC  20230

RE:  APEI Comments on Export Control Regulations
Docket Number:  BIS-2015-0006

Dear Sir or Madam:

Thank you for the opportunity to provide comments on the recent revisions to Categories VIII and XIX of the USML and related export regulations. We are a small company in the business of providing power electronics products and services. We appreciate the continued work of the BIS and DDTC to improve and update the nation’s export control regulations.

Our comments are in support of the Export Control Reform Initiative (ECR Initiative), while suggesting that some additional clarification is needed to ensure that the proposed rules achieve the stated goals of the ECR Initiative. We believe that some minor clarifications would greatly improve the exporter’s ability to understand what items are intended to be controlled by the regulations, as described in more detail below.

1. USML Category VIII(h)(1) Note Needs Clarity to Avoid Multiple Interpretations

The note to paragraph (h)(1) of USML Category VIII states:

“Specially designed (see §120.4(b)(3)(ii) of this subchapter) [Sic] does not control parts, components, accessories, and attachments that are common to aircraft described in paragraph (a) of this category but not identified in paragraph (h)(1), and those identified in paragraph (h)(1). For example, a part common to only the F-14 and F-35 is not specially designed for purposes of the ITAR. A part common to only the F-22 and F-35—two aircraft models identified in paragraph (h)(1)—is specially designed.” (Emphasis added).

Our concern with this note, particularly the bolded statement, is that an exporter, or export official, may erroneously believe that a part or component common to (i.e. in production for) only the F-22 and F-35 is specially designed regardless of whether it meets one of the other so called “release” criteria under § 120.41(b). While such a part or component that is common to only the F-22 and F-35 will not qualify for the §120.41(b)(3) release parameter because the F-22 and F-35 are both considered enumerated, this event would not necessarily preclude the application of other release parameters under § 120.41(b).
For example, a part may be common to the F-22 and F-35 only, but it may be an insignificant part such as a screw, bolt, washer, or spacer. Also, if a commodity was made with knowledge that it is or would be for use in or with a defense article enumerated on the USML and commodities not on the USML, then it may not be considered specially designed even if it is common to the F-22 and F-35 only.

We recommend that the note is clarified to prevent inconsistent application of the rule and to prevent the control of items that were not intended to be covered by the provision. Also, please note that there appears to be an error in the citation contained in the note. Below is our recommendation, with the recommended changes to the paragraph (h)(1) note showing in red font text.

RECOMMENDATION

NOTE TO PARAGRAPH (h)(1): For purposes of paragraph (h)(1), the aircrafts identified therein are enumerated defense articles and any aircraft otherwise described in paragraph (a) of this category are not enumerated when applying §120.41(b). Thus, Specially designed (see §120.41(b)(3)(ii) of this subchapter) does not control parts, components, accessories, and attachments that are common to aircraft described in paragraph (a) of this category but not identified in paragraph (h)(1), and those identified in paragraph (h)(1). For example, when applying §120.41(b)(3), a part common to only the F-14 and F-35 is not specially designed for purposes of the ITAR. A part common to only the F-22 and F-35—two aircraft models identified in paragraph (h)(1)—is specially designed, unless one of the other subparagraphs is applicable under §120.41(b).

2. Request for Confirmation on the Scope of USML Category VIII(f) as it relates to Category VIII(h)(1)

USML Category VIII(f) states as follows:

“Developmental aircraft funded by the Department of Defense via contract or other funding authorization, and specially designed parts, components, accessories, and attachments therefor.” (Emphasis added).

We are requesting confirmation that Category VIII(f) only controls developmental “aircraft” funded by the DOD via contract or other authorization (and specially designed parts, components therefor) and does not control developmental parts, components or equipment funded by the DOD via contract that would otherwise be released under paragraph (h)(1). In other words, the exporter must be under contract with the DOD for funds designated for the development of an “aircraft” to trigger controls under paragraph (f), and the source of funding is irrelevant with respect to the parts and components designed for the aircraft.

Below is an example that may help illustrate our interpretation of the scope of this provision.
An exporter is under contract with DOD funding for a developmental component that would fit the F-22 (and other applications). The exporter is not under contract for the development of an F-22 or any other aircraft. Exporter determines that the component is eligible to be released under §120.41(b)(4) because it was developed with knowledge that it would be for use with both enumerated defense articles and commodities not on the USML. Exporter further determines that this DOD funded developmental component is not within the scope of paragraph (f) because the exporter’s DOD funded contract is not for the development of an F-22 aircraft or any other aircraft. Thus, the component is not controlled by ITAR.

We respectfully request confirmation that the above understanding is the proper interpretation with respect to the scope of USML Category VIII(f) as it relates to Category VIII(h)(1).

3. **Clarification on USML Category XI(a)(7) as it relates to Category VIII(h)(1)**

A clarification is needed with respect to Category XI(a)(7) and its application to Category VIII(h)(1) to ensure consistent application of the regulations. The issue is two-fold:

(I) Category XI may control Category VIII(h)(1) equipment that otherwise would be released from ITAR due to a control parameter unrelated to the equipment’s military or intelligence advantages; and

(II) when following the order of review process of § 121.1, exporters of equipment subject to Category VIII(h)(1) may not recognize that a control parameter exists in a separate category (XI(a)(7)) unrelated to the functional characteristics and design application of their developmental equipment resulting in inconsistent or improper classifications.

I. **CONTROL OF CATEGORY VIII EQUIPMENT OTHERWISE RELEASED FROM ITAR**

The DDTC set forth the particular types of equipment and systems (among other things) associated with certain aircraft that were of concern from a military and intelligence advantage standpoint in Category VIII(h). Equipment or systems that are not enumerated or caught by a specially designed control parameter in paragraph (h) presumably do not rise to the level of concern necessary to fall under ITAR. However, such equipment or systems could still be captured by a separate category and fall under ITAR for reasons that seem to be unrelated to their technical or military significance.

Paragraph (a)(7) of Category XI reads as follows:

“Developmental electronic equipment or systems funded by the Department of Defense via contract or other funding authorization”.

This broad provision may be interpreted to reach electronic equipment otherwise released from controls under Category VIII(h)(1) which seems to be in conflict with the goals of the ECR Initiative. The Department of State has stated that Category VIII should not contain controls on specially designed items for a defense article regardless of their significance to maintain a
military advantage for the United States (See 78 FR 22741, April 16, 2013). However, developmental equipment or systems released from ITAR under Category VIII(h)(1) could still be controlled by Category XI(a)(7) for a reason unrelated to the equipment’s technical or military significance which is inconsistent with the stated ECR Initiative objectives.

In such a scenario, the equipment would be controlled only because of its funding source (i.e. DOD contract or authorization), which in and of itself, seems to confer no critical military advantage for the United States since private funding is equally capable of developing equipment for strategic use in military operations. Even more, the long reach of Category XI(a)(7) could create an innovative chill on technology developed for the DOD because contractors may elect not to participate in certain DOD contracts if ITAR controls could be avoided simply by not accepting DOD funds.

For these reasons, we recommend a change to Category XI Note1 To Paragraph (a)(7) that will limit its reach to Category VIII(h)(1) equipment and enable the provision to be more aligned with ECR Initiative goals. The recommended changes are shown in red text below.

**RECOMMENDATION**

**NOTE 1 TO PARAGRAPH (a)(7):** This paragraph does not control electronic systems or equipment (a) in production, (b) determined to be subject to the EAR via a commodity jurisdiction determination (see § 120.4 of this subchapter), or (c) identified in the relevant Department of Defense contract or other funding authorization as being developed for both civil and military applications, or (d) that are otherwise properly released from ITAR under § 120.41(b) when specially designed is the control parameter used to determine status as a defense article.

II. INADVERTENT ERRORS WHEN FOLLOWING THE ORDER OF REVIEW PROCESS

Paragraph (h) of Category VIII does not contain a provision relating to controls on DOD funded electronic equipment developed for enumerated aircraft. Thus, if an exporter, after reviewing the particular equipment’s technical and design application characteristics, determines that its equipment is not enumerated or is released from special design controls under paragraph (h), then the exporter may conclude that the equipment is not under ITAR jurisdiction based on the order of review process and § 121.1. However, as mentioned above, separate Category XI(a)(7) could capture developmental electronic equipment funded by the DOD that were otherwise released from ITAR by proper application of the specially designed parameters in Category VIII(h)(1). This disconnect could cause inconsistent classification determinations because source of funding, by itself, is not a parameter addressed in the order of review process or § 121.1 which may lead the exporter to erroneously determine its equipment or system is not subject to ITAR.

**RECOMMENDATION**

If the DDTC and BIS intends to use source of funding as a control for certain developmental electronic equipment or systems that may otherwise be analyzed under Category VIII(h), then we recommend that a provision related to source of funding be plainly set forth in Category VIII(h) or in one of the reserved paragraphs in Category VIII (i.e. paragraphs (j)-(w)). In doing so, we respectfully request that the DDTC and BIS take in consideration our other comments related to source of funding as a control parameter.
4. **Section 120.41 (Specially designed) Needs a Minor Edit for Consistency with Category VIII(h)(1)**

Category VIII(h)(1) states as follows:

(1) Parts, components, accessories, attachments, and **equipment** specially designed for the following U.S., origin aircraft…” (Emphasis added).

Equipment is added as an item subject to the specially designed analysis for purposes of subparagraph (h)(1). However, equipment is not included in the § 120.41 (Specially designed) provisions as an item eligible to be “caught” or “released” by the specially designed control parameters.

**RECOMMENDATION**

Either include equipment in the main text of § 120.41 or qualify its use in a note to § 120.41 or in a note to paragraph (h)(1) to avoid any confusion regarding the application of the specially designed controls to paragraph (h)(1).

We believe each of these clarifications will help exporters and government agencies interpret the regulations more consistently without increasing national security risks for the Unites States.

Thank you for considering our comments.

Respectfully Submitted,

Jason Worley  
Contracts Administrator & Staff Attorney
VIA E-MAIL TO PUBLICCOMMENTS@BIS.DOC.GOV

May 1, 2015

Mr. Kevin J. Wolf
Assistant Secretary for Export Administration
Bureau of Industry and Security
U.S. Department of Commerce
14th Street and Pennsylvania Ave., NW
Washington DC 20230
Attn: Regulatory Policy Division, Room 2099B

Reference: RIN: 0694-XC023

Subject: Request for Comments Regarding Controls on Military Aircraft and Military Gas Turbine Engines on the Commerce Control List

Dear Mr. Wolf,

BAE Systems plc (BAE) offer the following comments in response to the request from the Bureau of Industry and Security (BIS) on March 2, 2015 (80 Fed. Reg. 11315). BAE appreciates your efforts to seek feedback with regard to recent revisions to USML Categories VII and XIX and related “600 series” ECCNs.

1. Jurisdiction and Self Classification. DDTC and BIS have encouraged non-U.S. companies to make their own determination of jurisdiction and classification for transitioning items. This has been a significant concern and challenge for non-U.S. defense industry participants in Europe, both end manufacturers and suppliers. Companies are at times having trouble obtaining jurisdiction and classification information from producers and exporters. Where European companies are unable to obtain this information, they are fearful of U.S. enforcement activities for well-meaning, technical errors in self-classification. This concern is negatively impacting some U.S. Export Control Reform (ECR) goals.

1 See, e.g., 73 Fed. Reg. 22740 at 22570 (Foreign persons or U.S. persons abroad that have USML items in their inventory at the effective date of transition should review both the USML and the CCL to determine the proper jurisdiction); DDTC FAQs on Transitioning Items / Commodities (Q: May a foreign company self-determine that an item previously shipped on a USML license is no longer ITAR controlled? Or must it wait for the U.S. supplier to confirm the change of control in writing? A: Foreign persons may self-determine the jurisdiction of the item. There is no requirement for a confirmation in writing. However, if doubt exists on the jurisdiction of an item, then the foreign person should contact the original exporter or manufacturer for clarification.).
Proposed Action:

A. Take steps to encourage U.S. manufacturers and exporters to provide classification details to European industry. In particular, this might include:

- Making complete and accurate destination control statements a point of emphasis in regulator outreach and enforcement for exports and reexports.

- Designing communication strategies with U.S. industry to encourage sharing of updated, post-ECR jurisdiction and classification.

B. We encourage BIS to consider assurances to non-U.S. companies which undertake good-faith attempts to self-classify, that any enforcement for errors will be reasonable and that a significant mitigating factor will be where good faith attempts to obtain the information from U.S. sources have been unsuccessful.

2. Use of STA for Governments. To use STA for physical shipments, an exporter or reexporter must seek a prior consignee statement under EAR § 749.20(d)(2). There is some conflict between BIS oral guidance and the language of EAR § 740.20(d) as to whether a prior consignee statement is required from an A:5 Country’s government. Prior consignee statements can be difficult to obtain from governments, and some key European governments refuse to provide such statements. License exception GOV applies in many of the same export situations as STA and does not require such a prior consignee statement. We encourage BIS to address this concern by clarifying that prior consignee statements are not required from foreign governments eligible for STA.

EAR § 749.20(d)(2) provides that for exports or reexports (other than transfers of software source code within a single country), a person relying on license exception STA must obtain a prior consignee statement. The language of the regulations appears to indicate that such prior consignee statements are required from governments:

Paragraphs (d)(2)(i) through (vi) of this section are required for all transactions. In addition, paragraph (d)(2)(vii) is required for all transactions in “600 series” items and paragraph (viii) of this section is required for transactions in “600 series” items if the consignee is not the government of a country listed in Country Group A:5 (See Supplement No. 1 to part 740 of the EAR).

The reference to a section not required for a government consignee would seem to indicate that the other sections are required for government consignees.

However, we understand that BIS officials have provided guidance that prior consignee statements were not required for governments. Thus, there is some confusion among industry members as to how BIS will interpret § 749.20(d)(2).

Proposed Action:

We encourage BIS to take steps to remove the prior consignee statement requirement for governments. This has emerged as an impediment to the use of the STA license exception, in particular where governments refuse to provide such a signed statement.

License exception GOV, which applies in many of the same cases as STA, does not require a prior consignee statement from a government end user. However, GOV and STA do not line
up exactly, with GOV authorized for country group A:1 plus several listed additional countries, while STA applies for country group A:5 and in some cases country group A:6. It would remove substantial confusion if European industry did not have to navigate this overlap of license exceptions STA and GOV and switch between the two license exceptions simply to manage prior consignee statement concerns.

BIS might take two steps to address this concern:

a) BIS could provide written guidance that it does not interpret § 749.20(d)(2) to require a prior consignee statement from an A:5 government consignee; or

b) BIS could revise § 749.20(d)(2) to clarify that a prior consignee statement is not required for government consignees or end users.

3. Reexports of Transitioned EAR-Controlled Items Under DDTC Authorizations.
Many DDTC licenses and authorizations are nearing the end of their two year period of validity for items, software and technical data that have transitioned to EAR control. Some of these DDTC licenses or authorizations provided for multiple steps for manufacture, subsequent reexports within the supply chain and later delivery to the end user. Foreign manufacturers are facing a gap where transitioning DDTC licenses or authorizations cease to be valid two years after the effective date for applicable USML/CCL changes, but reexports of now EAR-controlled items are still pending under long-term contracts.

We ask that DDTC and BIS clarify that where the first step in a chain of exports and reexports has already occurred under a DDTC license or authorization while still valid, future reexports remain authorized even after the transitional license period ends. It is clear that new exports would not be permitted after the two year transitional period (or if the license or agreement otherwise expires). It is not clear whether a string of exports and reexports, if begun prior to the effective date of ECR or during the two year transition period, can be completed afterward.

To illustrate, imagine a situation where an ITAR-controlled subsystem is exported to a European country for an aircraft or ship with a long build time. A DDTC authorization allowed the initial export of the subsystem, subsequent reexport of the subsystem for various manufacturing steps, and years later the reexport of the end item to a customer. Some or all items under the authorization have transitioned to EAR control, and further reexports are expected after the two year transition period.

DDTC addressed reexports/retransfers in its April 16, 2013 Final Rule amending the ITAR, 73 Fed. Reg. 22740 at 22570:

If reexport or retransfer was previously authorized under a DDTC authorization, then that reexport or retransfer authority remains valid. The three scenarios for which this applies are: 1) reexport/retransfer authority granted through a program status DSP-5; 2) the sales/distribution territory of a manufacturing license or warehouse and distribution agreement if the agreement continues to provide the export authority; or 3) any stand-alone reexport/retransfer authorization received pursuant to ITAR § 123.9.

However, this followed language in the same Final Rule at page 22749 which described the validity period for DDTC licenses and agreements following transition (generally 2 years if
not otherwise expired). Thus, it is not clear if the language above authorizing continued reexports/retransfers applies for certain licenses or authorizations beyond two years after transition.

Proposed Action:

We ask that BIS provide clarification (or if necessary amend its rules) in coordination with DDTC so that non-U.S. companies may use DDTC licenses to reexport transitioned EAR items after the two-year license validity period where the first export in the chain of exports and reexports occurred prior to transition or within the two year validity period.

Please do not hesitate to contact the undersigned if you have any questions or would like to discuss these comments in greater detail by phone at +44 (0) 1252 383522 or by email at joyce.remington2@baesystems.com.

Sincerely,

Joyce Remington
Group Deputy Head of Export Control – Licensing & Policy
Dear Sir or Madam:

I respectfully request that two terms in 9E619 b.1 be defined. It is not clear to me what is meant by the front or turbine center of a military gas turbine engine.

9E619 Technology required for the development, production, operation, installation, maintenance, repair, overhaul, or refurbishing of military gas turbine engines and related commodities controlled by 9A619, equipment controlled by 9B619, materials controlled by 9C619, or software controlled by 9D619 (see List of Items Controlled).

b. Technology (other than build-to-print technology) required for the development or production of any of the following:

b.1. Front, turbine center, and exhaust frames;
Sincerely,

Michael S. Meleshenko
Export Compliance Officer
Belcan Corporation
May 1, 2015

RESPONSE TO REQUEST FOR COMMENTS RE: USML CATEGORY VIII AND CCL CATEGORY 9

On March 2, 2015, the Department of State, Directorate of Defense Trade Controls ("DDTC") and the Department of Commerce, Bureau of Industry & Security ("BIS") issued Federal Register notices soliciting comments from industry on the implementation of Export Control Reform ("ECR") with respect to military aircraft and military gas turbine engines and setting the deadline for such comments as May 1, 2015.¹

Bell Helicopter Textron Inc. ("Bell Helicopter") respectfully submits the following comments on U.S. Munitions List ("USML") Category VIII(h)(2) and VIII(h)(18).

DDTC Should Remove “Interconnecting Drive Shafts” from USML Category VIII(h)(2) and Add “and ‘Specially Designed’ Ballistically Tolerant Parts and Components Therefor” to USML Category VIII(h)(18).

Among other things, USML Category VIII(h)(2) controls “interconnecting drive shafts.” An interconnecting drive shaft is a mechanical device that connects two rotors to two engines on a helicopter or tiltrotor aircraft and allows one engine to drive both rotors in the event that the other engine fails. An interconnecting drive shaft does not provide any specific military functionality; rather it is essential to safety of flight.

We respectfully request that DDTC remove “interconnecting drive shafts” from USML Category VIII(h)(2). Not only does the interconnecting drive shaft not provide any specific military functionality, but controlling all tiltrotor interconnecting drive shafts on the USML is inconsistent with past classification determinations for tiltrotor aircraft and tiltrotor aircraft drive train systems issued by DDTC and BIS.

Bell Helicopter understands that the intent of ECR was not to capture items previously determined to be controlled by the EAR, and the EAR has long controlled technology for helicopter and tiltrotor power transfer systems. In fact, Bell Helicopter received a Commodity Jurisdiction determination in 1997 ruling that a specific tiltrotor aircraft that contains an interconnecting drive shaft falls under the jurisdiction of the EAR, and in 2005, BIS issued a CCATS stating that the power transfer technology for the aircraft falls under ECCN 9E003.d. Bell specifically described the interconnecting drive shaft in the information submitted to BIS in connection with this CCATS. Therefore, not all tiltrotor aircraft are ITAR-controlled, nor should all interconnecting drive shafts be ITAR-controlled.

As DDTC and BIS are aware, ECCN 9E003.d controls “technology” required to “develop” or “produce” a tiltrotor power transfer system, which includes the interconnecting drive shaft; however, USML Category VIII(h)(2) covers the interconnecting drive shaft produced using this technology. We are unaware of any other item that is ITAR-controlled when the technology required to develop or produce the item has been EAR-controlled for a number of years.

Bell Helicopter understands that the U.S. has an important lead in the development of tiltrotor technology, and we agree that it should be controlled for more than anti-terrorism reasons; however, ECCN 9E003.d is controlled for national security reasons, which requires a license to most destinations. Bell Helicopter believes that controlling tiltrotor interconnecting drive shafts in a similar CCL entry subject to national security export license requirements would be an appropriate export classification.


Bell Helicopter Textron Inc. is a subsidiary of Textron Inc.
Bell Helicopter recognizes, however, that certain aircraft drive systems may continue to warrant ITAR control. To cover “interconnecting drive shafts” that truly warrant ITAR control, we recommend that DDTC add “and ‘specially designed’ ballistically tolerant parts and components therefor” to USML Category VIII(h)(18). This would capture such drive shafts and their component parts that have been “specially designed” to achieve a specific military purpose, rather than bluntly capturing all tiltrotor interconnecting drive shafts under USML Category VIII(h)(2).

Thank you for your consideration. We hope that these comments will help DDTC and BIS continue to improve the U.S. export control system.

Thank you,

Julia Lohmer
Director, Global Trade Compliance
May 1, 2015

Mr. Todd Willis
Director, Munitions Control Division
Bureau of Industry and Security
U.S. Department of Commerce
14th Street and Pennsylvania Avenue NW
Washington, DC 20230

Subject: Notice of Inquiry: Request for Comments Regarding Controls on Military Aircraft and Military Gas Turbine Engines on the Commerce Control List

Reference: Federal Register / Vol. 80, No. 40 / Monday, March 2, 2015/Proposed Rules

Dear Mr. Willis,

The Boeing Company (“Boeing”) welcomes this review of the controls implemented in recent revisions to Categories 9y610 and 9y619 of the Commerce Control List (“CCL”). We strongly support the Bureau of Industry and Security (“BIS”) plan to periodically review the CCL to ensure that controls are clear, account for technological developments, and properly implement national security and foreign policy objectives.

Boeing thanks the Department of Commerce, as well as the Departments of State and Defense for their sustained efforts to revise the control lists. The reforms have strengthened implementation of U.S. national security while also creating benefits in terms of focus on critical technologies and licensing simplification. Boeing’s approach is to consider that the United States Munitions List (“USML”) and the CCL comprise in essence one combined list. Our comments are intended to add clarity and promote consistent application of the regulations.

Boeing’s comments address the term ‘military aircraft’, specific 9A610.y entries, and certain definitions that are critical to classification efforts.

1) The term ‘military aircraft’ in ECCN 9A610:

ECCN 9A610.a controls ‘military aircraft’ and Note 1 provides an explanation of this term as follows:

   Note 1: For purposes of paragraph .a the term ‘military aircraft’ includes the following types of aircraft to the extent they were “specially designed” for a military use, and are not enumerated in USML paragraph VIII(a): trainer aircraft; cargo aircraft; utility fixed wing...
Note 1 is worded such that it does not provide a definition of ‘military aircraft’. Rather, it lists aircraft types considered to be ‘military aircraft’ under the jurisdiction of the Department of Commerce. The note indicates that “….. ‘military aircraft’ includes the following types of aircraft…..” (emphasis added). Use of ‘includes’ implies there may be other aircraft covered by the term that are not listed in the note. The inclusion of “…unarmed military aircraft…” acts as a catch-all, however the term ‘military aircraft’ is used in that phrase so the reference is circular.

Recommendation:
Revise Note 1 to read as a definition, which also eliminates the need for the phrase regarding unarmed military aircraft, as follows:

**Note 1:** For purposes of paragraph .a the term ‘military aircraft’ includes means any aircraft the following types of aircraft to the extent they were “specially designed” for a military use, and are not enumerated in USML paragraph VIII(a). This includes: trainer aircraft; cargo aircraft; utility fixed wing aircraft; military helicopters; observation aircraft; military non-expansive balloons and other lighter than air aircraft, and other unarmed military aircraft, regardless of origin or designation. Aircraft with modifications made to incorporate safety of flight features or other FAA or NTSB modifications such as transponders and air data recorders are “unmodified” for the purposes of this paragraph .a.

2) **ECCN 9A610.y listings**

Several listings in ECCN 9A610.y have qualifiers that limit control to specific types. This results in the exclusion of similar items of equally low significance from the perspective of technology and capability. The similar items are thus classified as ECCN 9A610.x. This is an over-control that does not meet the Export Control Reform objective of focusing U.S. government resources on critical exports, as well as burdening industry.

**Recommendation:**
Revise the below 9A610.y listings to enable consistent classification of similar low-level items:

- y.2. Analog Cockpit gauges and indicators;
- y.4. Check valves for hydraulic and pneumatic systems;
- y.8. Filters and filter assemblies for hydraulic, oil and fuel systems;
Hydraulic and fuel hoses, straight and unbent lines, fittings, couplings, and brackets;
Steel brake wear pads (does not include sintered mix or carbon/carbon materials);

The 9A610.y.20 listing is overly broad and thus unclear. For example, it could refer to sonobuoy arrays. For aviation purposes, the most common underwater beacons are underwater locator beacons, which we believe is what is intended to be controlled here.

**Recommendation:**
Clarify what type of underwater beacon this control applies to as follows:

> y.20. Underwater **locator** beacons;

### 3) Part 772 definitions of “accessories”, “attachments”, “component”, “end item”, “equipment”, “part”, and “system”

In determining the applicability of control listings within the Export Administration Regulations (“EAR”), key terms are used to determine whether releases are available in the “specially designed” definition. Because several of the term definitions overlap (perhaps unavoidably given their prevalence on the control lists), exporters may be applying the definitions in different ways. For example, applying different concepts of ‘intended use’ when deciding what is an “end item” or taking different approaches to application of the “specially designed” releases when a “component” also meets the definition of “system”. In order to maximize consistent application of the terms, Boeing provides our analysis of their interrelationships and the resulting conclusions with respect to the “specially designed” definition. We also recommend slight revisions to the definitions to promote consistent understanding.

**a) “Equipment” and “System”**

The current regulatory text is (emphasis added):

*Equipment.* This is a combination of parts, components, accessories, attachments, firmware, or software that operate together to perform a function of, as, or for an end item or system. Equipment may be a subset of “end items” based on the characteristics of the equipment. Equipment that meets the definition of an end-item is an end-item. Equipment that does not meet the definition of an end-item is a part, component, accessory, attachment, firmware, or software.

*System.* This is any combination of “end items,” “equipment,” “parts,” “components,” “accessories,” “attachments,” firmware, or “software” that operate together to perform a function.
The definition of “equipment” contains the definition of “system” (see bolded text) and provides additional criteria to further identify which items meet the definition. If you replace the bolded text in the “equipment” definition with the term “system” (which has the identical text, apart from “end items”, “equipment”) you get the following version of “equipment”:

*Equipment is a system of, as, or for an end item or system.*

Accordingly, it follows that the sets of “equipment” and “system” are the same. Boeing is not recommending consolidation of the two terms, rather clarification is needed so that industry can classify “systems” and “equipment” with confidence.

b) “End item”

The current regulatory text is:

*End item. This is a system, equipment or assembled commodity ready for its intended use. Only ammunition, fuel or other energy source is required to place it in an operating state. Examples of end items include ships, aircraft, computers, firearms, and milling machines.*

This definition creates considerable variability as to what constitutes ‘intended use’. One could interpret the intended use of a specific gas turbine engine as ‘to produce thrust’ or alternatively ‘to propel a commercial aircraft’. In the first instance, the engine alone would be an “end item”; in the latter case the same engine would be a “component” of the aircraft. Because status as an “end item” vs. “component” is key to the applicability of the “specially designed” releases, clarity of the “end item” definition is very important.

A definitional parameter establishing the level of an “end item’s” integration, in addition to readiness for intended use, would add clarity. In this way, an “end item” represents the highest level of integration, and ’intended use’ is not simply to function (thrust) but to function within an item which will not be further integrated (propel an aircraft). The implication is that no aircraft “component” or “parts” would be and “end items” (the definitions are exclusive if we accept the proposed interpretation of ‘intended use’). In the example provided only the aircraft is an “end-item” ready for its intended use.

**Recommendation:**
Revise the definition of “end item” as follows:

*End item. This is a system, equipment, or assembled commodity that has reached its highest level of integration and is ready for its intended use. Only ammunition, fuel or other*
energy source is required to place it in an operating state. Examples of end items include ships, aircraft, computers, firearms, and milling machines.

c) “Equipment”

The current regulatory text is (emphasis added):

*Equipment.* This is a combination of parts, components, accessories, attachments, firmware, or software that operate together to perform a function of, as, or for an end item or system. *Equipment may be a subset of “end items” based on the characteristics of the equipment.* Equipment that meets the definition of an end-item is an end-item. Equipment that does not meet the definition of an end-item is a part, component, accessory, attachment, firmware, or software.

Because an “end item” is defined as “equipment” which is further qualified by its readiness for intended use, the set of “end items” is a subset of “equipment”. Confusion is introduced by the second sentence of the “equipment” definition in bold above because it suggests the opposite – that “equipment” is a subset of “end items”. The third sentence: ‘Equipment that meets the definition of an end-item is an end-item’ is consistent with the notion that “end items” are a subset of “equipment”.

Also, “equipment” is defined as “a combination of parts, components, accessories, attachments, firmware, or software”. However, the last sentence of the definition states that equipment can be a “part”. This is inconsistent with the earlier statement that “equipment” is a combination of elements.

*Recommendation:*

Delete the second sentence of the definition and the word “part” as follows:

*Equipment.* This is a combination of parts, components, accessories, attachments, firmware, or software that operate together to perform a function of, as, or for an end item or system. Equipment may be a subset of “end items” based on the characteristics of the equipment. Equipment that meets the definition of an end-item is an end-item. Equipment that does not meet the definition of an end-item is a part, component, accessory, attachment, firmware, or software.

d) “Component”

The current regulatory text is:

*Component.* This is an item that is useful only when used in conjunction with an “end item.” “Components” are also commonly referred to as assemblies. For purposes of this definition
an assembly and a “component” are the same. There are two types of “components”: “major components” and “minor components.” A “major component” includes any assembled element which forms a portion of an “end item” without which the “end item” is inoperable. For example, for an automobile, “components” will include the engine, transmission, and battery. If you do not have all those items, the automobile will not function, or function as effectively. A “minor component” includes any assembled element of a “major component.” “Components” consist of “parts.” References in the CCL to “components” include both “major components” and “minor components.”

A “component” needs to be further integrated before it can fulfill its intended use. An example of a “component” is a functional aircraft navigation system ready for installation on an aircraft. Even though the navigation system is ready, if provided power, to navigate on the bench top, it needs to be further integrated into a larger system in order to satisfy its intended use (aircraft navigation). In this case, the navigation system does not satisfy the definition of “end item” even though it may be enumerated specifically in a control listing. Within that framework, the navigation system is a “component”. By contrast, a hand-held GPS system is a combination of elements which will not be further integrated, is ready for its intended use, and is therefore an “end item”.

**Recommendation:**
Consistent with the clarification of using level of integration to differentiate an “end item” from a “component”, revise the definition of “component” as follows:

**Component.** This is an item that is useful only when used in conjunction with incorporated into an “end item.” …

e) Conclusions

The above definitions necessarily overlap to a certain extent and our comments are not intended to criticize or preclude that reality. The three minor revisions to the definitions of “end item”, “equipment” and “component” proposed would add clarity and thus more consistent application. These terms are very consequential for classification, which in turn impacts many subsequent decisions, such as the applicability of exceptions and license requirements. The conclusions resulting from the above analysis are that:

- an “end item” is an article that has reached its highest level of integration;
- “equipment” that is not an “end item” (at highest level of integration) is eligible for the paragraph (b) releases in the “specially designed” definition;
- “systems” and “equipment” describe the same set of items;
- a “system” that is not an “end item” (at highest level of integration) is eligible for the paragraph (b) releases in the “specially designed” definition.
**Recommendation:**
Develop and publish guidance to enable exporters to apply the definitions and the “specially designed” releases consistently and compliantly.

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 703-465-3505 or via email at christopher.e.haave@boeing.com.

Sincerely,

Christopher Haave
Director, Global Trade Controls
April 29, 2015

Regulatory Policy Division,
Bureau of Industry and Security, Room 2099B
U.S. Department of Commerce,
Washington, DC 20230

Reference: RIN 0694–XC023

Subject: Federal Register / Vol. 80, No. 40 / Monday, March 2, 2015 / Proposed Rules 11315 entitled “Notice of Inquiry: Request for Comments Regarding Controls on Military Aircraft and Military Gas Turbine Engines on the Commerce Control List”

Dear Sir or Madam:

Crane Aerospace & Electronics would like to respectfully submit its comments, in response to the Bureau of Industry and Security’s inquiry on how to improve the implementation of 600 series ECCNs 9A610 and 9A619. We appreciate the efforts of BIS to continually improve the regulations being implemented as part of Export Control Reform.

Comments:

1. Since the applicability of ECCN 9A610.x and 9A619.x is tied directly to the definition of “Specially Designed”, we have the following comments on paragraph (b)(2) of the definition of Specially Designed, (which is essentially identical in ITAR §120.41 and in EAR Part 772, reproduced below):

“Sopecially Designed”

(b)(2) Is, regardless of ‘form’ or ‘fit,’ a fastener (e.g., screw, bolt, nut, nut plate, stud, insert, clip, rivet, pin), washer, spacer, insulator, grommet, bushing, spring, wire, solder

Our experience is that the terms “spacer” and “shim” are often used interchangeably by our industry, as they often perform the same function, so we request that “shim” be added to the list of items in paragraph (b)(2).

Also, we request that “gaskets”, “seals”, “retaining rings”, and “preformed packing” be added to the list of items in paragraph (b)(2), since these are commonly used items with functions similar to items currently listed in (b)(2).

2. Regarding the “.y” paragraphs in ECCN 9A610 and 9A619, we request that BIS consider making all of the items listed in 9A610.y, and all of the items listed in 9A619.y, applicable to both 9A610 and 9A619. Or, preferably, that BIS consider making all of the items listed in 9A610.y and 9A619.y applicable to all “600 Series” ECCNs on the CCL.
This last approach would be consistent with the approach taken by BIS in its more recent rule covering ECCN 3A611.y.

3. Regarding our comments directly above, we acknowledge that some of the items in 9A610.y (such as 9A610.y.1, y.9, y.11, y.12, y.29, and y.30) would not typically be used in 9A619 engine applications. So, if BIS does not want to make the entire 9A610.y list applicable to 9A619, then we request that you consider making at least the following items applicable to both 9A610.y and 9A619.y:

- Oil tank and reservoirs (currently 9A619.y.1)
- Oil lines and tubes (currently 9A619.y.2)
- Fuel lines and hoses (currently 9A619.y.3)
- Fuel and oil filters (currently 9A619.y.4)
- V-Band, cushion, broomstick, hinged, and loop clamps (currently 9A619.y.5)
- Shims (currently 9A619.y.6)
- Identification plates (currently 9A619.y.7)
- Air, fuel, and oil manifolds (currently 9A619.y.8)
- Check valves for hydraulic and pneumatic systems (currently 9A610.y.4)
- Filters and filter assemblies for hydraulic, oil and fuel systems (currently 9A610.y.8)
- Hydraulic and fuel hoses, straight and unbent lines, fittings, couplings, and brackets (currently 9A610.y.10)

4. Since the .y list of items in ECCN 3A611 is applicable to items associated with ECCNs 9A610 and 9A619, we request that you add “inductors” to 3A611.y.13 (“electric transformers”), since an inductor is a fundamental building block of a transformer, but can also be used and sold separately. These basic electrical items are commonly used in aircraft and aircraft engines.

5. Finally, we suggest that you add notes to 9A610.x and 9A619.x to further clarify that electronic items that appear to be described in 3A611.x should nevertheless be classified as 9A610.x or 9A619.x if those electronic items are specially designed for military aircraft or engine applications. Although BIS included similar wording in the “Related Controls” section of 3A611 and in the Federal Register notice commentary that accompanied 3A611, this is a “change in practice” for many in the aircraft, engine, and electronics industries that could use further reinforcement and clarification.

Sincerely,

Bob Seay

Manager, Contracts & Export Compliance
Dear Sir,

I write to you on behalf of the Export Group for Aerospace and Defence (EGAD), which is a not-for-profit making special interest industry group, focusing exclusively on all aspects of export and trade control compliance matters, and is the only dedicated national industrial body in the UK dealing exclusively with export and trade control issues. EGAD operates under the joint auspices of the ADS Group Ltd (ADS), the British Marine Federation (BMF), the British Naval Equipment Association (BNEA), the Society of Maritime Industries (SMI), and TechUK.

This is in response to the consultations which were launched by the US Government on Monday 2nd March 2015, seeking comments on practical experiences with the transfers of Categories VIII and XIX from the International Traffic in Arms Regulations (ITAR) to the Export Administration Regulations (EAR), under the on-going US Export Control Reform (ECR) process.

On behalf of UK Industry we would like to submit the following general and generic comments and observations to you, for your consideration, to add to the no doubt much more detailed and insightful, practical responses that we are sure will also be submitted by individual companies.

First of all, we would like to state that UK Industry in general is hugely supportive of any and all efforts and initiatives to try to address the widely-held perceptions of the bureaucratic impediments that have resulted in the need for an ECR, in the US, to try to make the US export control system simpler and bureaucratically easier, whilst not creating unanticipated and unwelcome opportunities for potential proliferators. We have been unequivocal in our support for the ECR initiative, and remain committed to try to do all that we can to make it work and succeed. We are enormously grateful for the high degree of constructive engagement, willingness to enter into open discussions and debate, and assistance that the US Department of Commerce has unfailingly demonstrated on ECR, which have been hugely beneficial, in our view, and has invariably demonstrated considerable professionalism and commitment on the part of its staff.

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That being said, it is very widely agreed within UK Industry that there are all-too-often highly divergent and sometimes completely contradictory and inconsistent differences of opinion on the control list classifications of items now coming out of companies based in the US, as a direct result of ECR. This is highly confusing for the UK companies involved, and with uncertainty and confusion often comes an innate desire to try to avoid having to deal with it (eg by sourcing from elsewhere), or greater risks of inadvertent non-compliance taking place. It is essential that any UK firms faced with such different opinions seek sight from the US firms involved of how they had worked out what the new, post-ECR classification of their items are, as this then enables them to ascertain if the US firm had made a mistake in its workings. This has also exposed previous instances where US parties have misclassified systems and technology, where, in the past, this really did not matter very much in the overall scheme of things, as it was all regarded as being ITAR, but which now, in the post-ECR World, such misclassifications actually have quite significant practical implications.

The fundamental aim of ECR, as we understood it, had been to provide greater clarity and certainty, but, sadly, we believe that the opposite may very well now be the case. As already stated above, it is clear that senior staff within the US Department of Commerce are desperately keen and willing to help, and to get ECR to work, but UK (and, more importantly, US) companies are seemingly having very mixed experiences with ECR at the practical implementation level. There can all-too-often be much confusion and, all-in-all, the situation is widely regarded as being extremely “challenging”.

We believe that there is a host of unintended consequences which are taking place, many of which are proving to be real challenges, especially for the large UK prime contractors. What Industry (both US and overseas) had sought was a simplification of the previous ITAR, rather than complying with this new, and in many ways even more complex, legislative and regulatory regime. For this to work smoothly, UK companies have to be dealing to US suppliers and partners who are fully up-to-date, knowledgeable and well-informed on US export control issues, and are open, constructive and transparent in what they are doing; whilst there are some such US firms, sadly, they are not all like that, and problems then invariably result for the UK parties involved. As just one example, we know of at least one non-US company, involved in the aerospace sector, which had contacted some eighty (80) US-based suppliers in its supply chain, in October 2013, to ask them what the impact of ECR was on what they supplied to them; a year later, only some seven (7) of these US-based suppliers had responded to this request with the required information.

In our view, the provision of additional training is needed, both in the US, as well as elsewhere, prior to the 15th October 2015 deadline to the transition period for former Category VIII and XIX items of technology. We are very well aware of the great efforts that the US Department of Commerce has already put into trying to achieve this, but feel that more needs to be done to make ECR the success that it deserves to be.

We are confident that individual firms will have submitted details of their own practical experiences of the specific issues and queries that they have had to face, where clarification would be invaluable, in their own responses to this consultation, so we will not seek to replicate these detailed inputs. One query which we understand is still outstanding, despite being posed to the US Government by a number of UK firms, relates to the control of “derived data”, which is seemingly controlled under the “600-series” controls, whilst it is not under the rest of the EAR.

The whole subject of “Defense Services”, as they pertain to 600-series items and technology, including technology which had been covered by Categories VIII and XIX but has been transferred to EAR, remains highly confusing and extremely unclear; in our view much greater clarity on this would be enormously helpful.

With the 15th October 2015 deadline to the transition period for former Category VIII and XIX items of technology fast approaching, we can only hope that as many US firms as possible have taken full advantage of this two-year transition period to try to sort out their licensing affairs.

Thank you in advance for your consideration of these comments. If you have any questions about this correspondence please contact me.

Regards

Brinley Salzmann - Secretary, EGAD
BEFORE THE DEPARTMENT OF COMMERCE
BUREAU OF INDUSTRY AND SECURITY

Docket No. 150210135-5182-01

Notice of Inquiry: Request for Comments Regarding Controls on Military Aircraft and
Military Gas Turbine Engines on the Commerce Control List

Comments of
Engineered Arresting Systems Corporation,
dba Zodiac Arresting Systems America

Peter Mahal
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By Its Attorneys

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Dated: May 1, 2015
I. Introduction

Engineered Arresting Systems Corporation of Aston, Pennsylvania, dba Zodiac Arresting Systems America (“ZASA”), submits these comments to the Notice of Inquiry: Request for Comments Regarding Controls on Military Aircraft and Military Gas Turbine Engines on the Commerce Control List that the Department of Commerce, through the Bureau of Industry and Security (“BIS”), published in the Federal Register on March 2, 2015, under docket number 150210135-5182-01.

ZASA welcomes this opportunity to comment on classifications from the perspective of a U.S. manufacturer of aviation safety products applicable to commercial operations, as well as operations involving military aircraft. As set forth in further detail below, ZASA maintains that its fixed, land-based system comprising an energy absorption mechanism, a mechanical or digital-controlled device that adjusts the mechanism’s braking force and a net or cable engagement device, should be reclassified to its historic EAR99 classification and that BIS’ March 2015 reclassification under 9A610.f, reserved for military items only, is inappropriate.

The foregoing arresting and engagement items are safety equipment and are aircraft neutral. As discussed below, they have been installed for use by both commercial and military aircraft and, for decades, have been developed and produced for general purposes, including more recent use for arresting vehicles on highways. The technology has been publicly available for many decades and relies on the laws of physics in safely stopping a variety of aircraft and/or vehicles in emergency situations only. In addition, these items are insufficiently designed for use as a mobile arresting system, could not be used to train foreign military pilots for aircraft carrier landings and arrestments, and operate on a wholly separate basis from any existing ship-based arresting system. These items are used for fixed, land-based arresting systems, which are safety equipment used for flight operations. They do not qualify as ‘ground equipment’ under 9A610.f. U.S. national security would not be threatened or harmed by the export of these items. In fact, under their prior EAR99 designation, BIS has knowingly allowed the shipment of hundreds of BAK-12/500S energy absorption mechanisms with various different engagement devices to be shipped to dozens of foreign countries for use at military air bases.

II. Background on ZASA and its Fixed, Land-Based System

ZASA designs and manufactures emergency aircraft arresting systems. Since 1937, ZASA has developed energy absorption products for the controlled deceleration of commercial and military aircraft in emergency situations. Over 5,000 ZASA systems have been installed and used in the United States and in over 85 other countries worldwide. Aircraft arresting systems are essential safety equipment that are not aircraft specific; they are designed to save lives and aircraft irrespective of the type or purpose of aircraft involved. Such equipment provides emergency assistance to landing and departing aircraft with brake failures or flight control problems. ZASA has also channeled this expertise into related, yet diverse areas such as perimeter security/containment, and vehicle arresting systems. The common application is “controlled energy absorption.”
ZASA manufactures fixed, land-based arresting systems under the trade names BAK-12 and 500S. The BAK-12/500-S incorporates a standard mechanical hydraulic control circuit to provide preprogrammed friction brake pressures for aircraft-specific weight ranges and automatically adjusts to accommodate aircraft of varying weights, engaging speeds and off-center arrestments within the specified performance envelope. A digitally controlled BAK is offered under the trademarked name SMARTARREST® that adjusts energy absorber braking force by reading computer-analyzed information provided by sensors built into the engaging system.

ZASA also manufactures the engagement systems which are used with the BAK-12 and 500S energy absorption mechanisms. The 61QSIIM Stanchion System is a mast and net device system. The type of engagement device is selected by the end user, and can be sold separately from the actual arresting system. Together, the BAK-12/500-S energy absorption mechanism, its control mechanism and an engagement device form a fixed land-based system. Civil works to properly install these systems typically takes weeks, depending upon local topography, drainage systems and electrical power service installation.

III. Export Control Classification History

Arresting and engagement systems of some form have been in use since the late 1930s. ZASA’s historical records indicate that since at least 1982 fixed, land-based arresting and engagement systems have been under the jurisdiction of the Department of Commerce so long as certain cooling equipment was not utilized and expeditionary hardware was not provided. (In contrast, mobile arresting systems were placed under the jurisdiction of the Department of State.) The Department of State reconfirmed the classification status of these systems in 1990.

In 2004, under a Commodity Jurisdiction determination (CJ 078-04), the fixed, land-based BAK-12 and 500S mechanisms (along with the 61QSIIM engagement system) and their associated spare parts, were again reconfirmed as being under the jurisdiction of the Department of Commerce and not designated as defense articles to be controlled under the U.S. Munitions List (“USML”). In a letter dated August 12, 2004, Mr. Gene Christiansen, of the Department of Commerce, stated that pursuant to CJ 078-94, “those systems under Commerce jurisdiction are classified as EAR99.”

Under Export Control Reform (“ECR”), even mobile arresting and engagement systems were removed from the U.S. Munitions List under the jurisdiction of the Department of State and placed under the jurisdiction of the Department of Commerce. Mobile versions of the arresting system have been classified under ECCN 9A610.f. Until recently, the fixed, land-based versions correctly remained classified as EAR99. That designation of over 20 years was recently rescinded with no warning and the system is now classified under the 600 series of the Commerce Control List (“CCL”).

IV. Recent Issues with Arresting Systems’ Classification and Resulting Business Impact

As previously noted, ZASA’s fixed land-based arresting and engagement systems have been under BIS control and classified as EAR99 for decades. During that time, thousands of systems have been exported to nearly 100 customer countries without question or incident. Tens of
thousands more spare parts to these systems have also been exported with no license required (“NLR”). In late March 2015, BIS notified ZASA that this non-military designated item and its parts would now be placed under a 600 series military item classification, 9A610.f.

As a result, and if this reclassification stands, ZASA will suffer lost business sales and opportunities. Fixed, land-based systems and their spare/repair parts make up the majority of ZASA’s business each year. The equipment was designed for a lifespan of 30 years, but many existing installed systems outlast that projection due to their durability and simplicity, and the availability of a reliable source from ZASA of spare parts for repairs and 10-year overhaul cycles. The decision to reclassify fixed, land-based arresting systems under 9A610.f will produce a dramatic increase in documentation and control for an entire class of products which has been classified as EAR99 for decades. Non-ZASA parts are produced in many countries, but often fail to meet the high standards of material and fabrication tolerances of the ZASA components. To put in place license restrictions on ZASA’s systems and parts when multiple sources internationally will continue to offer their alternate parts to end users, will merely serve to penalize a compliant U.S. business, while providing no restraint to these non-U.S. manufacturers, and instead, provides foreign manufacturers with a competitive advantage.

Reliance upon the license exceptions Shipments of Limited Value (LVS) and Strategic Trade Authorization (STA) will be of extremely limited value or relief to ZASA. Under ECCN 9A610, the value of LVS cannot exceed $1500; a threshold that would not even apply in the sale of any arresting or engagement system, and that would be exceeded in virtually every sale of repair, spare or replacement parts. Further, the STA exception would not apply to a significant portion of ZASA sales, as sales to allies covered under STA account for less than 50% of ZASA’s routine customer base for both full systems and spare parts.

If this determination stands, ZASA is faced with significant business challenges which will affect its competitive capabilities worldwide while needlessly placing significant administrative burdens not only on the company, but also on BIS licensing officers.

V. Aircraft Arresting and Engagement Systems Are not Military Items and are Not Covered by ECCN 9A610.f

Fixed, land-based arresting and engagement systems have historically been classified EAR99 by BIS, even when the export is to a foreign military service. Their use is for aviation safety purposes and the systems are designed to arrest various types of aircraft regardless of whether they are military or commercial. Their use and application are not restricted to military aircraft or for a military use for aircraft described under USML Category VIII(a) or otherwise covered under ECCN 9A610.a. Nor do they qualify as “ground equipment” since they are in fact essential to safe landings and takeoffs, and thus qualify as flight operations safety equipment.

A. Fixed, Land-Based Systems are Aviation Safety Equipment

Fixed, land-based systems involve only aviation safety equipment. One inherent problem in discussing aircraft arresting systems is the tendency for the average layperson to immediately think of aircraft carrier arresting systems. The BAK-12 and 500S fixed, land-based systems are not and could never be used for such a military purpose. Importantly, military aircraft typically
land hard and fast and these mechanisms are sized to handle single arrestment events, not recurring operations that characterize military flight operations. Adequacy of design for emergency purposes does not equate to sustained operational capability, and these fixed based emergency arresting systems are not designed or capable of being configured for rapid and repeated tactical use by military aircraft. They are implemented in emergency situations only when aircraft of any make, and for any purpose, are likely travelling at reduced speeds in an effort to land the aircraft safely and with minimal damage or aborting a takeoff attempt due to loss of control or aircraft malfunction.

Further, when engaged for emergency purposes, the runway at issue would be shut down for a significant period of time. After an arrestment is made, it can require a significant amount of time to remove the aircraft from the engagement system, clear the runway of emergency personnel and equipment, inspect the tape and reset the system, certify it for its next use and verify proper operation of the energy absorbers; all steps necessary before returning the runway to safe operations.

Finally, during post-use inspection of the tape, it is possible that the one engagement by the system has damaged or stressed the tape to the point that it needs to be replaced. The need to arrest an aircraft becomes an interruption of normal airport operations, and considerably slows down the landing of all scheduled planes. The only rationale for having and using a fixed arresting system is to add some extra margin of safety for an aircraft that cannot stop on its own due to braking system failure, or is at risk for losing steering control during landing or take off, due to a system failure or damage to a flight control surface or steering system.

Regarding aircraft carrier arrestment systems, they justifiably remain under the control of the Department of State and the ITAR. Ship-based systems are unique and highly complex systems. They are developed for repetitive use and use a cable, not a tape, arresting technique. These systems are able to withstand very high energy and repeated arrestments, without replacements until approximately 100 shipboard landings. The cable component, along with the completely different energy absorption mechanism (neither of which are part of a fixed, land-based system), allows for the landing of heavy, high-speed aircraft and their arrestment within 400 feet and in about two seconds when typically travelling at 150 miles per hour. Aircraft coming in to land on a carrier are normally landing at 85% of full throttle, and at touchdown, the pilot advances the throttles to full power in case an unsuccessful arrestment occurs and the pilot is required to take off once again from the carrier. If a BAK-12 or 500S system were employed in such an environment, the tape would likely fail, or be ripped out from the system and the sheaves could be severely damaged. More importantly, the aircraft and pilot would risk being lost overboard.

The above factors clearly indicate that the design, nature, and performance/capabilities of fixed, land-based systems are wholly different systems than those of shipboard design.

**B. Fixed, Land-Based Systems are not ‘Ground Equipment’**

BIS has indicated that with ECR, fixed, land-based arresting and engagement systems may be categorized under 9A610.f as ‘ground equipment.’ The technical note for ‘ground equipment’ defines the term as including “pressure refueling equipment and equipment designed to facilitate
operations in confined areas.” The BAK-12 and 500S systems are not covered by this definition.¹

These fixed arresting systems, combined with an engagement system, are not designed for ground operations. As the term implies, and as the aviation industry applies it, ‘ground equipment’ is available at airports to support the operations of aircraft while on the ground. The functions such equipment serves generally involve ground power operations, aircraft mobility while on the ground, and loading operations. As defined under the ECCN, such ground equipment would include refueling equipment. It could also include Ground Power Units, Air Start Units, heaters/deicers. It does not include fixed arresting and engagement systems which relate, not to ground operations, but, rather, solely to flight operations. Flight is considered to have been initiated as the aircraft enters the runway, and so any engagement of any type of fixed, land-based arresting system is an inflight incident, usually requiring reporting of some manner due to the impact upon flight safety. Ground equipment is not involved in flight safety operations.

ZASA has confirmed that at least one other Wassenaar Arrangement (“WA”) signatory does not consider its nationally produced fixed, land-based systems as military articles and does not place controls on them for export. Specifically, these items are not considered to be covered under Munitions List Category 10 (“ML10”) as ‘ground equipment.’

Fixed arresting and engagement systems are thus properly characterized as flight safety equipment and serve an in-flight, not ground support, function. They are used in emergency situations to arrest an aircraft that either must abort a takeoff or requires assistance to land due to brake failure or flight control problems. Neither the BAK-12 nor the 500S or the related engagement systems qualify as ground equipment.

VI. Fixed, Land-Based Systems Involve Basic Technology that Is Implemented for General Purposes

The technology and equipment at issue with emergency arresting systems are neither high nor complex technology that would give any foreign interests a tactical military advantage or impair the national security of the United States. At their most basic level, these systems function based on the simple laws of physics. The energy is absorbed to bring the plane to a stop. In emergency situations, they can arrest any type of aircraft -- large or small, military or commercial, and based solely upon the weight and speed of the aircraft, will safely arrest the aircraft within a certain distance. It remains true that the type of engaging device can vary, but the essence of the arresting system—the energy absorber—is a simple friction device, scaled up to handle aircraft level energy absorption.

These systems rely on energy absorption technology that is being used and developed for a general purpose. That same energy absorption device was installed at an airport in Toulouse, France, in the 1970s for use in the event of an emergency involving the commercial Concorde.

¹ Further, and as discussed below, ZASA respectfully states that this sub-category does not even apply to the mobile arresting systems which BIS has placed in this ECCN via a CCAT dated January 5, 2015. The definition of “ground equipment” and the application of the conventions related to the use of quotation marks on the CCL (15 C.F.R. § 774.1(d) exclude both fixed and land-based arresting and engagement systems from being placed in this ECCN.
airplane. The FAA also undertook testing in the 1970s and equipped a Boeing 707 aircraft with a hook to simulate an emergency arrestment of a commercial aircraft. Further, these systems are currently installed at over 100 joint commercial-military airports, with the FAA having operational control of the systems.

ZASA also has an open research and development project to identify solutions for the arrestment of small aircraft, including business/private jets, at general aviation airports. One of the solutions currently being examined is a fixed system utilizing a BAK-12/500S energy absorption mechanism that can accommodate smaller aircraft as well as larger ones. SMARTARREST® and a net arresting mechanism similar to the 61QSIIM would also be used.

In addition to the foregoing commercial aviation applications, the technology has also been considered for general safety and security purposes as non-lethal barriers and safety systems to stop and contain vehicles. For example, it is capable and designed to stop a vehicle from entering secured areas at public spaces. A variant of the energy absorbing system has also been implemented in the Houston, Texas, area for public safety purposes to stop opposite direction traffic in a one-way highway HOV entry/exit lanes. Applications proposed for this type of system include highway run-off control, motor speedways, and rail crossing disaster prevention. It can be used to safely “catch” and stop any category of vehicle up to and including a 15,000-pound truck traveling at speeds of 50 mph or less, and was so demonstrated on Discovery Channel in December of 2008.

The foregoing examples establish that ZASA is developing and producing this basic technology and these systems for general purposes.

**VII. Fixed, Land-Based Systems’ Technology and Data Are Public and Available via Foreign Competitors**

The technology involved with these systems has long been made publicly available. Patents and patent applications concerning the same BAK-12 and 500S energy absorbing technology and equipment are publicly available, and have been as far back as at least 1967. See USPTO Patent Full-Text and Image Database at www.uspto.gov for Patent Nos. 3,317,164 (May 2, 1967); 3,599,905 (August 17, 1971); and, 4,331,309 (May 25, 1982)). Two of the U.S. registered patents (3,317,164 and 3,599,905) claim priority to foreign patents in France and Switzerland dating back to 1964. In addition, the U.S. Air Force has publicly released, with no restrictions, Air Force Instruction 32-1043, which provides procedures for siting, installing, maintaining and operating aircraft arresting systems.

The technology involved in aircraft arrestment has existed for over 50 years and the systems have been widely dispersed around the world. Decommissioned fixed energy absorption and arresting mechanisms are available worldwide for resale as an entire system or to sell parts for spares or components to the system, such as the BAK-12 or 500S and the related engagement mechanisms. Where budgets are constrained, ZASA has learned of and witnessed cannibalization of components for resale; and these also have not been controlled transactions.

ZASA’s main competitor, SCAMA, AB, located in Sweden (www.scama.se), offers aircraft arresting systems, both mobile and fixed, for sale globally, including energy absorption units.
similar to the BAK-12 and 500S. These systems are comparable in quality (function, technology, performance capabilities) to ZASA’s systems. In fact, SCAMA recently won a competitive bid for the sale of a mobile aircraft arresting system for the Polish Air Force under a U.S. sponsored Foreign Military Sales program. Finally, GERCO, Ltd., located in Greece (www.gerco.gr/en/company.asp), offers for sale a full line of aircraft arrestor systems and related services, including BAK-12 and 500S equivalents.

After decades as an EAR99 item, reclassifying these arresting systems as a 600 series item will serve no national security or foreign policy purpose. The technology is publicly available, and systems can be easily provided by foreign competitors. BIS’ recent reclassification only places ZASA at a competitive disadvantage.

VIII. Reclassification of Arresting Systems Does Not Properly Implement the National Security or Foreign Policy Objectives of ECR

ZASA and its employees fully realize and support that national security must come first, and sensitive technologies with solely military applications must be protected. However, ECR was called for because the outdated U.S. export control regime covered too many products that involved obsolete technology, lacked a significant military application, or were readily available from other countries. Reform was also needed in order to allow the U.S. government to focus its resources on transactions of greater concern. Finally, the oft-repeated goal of ECR was to place “higher walls” around fewer, more critical items. None of these goals will be served should BIS reclassify ZASA’s arresting and engagement systems as ECCN 9A610 products.

ZASA’s technology itself is neither rare, nor involves exceptional materials and processes. It is based upon the simple laws of physics, and is not unique to these arresting systems applications. The products do not enhance the capability to launch and recover military aircraft, but the equipment does provide a safety feature roughly analogous to an air bag in a car. It is there, but remains unused for most, if not all, of its life. These arresting systems are designed to provide a last chance save from disaster, which most flights never experience.

At no time in the past 20 or more years, has there been any evidence that the EAR99 classification of the fixed, land-based arresting and engagement systems manufactured and exported by ZASA have led to any risk or any undesired affect upon any national security objective. ZASA has demonstrated that the actual employment and engagement of a troubled aircraft by a fixed arresting system does not enhance airfield operations or provide military tactical advantages. The counter balancing rationale for installing and using these fixed arresting systems, is to add safety to the aircrew, and to help the pilot manage the deceleration to a safe stop. At times some aircraft damage occurs, but the ultimate goal is to save lives, so these inefficiencies are determined to be an acceptable trade-off. It does not stand to reason that such life-saving capability in any way threatens U.S. national security or impairs the foreign policy objective of the United States.

To ZASA’s corporate knowledge, fixed land-based systems were never considered inherently as a defense article. In fact, prior to ECR, the former USML Category VIII pertaining to aircraft and associated equipment specifically carved out these systems so that they were not subject to the ITAR:
(d) Launching and recovery equipment for the articles in paragraph (a) of this category, if the equipment is specifically designed or modified for military use. **Fixed land-based arresting gear is not included in this category** (Emphasis added).

Even the revised USML Category VIII post-ECR continues to specify that fixed land-based arresting gear is not covered under the ITAR. *See USML Category VIII(d)(Note to paragraph (d)).*

An historic review of ECCN 9A018 which controls equipment on the Wassenaar Arrangement Munitions List further confirms that fixed, land-based arresting systems have never been controlled by BIS for purposes of compliance with U.S. commitments to this multi-national agreement.

It is unreasonable for BIS to conclude that adding licensing restrictions and requirements more than 20 years after a product has been classified as EAR99 and shipped worldwide will bring about a tighter control and enhance national security.

The purpose of ECR was to transition many less sensitive military items from the State Department’s ITAR to the more flexible Commerce Department’s EAR to allow enhancements to national security by increasing interoperability with allies while simultaneously improving the competitiveness of U.S. industry. The purpose of the ECCN 600 series was to amend the EAR to allow for control of formerly USML items so that they still could be controlled as military items, but in a more flexible manner. The purpose of ECR was not to take items which were already under the EAR and have never been designated as defense articles and declare them as military items to be controlled under the 600 ECCN series.

A key aspect of ECR was to reduce the restrictions that attach to U.S. products to increase the competitive capabilities of U.S. companies. Similarly, these reforms were meant to reduce the administrative burden on companies. If the Bureau of Industry and Security (“BIS”) proceeds with reclassifying an historical EAR99 product to be covered under a 600 ECCN series designation (*i.e.*, 9A610), the result will be to sow confusion and stifle the competitive abilities of U.S. manufacturers and exporters with no positive advancement of the intended national security and foreign policy objectives of the reform effort.

**IX. ECR was Not Intended to Capture Non-Military Products and Place them under the 600 Series ECCN Category for Military Items**

The 600 series classification was never intended under ECR to cover existing items that the Departments of State and Commerce did not already declare as defense articles. The above USML reference and specific exclusion of fixed, land-based systems from the USML prior to ECR provides historical confirmation that these systems are not military items. The USML, prior to ECR and prior to becoming a positive list, contained broad catch-all provisions that covered as a military item anything that was specifically designed or modified at any point for a military application. Even under this broad application, fixed land-based systems were carved out from control under the USML, and this understanding was supplemented by repeated EAR99 classification rulings from the Department of Commerce.
Under ECR, the 600 series ECCNs were created and intended to capture defense articles that were no longer listed on the revised USML. Assistant Secretary Kevin Wolfe spoke clearly to this in his speech and slide presentation at the July 2013 BIS Update Conference (see Export Control Reform – New Order of Review and the “600 series”). During this presentation, Mr. Wolfe stated that items that are now defense articles but that are no longer listed on the revised USML categories will become subject to the EAR’s “600 series” ECCNs. Further, this presentation made clear the following two key points in determining any changes in jurisdiction:

- CJs that determined item was subject to the EAR
  - If item was not classified in an existing “018” ECCN at the time of determination, the item will not be controlled under the 600 series [ZASA’s systems have never been so classified]
  - If item was not listed on the CCL at the time of determination (i.e., designated EAR99), the item will remain EAR99, unless later enumerated in an entry on the USML or CCL [ZASA’s systems have historically been classified as EAR99 and no entry on the USML or CCL designates them as controlled]

BIS’ reclassification of ZASA’s fixed, land-based systems under the 600 series is inappropriate. These fixed, land-based systems should remain EAR99 to ensure that the regulations are clear, predictable, and do not inadvertently control items in normal commercial use. Barring the willingness to make such a correction to reinstate the historic EAR99 classification, ZASA proposes that, as an alternative, ECCN category 9A991 could characterize this equipment, and would have the effect of appropriate control that is consistent with decades-old DDTC and BIS policies regarding the classification of fixed, land-based arresting systems.

As noted above (see footnote 1), BIS has placed mobile arresting systems under ECCN 9A610.f. While ZASA acknowledges that mobile arresting systems were previously controlled under the USML and their migration to the CCL under the 600 series may be appropriate, ECCN 9A610.f also does not cover these systems or their parts. While mobile, these systems remain flight safety equipment and not ‘ground equipment’ as that term is defined. Thus, ZASA respectfully proposes as another alternative that BIS take one of the reserved subcategories under 9A610 (i.e., b.-e.) and create a new ECCN category as follows:

9A610.e. Mobile aircraft arresting and engagement systems for aircraft controlled by either USML paragraph VIII(a) or ECCN 9A610.a. Technical Note: Fixed land-based arresting gear is not included in this category.

Such an amendment would meet the goal of retaining control of mobile arresting systems, while remaining consistent with decades of clear exclusion from license requirements for the permanently installed fixed based safety equipment variants.

Clear “carve out” language, that removes the permanently installed fixed, land-based safety equipment and its associated parts and places them into EAR99, will return the management of these systems back to its reasonable and previously long-established structure.
X. Conclusion

ZASA understands the difficulties and strains that ECR has placed on BIS due to the reclassification of thousands of products, components and parts to control under the EAR and placement on the CCL. That effort and undertaking is very much appreciated and respected by all at ZASA and within the Zodiac US Corporation family. However, in this instance, BIS is in error in reclassifying an EAR99 item as a 600 series item.

ZASA employs over one hundred persons, many U.S. military veterans, who work in one of a modest number of manufacturing facilities in Southeastern Pennsylvania. This modest workforce has been and continues to be “the global center of excellence” and market leader for arresting and engagement systems and related parts. These employees have been performing these fabrications and shipments to global customers, and do so with tremendous pride in the safety enhancement that the systems provide at airports worldwide. Further, the ZASA supply chain consists mostly of small local businesses which owe a high percentage of their sales and stability to the uninterrupted flow of parts and services to ZASA as it fulfills more than 50 orders monthly. For decades, weekly shipments have been exported as EAR99/NLR to points around the world without incident or harm to U.S. national security.

The recent action taken to place fixed, land-based arresting systems into a category with export restrictions puts the existing workforce at risk, and could damage ZASA’s position as the market leader. The technology is publicly available and the product itself is available from foreign sources, and sales could be driven offshore as a result. Placing these systems and parts under ECCN 9A610 will serve only to add administrative overhead costs for ZASA and the real potential for burdening BIS licensing officers with hundreds of license applications each year that heretofore were never required by either DDTC or BIS.
May 1, 2015

**SUBMITTED VIA EMAIL TO: PUBLICCOMMENTS@BIS.DOC.GOV**

Regulatory Policy Division  
Bureau of Industry and Security  
Room 2099B  
U.S. Department of Commerce  
Washington, D.C. 20230


Dear Sir/Madam:

On behalf of Garmin International, Inc. ("Garmin"), we are pleased to provide these comments responding to the Notice of Inquiry Regarding Controls on Military Aircraft and Military Gas Turbine Engines on the Commerce Control List ("CCL") administered by the Bureau of Industry and Security ("BIS").

Garmin believes that AHRS, INS, and gyros for use in or with the production of aircraft described in ECCN 9A610 are made with the same processes, meet the same commercial industrial standards, and have the same functionality for both ECCN 9A610 aircraft and aircraft properly classified under ECCN 9A991.b.

We have commented to the Directorate of Defense Trade Controls ("DDTC") that Category XII should not be amended to provide an enumerated clause that describes gyros, AHRS, or INS that operate at defined performance parameters. The catch and release provisions for gyroscopes, AHRS, and INS better achieve the goals of Export Controls Reform to exclude from the USML items in normal commercial use over time.

**Catch and Release Provisions of ECCN 9A610.x**

Garmin respectfully submits that the catch and release provisions applicable to ECCN 9A610.x are better suited to maintain pace with the technology developments in navigation avionics than an enumerated clause with performance criteria only for the avionics, such as gyros, AHRS, and INS.
We appreciate BIS’s process to review ECCN 9A610, and Garmin understands the preference of BIS and the Administration to use enumerated performance criteria where possible. However, there are reasons this policy-making strategy to make gyros, AHRS, and INS subject to an enumerated clause is not the better alternative when compared to the catch and release provisions currently applicable to ECCN 9A610.x. Garmin is gathering information regarding common commercial use of gyros, AHRS, and INS equipment in aircraft properly classified under ECCN 9A991.b. Garmin will comment further when proposed Category XII and related CCL changes are available to the public. These comments provide regulators an early position of the Garmin preference for catch and release provision for gyros, AHRS, and INS equipment.

**Recommendation**

Garmin also respectfully submits that the Administration should maintain a catch-all clause in the USML such as current Category VIII(e) and refrain from describing gyroscopes, AHRS, or INS in a proposal to revise Category XII with enumerated clauses. BIS should maintain the catch and release provisions for ECCN 9A610.x.

Sincerely,

John Preis
Manager, International Trade Compliance
U.S. Department of State  
Office of Defense Trade Controls Policy  
PM/DDTC, SA-1, 12th Floor  
2401 E Street, NW, (SA-1)  
Washington, D.C. 20037

Regulatory Policy Division  
Bureau of Industry and Security  
Room 2099B  
US Department of Commerce  
Washington DC 20230

April 29, 2015

Subject: Response to Notice of Inquiries in Federal Register Vol 80, No. 40, March 2, 2015:  
Department of State Public Notice 9050  
Department of Commerce RIN 0694-XC023

The General Electric Company submits the following comments regarding Controls on Military Aircraft  
and Military Gas Turbine Engines in USML Categories VIII and XIX, as well as CCL category 600. The  
current reforms have been of significant value to General Electric, and represent a positive step  
forward in focusing export controls on items of greater technical significance. GE believes continued  
efforts to move items of lesser technical significance to categories of lesser controls will improve US  
industrial competitiveness and efficiency, and lower current barriers to participation in international  
aviation programs.

The following items are suggested clarifications and improvements related to Export Control Reform  
changes in Categories 9A619 and 121.1 category XIX and VIII.

Minor Components:  
There are several opportunities to clarify ambiguities in the current ITAR/EAR language around the  
control of minor components, as well as opportunities to modify and expand the list to simplify the  
export of minor parts of engines and aircraft. Suggestions include:

Expand (b)(2) Release:  
For those few items which could qualify to be included in .y entries across all  
categories, adding them to the (b)(2) release could efficiently release them from both the ITAR  
and EAR licensing requirements. Examples might include clamps, tubes, and brackets.
Shims vs Spacers:
9A691.y.6 captures shims, yet the 'specially designed' (b)(2) definition releases all spacers. It is unclear how industry would differentiate a shim from a spacer, and what technical reasoning would treat them differently.

Clamps:
9A619.y.5 lists 4 specific types of clamps, but there are other generic clamps that are equally minor, for example 'half-clamps', which hold tubes down against a structure. GE suggests the language be modified to more broadly list clamps.

Oil and fuel lines:
9A619.y.2 captures Oil lines and tubes
9A619.y.3 captures Fuel lines and hoses

It's unclear what differentiates a tube from a hose, or why it would be important to differentiate fuel transfer from oil transfer functions (or any other fluid). It would simplify classification of items to combine these categories into a single group, and specifically include the fittings and adapters common to these items.

Air lines:
9A619.y.8 captures Air, fuel, and oil manifolds, but air lines are not released like oil and fuel lines in y.2 or y.3 above. Air lines should be included in the categorization above. A single category for all three would simplify classification and exports.

Brackets:
Brackets whose primary construction is sheet metal and whose function is to position and support wiring, oil, fuel, or air lines, or engine accessories should be included in specially designed (b)(2). Brackets are essentially fasteners, connecting an item to another item.

Cables and harnesses:
General wiring harnesses are the electrical equivalent of fuel and oil lines – they transfer electrical signals between sensors and components, with no signal processing, and have no military functionality. They should also be released to 9A619.y or preferably identified in specially designed (b)(2) release.

Minor Components of 19.f.1 listed engines:
Items caught in 19.f.1 but described in 'y' are not currently released from 19.f.1 controls. Modifying the 19.f.1 control to carve out items identified in 9A619.y would complete the release of many low level parts. There are currently suppliers whose products meet the definitions to release parts to 9A619.y, but are still ITAR controlled because of unique use on 19.f.1 listed engines.

T700 Engine Line

It is unclear why the T700 engine has been singled out for inclusion on the USML given similarity to its CT7 commercial variant. The original T700/CT7 model, designated the T700-GE-700, was developed in the 1970’s and entered production in 1978. The CT7-1 was the very first T700/CT7 engine certified by the FAA for commercial use in 1977. Since then, GE has developed over 25 different models used on both rotary and fixed-wing aircraft for over 130 customers in over 50 countries.
The T700 turboshaft and CT7 turboshaft and turboprop engines form a family of engines where there are no significant differences between the military and commercial models. All T700 and CT7 engines have the identical architecture of a 5-stage axial compressor, a 1-stage centrifugal compressor, a 2-stage cooled high pressure turbine, and a 2-stage uncooled low pressure turbine. The entire family also shares identical bearing and lubrication systems and a top mounted accessory module.

There are no significant hardware differences between military T700 and CT7 engines, and none of the minor differences that do exist have anything to do with commercial versus military functionality. In fact, over the last 20 years, product advancements are typically introduced for the CT7 engine and leveraged for use on the T700. For example, the current engine for the UH-60M Black Hawk helicopter, the T700-GE-701D, owes most of its power and durability improvements over its predecessor T700-GE-701C to hardware developed for the commercial CT7-8 engine. Moreover, the most recent T700 model developed for the Special Operations MH-60M helicopter, was derived from and is almost identical to, the commercial CT7-8A engine that powers Sikorsky’s S-92 commercial helicopter.

GE recommends the T700 engine be released from the XIX.d listing, and recommends the XIX.d listing be focused on specific performance features of military significance.

**F101 and F118 engine lines**

The F101 and F118 engines were the initial basis for the latter F110 engine. While these engines power the B-1B and B-2 aircraft (which are captured in 8.h.1), there are no unique features of or technologies within these engines that warrant control in 19.f.1 that would otherwise not be captured in other ITAR categories, such as 19.f.2-6 or 13.j. Many individual components are common to all three engines, and often a drawing will contain an early version of an individual part, that while no longer in production, is unique to an early F101 model, causing the entire drawing to be caught in 19.g, rather than, for example, 9E619.a.

GE requests the USG consider releasing these engines from the 19.f.1 listing.

**Augmentor and nozzle parts**

The ITAR currently captures cooled augmentors in 19.f.2, but does not identify individual parts of these components. Other ITAR categories identify both components and parts (eg. 19.f.1 and 19.f.6). The EAR identifies technology for many augmentor parts within 9E619.b.7. The 2 regulations are written at different levels of detail. Neither the ITAR nor the EAR specifically identifies these augmentor parts in hardware categories. GE recommends that augmentor parts be explicitly captured in 9A619 consistent with 9E619.

**Controls technology for 9A619.a engines**

For commercial engines, approximately 75% of the FADEC control technology is NLR, leaving a focused list of specific technologies of importance in categories 9E003.h.1-3. Military engines described in 9A619.a place FADEC controls technology in 9E619.c.6, which broadly encompasses some of the same general technology that is NLR on commercial engines. Whereas the 9A619.a engines are generally older technology engines or commercial engine derivatives, the 9E619.c.6 category is capturing technology generally available without license on commercial engines. GE recommends modification of 9E619.c.6 to better parallel the controls in 9E003.h.
GE appreciates the United States Government's efforts to focus export control regulations on the critical items important to national security, while simplifying export requirements on less critical items. US industrial competitiveness, as well as international acceptance of our products, is significantly impacted by these regulations, and we appreciate the ability to participate in further improvements going forward.

For questions concerning this request, please contact the undersigned at (513) 243-4282 or by e-mail at: rob.lawson@ge.com.

Sincerely,

Robert J. Lawson  
Sr. Business Manager - Aviation  
International Trade Compliance
Request for Comments Regarding Controls on Military Aircraft and Military Gas Turbine Engines on the Commerce Control List

RIN 0694-XC023

To the Attention of publiccomments@bis.doc.gov

The German Aerospace Industries Association (BDLI) with more than 220 members represents the interests of an industrial sector, which owing to international technology leadership and worldwide success has become a significant driver of economic growth in Germany. Combining almost all strategic key technologies, the German aerospace industry with a directly employed labor force of around 105,700, achieves an annual turnover of currently Euro 32.1 billion.

Communication with political institutions, authorities, associations and foreign representations in Germany is a major task of the BDLI, as well as a variety of services in Germany and abroad for its members. The BDLI is trade owner of the ILA Berlin Air Show International Aerospace Exhibition.

The BDLI is officially accredited to the German Bundestag where it performs specific, legally embodied tasks. The BDLI is a member of the European umbrella organization ASD, AeroSpace and Defence Industries Association of Europe, and the Federation of German Industries (BDI).

BDLI would like to underline that it respects the efforts undertaken by the relevant administrative bodies, i.e. Department of State, the Department of Defense, the Department of Commerce on the Export Control Reform with particular regard to Military Aircraft and Gas Turbine Engines and Associated Equipment.

STA, the Prior Consignee Statement signature by the A5 Governments

We understand that for 600 series, the signature of the A5 Government end user is not necessary, and therefore the prior consignee statement only needs to be done by Industry (unless this A5 Government itself retransfers the items to another entity using exemption STA).

Conflicting guidance and requests we have received has revealed a need of some clarification of this question. Can BIS make clearer the requirements and confirm that the signature of the A5 Government end user is not necessary on the Prior Consignee Statement.

De Minimis and STA:

Regarding items delivered under exception STA, De Minimis rule cannot be applied until all the conditions of the Prior Consignee Statement are fulfilled. And yet, it is possible to De Minimized 600 series items per 734.4(a)(6) when there is a validated BIS license joined. This leads BDLI member companies in the fact that you may receive some “600 series” which can be both De Minimized and not De Minimized. Indeed, “600 series” can be parts under a BIS license, which can be De Minimized, and also be the same parts under license exception STA which cannot be De Minimized, except by the A5 Government end user of the foreign end item these parts have been integrated to. This is inconvenient and requires
European industry to deal with two different authorities possible (STA and a BIS license) for the same part, which is also subject to different controls. As a result, there were both a reluctance to sign Prior Consignee Statements and the acceptance of items delivered under license exception STA.

BDLI suggests that BIS allow the use of De Minimis for parts received under STA and integrated into a foreign end-item in an A5 country.

**Destination Control Statements:**

The requirement for a foreign party to include a Destination Control Statement, when re-exporting / re-transferring EAR controlled items has to be clarified. Part 732.5(b) states

"The Destination Control Statement (DCS) must be entered on the invoice and on the bill of lading, air waybill, or other export control document that accompanies the shipment from its point of origin in the United States to the ultimate consignee or end-user abroad. The person responsible for preparation of those documents is responsible for entry of the DCS. ..." We have to face the fact that most exporters in the United States are not shipping directly to the ultimate consignee, but firstly to an intermediate consignee or end-user. Shipment, or re-export, to the ultimate consignee is later effected by the foreign party. Furthermore, no requirement is mentioned to include a Destination Control Statement for end items which include 500/ 600 De Minimized items. This results in risk as regards the restrictions on using the De Minimis for D5 countries. We suggest that Part 758.6 be adapted as follows

758.6

The Destination Control Statement (DCS) must be entered on the invoice and on the bill of lading, air waybill, or other export control document that accompanies the shipment from its point of origin in the United States to the ultimate consignee or end-user abroad to include those re-exports and re-transfers subject to the EAR conducted by the foreign party to the ultimate consignee or end-user.

...............  

**Destination Control Statements:**

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SNAPR: License approval does not include Scope of license:

BIS Licenses contain a particular proviso that requires the applicant to communicate to all
the end users the scope of the license as represented in the application. However, neither
block 21 (specific end use) nor block 24 (additional information) of the application are
reproduced in the approval. Due to the fact the scope of the license is not an integral part of
the license, the information may be disconnected or lost. Indeed, the applicant could
communicate it separately to the foreign parties. Similarly, communicating the end-use
separately may also not be properly interpreted as binding by the foreign parties.

BDLI suggests that both blocks 21 and 24 of the BIS SNAPR license application be
included as part of what is contained in the BIS license approval in order to ensure that
the foreign end users have knowledge of the scope of the license.

SNAPR: Missing Sub-paragraph of ECCN in both application and license approval:

The SNAPR application and the subsequent approvals format only reflects the primary
ECCN, (such as 5A610 or 3A001) but not the sub-paragraph.

Under many ECCNs, the sub-paragraphs may have different control policies which dictate
the licensing requirements and whether license exceptions are available (i.e. 3A001.a.1 and
3A001.b.2, 9A515.d and 9A515.e or 9A610.x and 9A610.y). In order to insure compliance
from the U.S. exporter to the foreign end-user(s), it is essential that all parties, and in
particular the foreign end users be informed of the full classification of the products.

BDLI proposes ECCN be sub-paragraphed in the BIS license application and in the
license approval.

For further detailed information, please contact Steffen Schwarzer, Manager Defence and
Space, BDLI, via telephone at +49 30 206140-44 or via email at schwarzer@bdli.de

Yours faithfully,

[Signature]
In the Matter of

Notice of Inquiry

Notice of Inquiry: RIN 0694-XC023

Request for Comments Regarding Controls on Military Aircraft and Military Gas Turbine Engines on the Commerce Control List

To: Bureau of Industry and Security, Department of Commerce (BIS)

COMMENTS OF MATTHEW J. LANCASTER

Introduction

1. These observations relate, in primary part, to controls on the Commerce Control List (CCL) for certain items related to military aircraft and military gas turbine engines which appear to contravene the CCL Order of Review in Supplement No. 4 to part 774 of the Export Administration Regulations (EAR).

2. This set of comments first introduces some relevant background and recommendations by topic; then provides some recommendations for incorporating the comments by providing example revised language.

BACKGROUND

General CCL Classification Guidelines

3. For CCL Categories, like CCL Category 9, which have been revised under the President’s Export Control Reform initiative (ECR), Supplement No. 4 to part 774 of the
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EAR describes ordered steps focusing on self-classification of items “subject to the EAR”, the first step of which is as follows:

As described in EAR § 734.3, the EAR govern only items “subject to the EAR,” e.g., items not subject to the exclusive jurisdiction of another agency. Thus, for example, if an item is described in the U.S. Munitions List (USML) (22 CFR Part 121) of the International Traffic in Arms Regulations (ITAR) (22 CFR Parts 120-130), including one of its catch-all paragraphs, then the item is a “defense article” subject to the ITAR and there is no need to review the CCL with respect to whether it describes the item. See 22 CFR § 120.6 (“Defense article means any item or technical data designated in § 121.1 of the ITAR. The policy described in § 120.3 is applicable to designations of additional items”). If an item is not described on the USML and is otherwise “subject to the EAR,” then work through each of the [remaining] steps to determine where the item is covered by the CCL or, if it is not covered by the CCL, and is therefore designated as EAR99.

4. In other words, the EAR requires that the first step is to determine that the item is “subject to the EAR”, which, for the purpose of these observations, is the equivalent of the item not being subject to the ITAR.

Test Equipment on the Revised USML

5. The ITAR defines the term “equipment” at ITAR § 120.45(h) as:

A combination of parts, components, accessories, attachments, firmware, or software that operate together to perform a function of, as, or for an end-item or system. Equipment may be a subset of an end-item based on the characteristics of the equipment. Equipment that meets the definition of an end-item is an end-item. Equipment that does not meet the definition of an end-item is a component, accessory, attachment, firmware, or software.

6. ITAR § 120.45(c) states that: Accessories and attachments are associated articles for any component, equipment, system, or end-item, and which are not necessary for its operation, but which enhance its usefulness or effectiveness.
7. These definitions establish that if the terms “accessory”, “attachment”, or “equipment” are used on the USML, a USML control for test equipment potentially exists.

8. Furthermore, in 79 FR 37539, Directorate, Defense Trade Controls, Department of State DDTC observed:
   One commenting party noted that paragraph (a)(11) identifies test sets for counter remote-controlled improvised explosive devices and counter radio electronic warfare systems that are already controlled in paragraph (a)(4)(iii). The Department amended paragraph (a)(11) to remove these references.

   (a) Electronic equipment and systems not included in Category XII of the U.S. Munitions List, as follows:
   *(4) Electronic Combat (i.e., Electronic Warfare) systems and equipment, as follows:
   *(iii) Systems and equipment specially designed to introduce extraneous or erroneous signals into radar, infrared based seekers, electro-optic based seekers, radio communication receivers, navigation receivers, or that otherwise hinder the reception, operation, or effectiveness of adversary electronics (e.g., active or passive electronic attack, electronic countermeasure, electronic counter-countermeasure equipment, jamming, and counter jamming equipment);
   *(11) Test sets specially designed for testing defense articles controlled in paragraphs (a)(3), (a)(4), (a)(5), or (b)…

10. Prior to receipt of public comments, proposed revisions to USML Category XI (see 78 FR 45023) read, in pertinent part:
   (a) Electronic equipment and systems not included in Category XII of the U.S. Munitions List, as follows:
   *(4) Electronic Combat (i.e., Electronic Warfare) systems and equipment, as follows:
   *(iii) Systems and equipment specially designed to introduce extraneous or erroneous signals into radar, infrared based seekers,
electro-optic based seekers, radio communication receivers, navigation receivers, or that otherwise hinder the reception, operation, or effectiveness of adversary electronics (e.g., active or passive electronic attack, electronic countermeasure, electronic counter-countermeasure equipment, jamming, and counter jamming equipment);

(11) Test sets specially designed for testing counter radio controlled improvised explosive device (C–RCIED) electronic warfare (CREW) systems;

11. In short summary, in implementing ECR for USML Category XI, DDTC acknowledged that it is possible that the mere use of the term “equipment” in an ITAR control parameter can establish a control for test equipment.

12. Even prior to implementing ECR for USML Category XI, a plain reading of the definitions for equipment and accessories and attachments should have suggested that use of any of these terms in an ITAR control parameter can establish a control for test equipment

Apparent Conflict on the CCL with the EAR Order of Review and the ITAR

13. USML Category VIII(h)(1) implicates test equipment: Parts, components, accessories, attachments, and equipment specially designed for the following U.S.-origin aircraft: the B-1B, B-2, F-15SE, F/A-18 E/F/G, F-22, F-35 and future variants thereof; or the F-117 or U.S. Government technology demonstrators. Parts, components, accessories, attachments, and equipment of the F-15SE and F/A-18 E/F/G that are common to earlier models of these aircraft, unless listed in paragraph (h) of this category, are subject to the EAR.

NOTE TO PARAGRAPH (h)(1): Specially designed (see §120.4(b)(3)(ii) of this subchapter) does not control parts, components, accessories, and attachments that are common to aircraft described in paragraph (a) of this category but not identified in paragraph (h)(1), and those identified in paragraph (h)(1). For example, a part common to only the F-14 and F-35 is not specially designed for purposes of the ITAR. A part common to only the F-22 and F-35—two aircraft models identified in paragraph (h)(1)—is specially designed. [emphasis added].
14. USML Category VIII(h)(1) appears to, under the ITAR, control test equipment used exclusively in or with one or more of the B-1B, B-2, F-15SE, F/A-18 E/F/G, F-22, F-35 or future variants thereof, or the F-117, or U.S. Government technology demonstrators.

15. Despite the apparent control for test equipment under USML Category VIII(h)(1), Export Control Classification Number (ECCN) 9B610, under Related Controls, states: USML Category VIII(h)(1) controls “parts,” “components,” “accessories,” “equipment,” and “attachments” “specially designed” for the aircraft enumerated or otherwise described in Category VIII(h)(1), but does not control the commodities enumerated or otherwise described in ECCN 9B610. USML Category VIII(h)(2)-(26) controls other aircraft “parts,” “components,” “accessories,” “attachments,” “equipment,” and “systems.” [emphasis added].

16. Indeed, ECCN 9B610.a includes in the list of items controlled: Test, inspection, and production “equipment” “specially designed” for the “production,” “development,” operation, installation, maintenance, repair, overhaul, or refurbishing of commodities enumerated or otherwise described in ECCN 9A610 (except 9A610.y) or USML Category VII, and “parts,” “components,” “accessories,” and “attachments” “specially designed” therefor.” [emphasis added].

17. However, without the ECCN 9B610 Related Controls description, ECCN 9B610.a could be viewed as a large net catching much of the test equipment which, by virtue of ECR, is not subject to the ITAR; therefore, not in direct conflict with a control parameter on the USML.

18. But the ECCN 9B610 Related Controls description appears to go further; even so far as to supersede the Order of Review in EAR Supplement No. 4 to part 774.

19. As such, members of industry familiar with the ITAR may self-classify test equipment uniquely used in or with the B-2 under USML Category VIII(h)(1), whereas other industry members might look at the ECCN 9B610 Related Controls description and self-classify the same test equipment under ECCN 9B610.a.
20. If it is the intention of ECR that test equipment, generally, is not subject to the ITAR, the ITAR should be modified to reflect that intent; otherwise, the ECCN 9B610 Related Controls description and other similar such descriptions should be modified to better align with the Order of Review as described in EAR Supplement No. 4 to part 774.

Software as “Equipment” in the EAR

21. The EAR defines the term “equipment” in part 772 as:
   A combination of parts, components, accessories, attachments, firmware, or software that operate together to perform a function of, as, or for an end item or system. Equipment may be a subset of “end items” based on the characteristics of the equipment. Equipment that meets the definition of an end-item is an end-item. Equipment that does not meet the definition of an end-item is a part, component, accessory, attachment, firmware, or software.

22. The EAR definition for the term “equipment” is almost identical to the ITAR definition for the term “equipment” (see Line 5 above).

23. The structure of the CCL is markedly different from the structure of the ITAR, especially in that each CCL category contains the same five groups; namely:
   A-Equipment, Assemblies and Components
   B-Test, Inspection and Production Equipment
   C-Materials
   **D-Software**
   E-Technology

24. The ITAR, on the other hand, generally captures software, technical data, and defense services all under one USML entry per each USML Category.

25. Because of the structure of the ITAR and the USML, the ITAR definition of the term “equipment” does not tend to wreak significant unintentional havoc on the clarity of USML controls.

26. On the CCL, however, use of the term “equipment” implies that a control for software exists outside of group D ECCNs when that might not be BIS’s intent.
27. For example, the use of the term “equipment” in ECCN 9B610.a (see Line 16 above) implies that ECCN 9B610.a controls certain software when it is probably BIS’s intent that any such software classify for export from the US under ECCN 9D610.

28. Because the CCL has a structure that is not the same as the structure of the USML, it is reasonable for the EAR to maintain definitions which reflect such structural differences.

29. The EAR should have a definition for the term “equipment” which reflects that the structure of the CCL has a group within each CCL category earmarked solely for software.

Uniformity with Respect to Terminology

30. The header for ECCN 9D104 reads: “Software” specially designed or modified for the “use” of equipment controlled by ECCN 9A001, 9A012 (for MT controlled items only), 9A101 (except for items in 9A101.b that are “subject to the ITAR,” see 22 CFR part 121), or 9A106.d. [emphasis added].

31. The Related Controls description for ECCN 9D104 reads: “Software” for commodities specified in ECCNs 9A005 to 9A011, 9A103 to 9A105, 9A101.b (except for items that are subject to the EAR), 9A106.a, .b, and .c, 9A107 to 9A109, 9A111, 9A115 to 9A118 is “subject to the ITAR” (see 22 CFR parts 120 through 130). [emphasis added].

32. In order to avoid confusion, especially given ECR’s dependence on defined terms, such aberrations should be replaced or stricken altogether.

RECOMMENDATIONS

33. Please consider the above-described and following recommended revisions (recommended additions below in bold red font; deletions in blue strikethrough font) for not only these ECCNs, but also, as applicable, for any other similarly situated CCL entry:
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EAR part 772 – Definitions of Terms

Equipment. This is a combination of parts, components, accessories, attachments, firmware, or software that operate together to perform a function of, as, or for an end item or system. Equipment may be a subset of “end items” based on the characteristics of the equipment. Equipment that meets the definition of an end-item is an end-item. Equipment that does not meet the definition of an end-item is a part, component, accessory, attachment, or firmware, or software. Software, either alone or combined with other software, is not equipment; it is software.

EAR part 774 – The Commerce Control List
CCL Category 9

9B610 Test, inspection, and production “equipment” and related commodities “specially designed” for the “development” or “production” of commodities enumerated or otherwise described in ECCN 9A610 or USML Category VIII (see List of Items Controlled).

...Related Controls: USML Category VIII(h)(1) controls “parts,” “components,” “accessories,” “equipment,” and “attachments” “specially designed” for the aircraft enumerated or otherwise described in Category VIII(h)(1), but does not control the commodities enumerated or otherwise described in ECCN 9B610. USML Category VIII(h)(2)-(26) controls other aircraft “parts,” “components,” “accessories,” “attachments,” “equipment,” and “systems.”

...9D104 “Software” specially designed or modified for the “use” of equipment controlled by ECCN 9A001, 9A012 (for MT controlled items only), 9A101 (except for items in 9A101.b that are “subject to the ITAR,” see 22 CFR part 121), or 9A106.d.

...Related Controls: “Software” directly related to for commodities specified in ECCNs 9A005 to 9A011, 9A103 to 9A105, 9A101.b (except for items that are subject to the EAR), 9A106.a, .b, and .c, 9A107 to 9A109, 9A111, 9A115 to 9A118 is “subject to the ITAR” (see 22 CFR parts 120 through 130).

Matthew J. Lancaster
PRIVATE CITIZEN

March 18, 2015
Submitted Via E-Mail (DDTCPublicComments@state.gov)

Mr. Edward Peartree
Director, Office of Defense Trade Controls Policy
Directorate of Defense Trade Controls
U.S. Department of State
Washington, D.C.

Re: Review of United States Munitions List (USML) Categories VIII and XIX (DOS-2014-0030)

Lockheed Martin Corporation (Lockheed Martin) is pleased to submit the following comments in response to the March 2, 2015 notice of inquiry regarding USML Categories VIII and XIX. Lockheed Martin commends the Departments of State and Commerce for their commitment to conducting periodic reviews of the USML categories that have recently been revised as part of the President’s Export Control Reform (ECR) initiative. As noted in the request for comments, the control lists should be “revised and updated to account for technological developments, practical application issues identified by exporters, and changes in the military and commercial applications of items affected by the list.” Regular comprehensive reviews of the control list categories will greatly help to ensure these objectives are met.

In particular, the Department has asked for comments on several subjects, including: defense articles that are described in the control text, but which have entered into normal commercial use since the most recent revisions to the category; and defense articles for which commercial use is proposed, intended, or anticipated in the next five years. With this in mind, Lockheed Martin has identified several control parameters in Category VIII that warrant further review and revision.

Specifically, Lockheed Martin is providing recommendations for modifying controls on military airlift aircraft (Category VIII(a)(14)) and certain parts and components integrated into aircraft controlled by Commerce Export Control Classification Number (ECCN) 9A610 (Category VIII(e) and (h)(10)&(17)). Recommendations are intended to address two issues:

1) Correcting the inadvertent and unanticipated control of legacy Lockheed Martin L-100 aircraft on the USML. These aircraft have been in commercial service and controlled under the jurisdiction of the Department of Commerce for decades. Clearly, the intent of the ECR initiative was not to impose greater export controls on these non-military aircraft; and
(2) Transferring control of commercial transport aircraft under development, such as the LM-100J, to the Commerce Control List (CCL). The LM-100J is developed for civil/commercial use, and is a good example of the type of commercial innovation and investment that export control list reform was intended to encourage. The LM-100J is readily distinguishable from the C-130J, which is the military variant of the same basic platform.

These proposed changes to Category VIII would improve the efficacy of U.S. export controls and help accomplish the stated objectives of ECR, including improving U.S. competitiveness abroad – which strengthens international partnerships, increases interoperability, sustains the U.S. industrial base, and lowers costs for U.S. systems – and enabling the U.S. government to focus limited export control resources on transactions that pose greater concern.

I. UMSL Category VIII(a)(14): Military Airlift

Under the current Category VIII(a)(14), “aircraft with a roll-on/roll-off ramp, capable of airlifting payloads over 35,000 lbs. to ranges over 2,000 nm without being refueled in-flight, and landing onto short or unimproved airfields” are deemed to be military aircraft worthy of control as defense articles. However, Lockheed Martin does not consider these capabilities – which are inherent to existing commercial aircraft and important for many commercial/civil applications – to be suitable criteria for controlling a critical military capability on the USML.

As noted in the Department’s request for comments, when revisions to Category VIII entered into force in 2013, “With limited exceptions, the defense articles that warranted control on the USML were those that provided the United States with a critical military or intelligence advantage. All other items were to become subject to the Export Administration Regulations [EAR].” However, the broad criteria used in Category VIII(a)(14) do not define a capability that provides such a critical advantage. As described in greater detail below, many U.S. and foreign aircraft have the capability to operate in austere environments within the range-payload parameters identified in Category VIII(a)(14). Moreover, the current USML criteria inadvertently capture existing commercial aircraft, such as the legacy Lockheed Martin L-100 aircraft, that have been controlled on under the jurisdiction of the Department of Commerce for decades.

It is our understanding that the intent of Category VIII(a)(14) was to ensure that certain military platforms, such as the C-130J Super Hercules, which provides tactical airlift capability to the U.S. Air Force, remained on the USML. The C-130J is the most flexible airlifter in the world – a proven, highly reliable and affordable airlifter that has been selected by 15 nations around the globe. Although the C-130J can satisfy many civil and commercial mission requirements – including firefighting, medical, humanitarian and disaster relief functions – Lockheed Martin does not recommend that the C-130J be removed from the USML. Instead, USML control parameters should recognize that what makes the C-130J – and similar military tactical airlift platforms – a sophisticated piece of military equipment is not its inherent flight/performance capabilities, but rather the military systems integrated into the aircraft which enable it to perform effectively in combat/military environments. When these military capabilities are removed from the aircraft, the airplane becomes similar to other commercial aircraft competing in the
international marketplace. Accordingly, Category VIII controls should ensure that existing and future commercial aircraft that do not provide a critical military advantage are not inadvertently controlled as defense articles.

**Legacy L-100 Aircraft Controlled as Commercial Aircraft**

Most L-100 currently in use are more than 23 years old. Originally designed and developed in the 1960s as a civil variant of the C-130, Lockheed Martin manufactured and sold versions of the L-100 until 1993. Over time, structural fatigue has limited the operational capability of the aircraft, reducing the range and flight characteristics. However, even with this reduced capability, Lockheed Martin has determined that the legacy L-100 aircraft are “capable of” airlifting a payload over 35,000 lbs over 2,000 nm. (Note: The range of the L-100 aircraft as delivered exceeded 2,800 nm for all models.) Current operators of the L-100 aircraft confirm that the actual range performance of existing aircraft exceeds the 2,000 nm threshold, without reserves.

Yet, the L-100 has been subject to the jurisdictional controls of the Department of Commerce’s EAR since its civil FAA certification in 1965. All L-100-type aircraft have been sold internationally as commercial aircraft. The Department of State confirmed the Commerce jurisdiction for the overall L-100 aircraft as recently as 2006 and posted public guidance confirming this interpretation until 2013. Lockheed Martin knows of no compelling national security reason to change this policy.

A change in jurisdiction would unnecessarily complicate export licensing and compliance requirements for U.S. exporters supporting the 50+ L-100 aircraft operating globally. Revisions to Category VIII(a)(14) were intended to provide objective parameters of control for tactical military airlift platforms, not capture aircraft already controlled as commercial items – particularly for aircraft that have little, if any, military utility. As commercial aircraft technology continues to advance and the need/ability for aircraft to operate in non-traditional environments (e.g., short and/or unimproved runways) expands, the control parameters outlined in Category VIII(a)(14) may inadvertently control other civilian aircraft in existence or development – including Lockheed Martin’s LM-100J – not suitable for military missions.

The current Category VIII(a)(14) control parameters frustrate the ability for current L-100 operators to continue commercial business operations and inhibit U.S. parts and component suppliers’ ability to support these aircraft. As stated in the notice of inquiry, the advantage of a “more positive” USML is that controls can be targeted to satisfy national security objectives “without inadvertently controlling items in normal commercial use.” There is no doubt that the L-100 aircraft have been in normal commercial use for decades. Category VIII(a)(14) should therefore be revised to rectify this unforeseen outcome of the list reform effort.

**LM-100J – The Next Generation of Commercial Transport Aircraft**

Lockheed Martin has developed a new civil variant of the C-130. The LM-100J will leverage the same technological investment that went into updating the C-130J to reduce manpower
requirements, lower operating and support costs, and provide life-cycle cost savings over earlier models. The LM-100J will compete in a class of 16-25 ton aircraft with offerings from numerous foreign competitors – including Russia, Europe, Brazil, and China. All of these competitive aircraft are not identical, and some capabilities (e.g., jet propulsion, expanded cargo space) may be more suitable for certain customer requirements. Lockheed Martin believes there is a robust commercial market for the LM-100J. In particular, the LM-100J is an attractive platform for domestic and international customers looking to fulfill civil, commercial, and humanitarian requirements:

- Serving markets where road and ports cannot get perishable products to markets before they spoil;
- Delivering goods to fragile ecosystems where other transportation modes might require hundreds of miles of roads or rails scarring the environment;
- Providing access to basic energy and food that have been denied due to natural disasters or de-stabilizing elements; and
- Gaining access to important global energy sources and other natural resources that can only be accomplished by air assets operating in harsh environments.

The legacy L-100 has proven itself as an essential piece of equipment in building and sustaining the Trans-Alaska pipeline, mitigating the Gulf Oil spill, and everyday supply of food, medical aid, and other human necessities to locations that are not reachable through other modes of transport. As the global middle class continues to expand and more communities in the developing world begin to enter the global marketplace, the need for these cargo transport services to remote areas will grow.

The ability of the L-100 and LM-100J to land on dirt/unimproved runways is a key aspect of the utility of the aircraft, but not an inherently military capability or a critical military advantage. There are many other civil aircraft that have proven to operate out of unimproved runways. For example, early generation Boeing 737s had an “unpaved strip kit” option available beginning in 1969. At the peak of their operations, 737s were making over 2,000 dirt landings a year. Other aircraft have also been flown from unimproved runways, including the 727. In fact, there are existing aircraft operators in Africa (e.g., Transafrik) that operate 727 aircraft from the same dirt runways on which L-100 aircraft operate. Another example is the new Pilatus (Switzerland) PC-24 business jet, which has a large cargo door and is designed to operate from dirt strips as their single engine PC-12 aircraft have always done.

Similarly, roll-on/roll-off (RO/RO) is not unique to military aircraft. RO/RO is attractive to any customer that is interested in the efficient loading of oversize payloads. This is a critical feature for many commercial customers that do not have pre-positioned loading equipment in remote areas. In addition to the L-100 that are operating commercially around the globe, both the Russian AN-12 and IL-76 aircraft have RO/RO ramps and are capable of landing on short or unimproved airfields. These aircraft are flown by many commercial transport operators.

Moreover, new aircraft with RO/RO capability are emerging on the commercial market. For example, the Embraer C-390 from Brazil features a rear cargo ramp and door, modern commercial turbofan engines, and an advanced cockpit capability. Embraer plans an ambitious
campaign in both the military and commercial marketplace, teaming with U.S. companies to market the aircraft in the U.S., Europe, and in several Middle Eastern countries. The Chinese Y-9 and Y-20 aircraft with similar capabilities are also expected to emerge in the global market in the coming years. Indeed, Lockheed Martin expects the market for aircraft capable of operating in these non-traditional environments to increase. Providing RO/RO capability and the ability to land in austere environments will be important market discriminators for companies interested in capturing this business.

All of the existing L-100, AN-12, and IL-76 aircraft are reaching the end of their lifespan, and their numbers are dwindling each year due to their age. If these aircraft are not replaced with new commercial aircraft with similar capabilities, there will be a shortfall in global capacity to deliver economic development, humanitarian and disaster relief over the next decade. The United States should recognize the importance of filling this gap with a proven U.S.-origin commercial aircraft and not cede market share to new foreign market entrants.

**LM100J & C-130J are not the Same Aircraft**

The LM-100J is an inherently civilian aircraft that is significantly different from the military C-130J aircraft. There are many examples of aircraft – both U.S. and foreign made – that have military and commercial versions of the same basic platform. It is the addition of military systems/equipment that transforms a commercial aircraft into a viable military aircraft, not the basic airframe or performance parameters. Examples of military-specific equipment that could transform a commercial platform include, *inter alia*:

- Aircraft self-defense systems
- Aircraft survivability systems
- Military IFF transponders
- Military mission equipment
- Military tactical radios
- Military training systems
- Armaments/weapon systems
- Targeting systems
- Electronic counter measures
- Ballistic Protection/Armor

All of the systems and functions that make the C-130J a highly-sophisticated military platform, including those listed above, have been removed. The LM-100J lacks any of the self-protection systems of the C-130J. It has no flame arresting foam in the fuel tanks and lacks the ability to operate the paratroop doors in flight. There are no military-specific radios, data links, or encryption capabilities. As important, the LM-100J is not easily transformed into a military significant platform; due to the integrated nature of the LM-100J avionics, an unauthorized third-party would find it very difficult to integrate military systems onto the aircraft.

**Controlling L-100/LM-100J as Defense Articles Will Cede Market Share to Foreign Competitors**

As noted above, controlling the 50+ legacy L-100 aircraft operating around the world would roll back decades of control as a commercial aircraft. In addition, capturing emerging U.S. commercial platforms will make U.S. companies less competitive in the international marketplace. Controlling aircraft operating in a commercial environment as defense articles presents substantial obstacles to the civil operators, including additional restrictions on marketing and financing, complicating the provision of parts and maintenance to broken aircraft, increased
licensing requirements for related services, and temporary import license requirements for repair of spares serviced in the United States. These complications not only increase the cost of commercial operations, but also add time in a fast-paced, profit-driven market that places a premium on efficiency. In fact, the ease of repair and maintenance on the LM-100J is one of its most attractive commercial qualities, but this market advantage will be diminished if subjected to the extensive licensing requirements that accompany USML control. Simply put, international customers looking to fulfill commercial aircraft requirements are more likely to prefer commercial aircraft.

Increasing the cost of aircraft not only makes U.S. exporters less attractive to foreign purchasers; it also drives up costs for domestic U.S. sales as well. By ceding commercial sales to foreign competitors, U.S. companies are unable to benefit from the economies of scale that would reduce costs for aircraft sold to the U.S. Government.

As noted in the March 2, 2015 notice of inquiry, one of the objectives of reviewing the control list is to “strengthen the U.S. industrial base by, among other things, reducing incentives for foreign manufacturers to design out and avoid U.S.-origin content and services.” Ensuring that the L-100/LM-100J are able to be sold and maintained as commercial aircraft is in the U.S. public interest and will bring economic gain for the United States.

Recommendation: There are a number of potential reforms to Category VIII(a)(14) that could effectively address this issue, including:

1) **Delete Paragraph VIII(a)(14):** As noted above, sophisticated military airlift platforms, such as the C-130J, will continue to be controlled on the USML due to the integrated military mission systems. Deleting paragraph (a)(14) would ensure that civilian aircraft that do not have these military systems would be controlled as commercial aircraft without sacrificing any controls on military aircraft. L-100/LM-100J would transition from USML Category VIII to Commerce Export Commodity Classification Number (ECCN) 9A610.

2) **Revise Paragraph (a)(14) to reference integrated military functions:** This option maintains the explicit control of military airlift aircraft, but limits controls to those with one or more military mission systems.

   “Aircraft with a roll-on/roll-off ramp, capable of airlifting payloads over 35,000 lbs. to ranges over 2,000 nm without being refueled in-flight, and landing onto short or unimproved airfields and incorporating one or more mission systems as listed in paragraph (a)(11) Note 1 of this category;”

This language would specifically capture military aircraft “that perform specific military functions, such as by providing military communication, electronic warfare, target designation, surveillance, target detection, or sensor capabilities.” L-100/LM-100J would transition from USML Category VIII to Commerce Control ECCN 9A610.
3) **Revise Paragraph (a)(14) to add explicit reference to military mission systems:**
Lockheed Martin understands that the U.S. government may consider revising the controls on mission systems identified in Category VIII(a)(11). Lockheed Martin concurs that (a)(11) could benefit from revision, including improved alignment of controls with Category XI of the USML. In the event that paragraph (a)(11) was significantly changed or removed, this language would maintain USML controls on military airlift aircraft, similar to option (2) above.

“Aircraft with a roll-on/roll-off ramp, capable of airlifting payloads over 35,000 lbs. to ranges over 2,000 nm without being refueled in-flight, and landing onto short or unimproved airfields and incorporating systems, equipment, assemblies, modules, and/or components that provides one or more of the following functions:

(i) **Aircraft Missile/Self Protection Systems, including:**
   (A) Radar Warning
   (B) Missile Warning
   (C) Infrared Countermeasure
   (D) Flare/Chaff Countermeasures

(ii) **Electronic Warfare (EW) and/or Electronic Counter Measure (ECM)**

(iii) **Voice and/or Data Communications that includes Electronic Counter-Counter Measure (ECCM) (i.e. HAVEQUICK III, SINCgars, SATURN)**

(iv) **U.S. government Identification Friend or Foe (IFF) Modes 4 or 5**

(v) **Military and/or intelligence cryptographic (including encryption, decryption, and key management)**

(vi) **Protective/Self-protection armor (for crewmembers and critical systems)**

(vii) **Global Positioning System (GPS) receiving equipment that can decrypt precise positioning service (PPS) signals and/or used with antenna designed to reduce or avoid jamming signals.”**

4) **Revise Category VIII(a)(14) to include a negative list of excluded aircraft:** Options (2) and (3) above would create a positive list of aircraft controlled on the USML. This option would rely on civil certification to exempt commercial aircraft as follows:

“Aircraft with a roll-on/roll-off ramp, capable of airlifting payloads over 35,000 lbs. to ranges over 2,000 nm without being refueled in-flight, and landing onto short or unimproved airfields, **excluding aircraft that have both a Civil Aircraft Design Type certificate and a Standard Certificate of Airworthiness that are FAA approved, active, current, and valid;**”

II. **Category VIII (e) & (h): Aircraft parts, components, accessories, attachments, associated equipment and systems**

Lockheed Martin is also seeking clarification on controls for several aircraft parts and components identified in Category VIII (e) and (h).

Specifically, Category VIII(h)(10) controls “Radar altimeters with output power management or signal modulation (i.e., frequency hopping, chirping, direct sequence-spectrum spreading) LPI (low probability of intercept) capabilities (MT if for an unmanned aerial vehicle, drone, or
missile that has a "range" equal to or greater than 300 km." Lockheed Martin recommends that USML controls on these items exclude specific equipment that has achieved civil FAA Technical Standard Order (TSO) conformity. This approach is already used in other revised categories of the USML. For example, in a note to Category XI(a)(3), the USML excludes control of various specific radar/radio systems, including radar altimeter equipment conforming to FAA TSO-C87. Referencing commercial standards for radar/radio altimeter equipment, as contained in FAA TSO-C87, would ensure that paragraph (h)(10) does not inadvertently capture commercial civil-certified avionics equipment.

Recommendation: Add a note to Category VIII(h)(10) as follows: "NOTE TO PARAGRAPH (h)(10): This paragraph does not control radar/radio altimeter equipment conforming to FAA TSO C87."

In addition, Category VIII(h)(17) controls: "Mission computers, vehicle management computers, and integrated core processors specially-designed for aircraft controlled in this category or controlled in ECCN 9A610". The process of designing a new aircraft starts with basic payload, range, airways, airfield and cost requirements. To reduce both initial acquisition and lifetime operating costs, aircraft designers minimize complexity, number of parts, and number of crew that it takes to safely meet functional requirements. For the past 30 years, this has led to the development of common parts and centralized systems for functional elements of the aircraft configured to perform multiple functions. The result is the creation of integrated modular avionics – mission computers, integrated core processors, and vehicle management units – that enable the aircraft to be operated with fewer crew members and maintained and supported more safely, easily and affordably than aircraft in the past. These benefits are important to both civil and military aircraft competitiveness and safety. As a general matter, aircraft controlled by Commerce ECCN 9A610 will contain such systems. Controlling these systems as USML items would undermine the benefits described above.

Recommendation: Lockheed Martin recommends a minor revision to the note at the end of Category VIII: "Inertial navigation systems, aided or hybrid inertial navigation systems, Inertial Measurement Units, and Attitude and Heading Reference Systems in paragraph (e) and parts, components, accessories, and attachments in paragraphs (h)(2)-(5), (7), (13), (14), (17)-(19), and (21)-(26) are licensed by the Department of Commerce when incorporated in a military aircraft subject to the EAR and classified under ECCN 9A610. Replacement systems, parts, components, accessories and attachments are subject to the controls of the ITAR." This note is critical to ensure that the USML does not inadvertently control commercial aircraft controlled under ECCN 9A610, including the LM-100J, if changes recommended in Section I above are adopted. Removing "military" would clarify that although items in 9A610 may have been transferred from the USML, they may not all be military items.

CONCLUSION

Thank you for the opportunity to provide comments in response to the notice of inquiry regarding USML Categories VIII and XIX. Lockheed Martin remains committed to supporting the ongoing effort to reform and improve the U.S. export control system. We are confident that the charges recommended above will have a positive impact on our ability to support U.S.
national security and foreign policy priorities by fostering U.S. competiveness abroad and strengthening international relationships.

If you have any questions related to these comments or would like additional information related to the issues discussed above, please contact Mark Webber, Director, International Trade Policy, Government & Regulatory Affairs at 703-413-5951 or Mark.J.Webber@lmco.com.

For Lockheed Martin Corporation,

Gerald Musarra
Vice President, Government & Regulatory Affairs

cc: publiccomments@bis.doc.gov
Bureau of Industry and Security
U.S. Department of Commerce
May 1, 2015

Regulatory Policy Division
Bureau of Industry and Security, Room 2099B
U.S. Department of Commerce
Washington, DC 20230

ATTN: Mr Todd Willis

SUBJECT: Request for Comments Regarding Controls on Military Aircraft and Military Gas Turbine Engines on the Commerce Control List (RIN 0694-XC023)

Dear Mr. Willis:

Northrop Grumman Corporation wishes to thank the Department for the opportunity to submit comments in review of the above proposed rule as we fully support the continued initiative to complete the fundamental reform of the U.S. export control system. In response, we provide the following:

1) We recommend changing the definition of “specially designed” paragraph “b” within §772.1 from “(b) A “part,” “component,” “accessory,” “attachment,” or “software” that would be controlled by paragraph (a) is not “specially designed” if it: ...” to “(b) An item that would be controlled by paragraph (a) is not “specially designed” if it.” As currently written, the paragraph (b) “release” criteria does not apply to end-items and equipment that meet the (a)(1) control language. For example, an aircraft tow bar for a military non-stealth (VIII(h)(1)) aircraft meets the (a)(1) performance parameters for ECCN 9A610.f. ‘Ground equipment’ “specially designed” for aircraft controlled by either USML paragraph VIII(a) or ECCN 9A610.a. However, even though “specially designed” is in the control language for 9A610.f, it would not apply as “ground equipment” are considered end-items verses the articles described in paragraph (b). We believe it is the USG intent to apply “specially designed” release criteria for all instances of use of the term “specially designed” and offer the recommended change to the language above. Same recommendation was submitted to the Department of State for similar instances in which “specially designed” control language was used to control/release end-items.

2) We recommend deleting 9A619.y.6 (and similar ECCNs) as “shims” meet the release criteria in §772.1 Specially designed, paragraph (b)(2) Is, regardless of ‘form’ or ‘fit,’ a fastener (e.g., screw, bolt, nut, nut plate, stud, insert, clip, rivet, pin), washer, spacer, insulator, grommet, bushing, spring, wire, solder. By definition, shims are nothing more than “spacers.” The terms are often used interchangeably by industry for part description/nomenclature. Shims contain even less technology than the other items listed...
in paragraph (b)(2) and the form of a shim is only ever modified for fit purposes.

3) In general, recommend a consistent use of syntax and terms throughout the entire “600 series” for all categories to increase clarity and understanding by industry. For example, compare/contrast how the terms “hydraulic” and “for” are used/not used in the following entries;

9A610.y.4 Check valves for hydraulic and pneumatic systems;
9A610.y.8 Filters and filter assemblies for hydraulic, oil and fuel systems; and
9A610.y.10 Hydraulic and fuel hoses, straight and unbent lines, fittings, couplings, and brackets.

The availability and level of technology for “check values” does not change if made for water, oil, gas, or hydraulic fluid. The term “hydraulic” as used in “y.4” should represent all types of liquids as is the traditional definition. However, “y.8” and “y.10” use the term “hydraulic” in succession with other liquids “fuel” and/or “oil” which implies the term “hydraulic” in all entries is restricted to just hydraulic fluid, thus making check valves for oil, gas, and water “9A610.x” controlled. The use of the word “for” in the first two entries “y.4” and “y.8” and the lack of the same syntax in “y.10” implies the terms “hydraulic and fuel” only describe the “hoses” and is not “for” describing the “straight and unbent lines, fittings, couplings, and brackets” indicating any type of the latter items are “y.10” controlled.

The same issues exist and the intent of the USG is even less clear when comparing the syntax of the same terms used in other categories as follows;

0A606.y.8 Hydraulic, fuel, oil, and air filters, other than those controlled by ECCN 1A004;
0A606.y.10 Hydraulic system hoses, fittings, couplings, adapters, and valves;
0A606.y.13 Pneumatic hoses, fittings, adapters, couplings, and valves;

8A609.y.2 Filters and filter assemblies, hoses, lines, fittings, couplings, and brackets for pneumatic, hydraulic, oil and fuel systems;
8A609.y.7 Potable water tanks, filters, valves, hoses, lines, fittings, couplings, and brackets;

9A619.y.2 Oil lines and tubes;
9A619.y.3. Fuel lines and hoses;
9A619.y.4. Fuel and oil filters;

The level of technology for these articles is the same irrespective of platform, but controls are inconsistently applied across categories. We therefore recommend “hydraulic” be defined as all types of liquids and “.y” controls regardless of end-item for
all types of valves hoses, lines, fittings, couplings, brackets filters and filter assemblies for pneumatic and hydraulic systems.

4) We recommend “cockpit” be removed from 9A610.y.2, 9A610.y.15, and 9A610.y.23 as the location of “mirrors” or “analog gauges and indicators” or “knobs, indicators, switches, buttons, and dials” does not affect the level of technology. They should have the same level of control regardless if located in the front or back of the aircraft.

5) We recommended to the Department of State that specific “parts,” “components,” “accessories,” and “attachments” which could be classified in any “.y” paragraph on the CCL be released from the USML. The items that are described in the CCL “.y” paragraphs have been determined to be very minor and require lesser controls (AT-only); however some of these parts remain on the USML given “catch-all” paragraphs on the USML (e.g. VIII(h)(1)).

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 Donovan
Director, Export Management
Global Trade Management
The following is the response we provided to a DOC licensing officer when he questioned our 3A611.a classification on a license submitted in January. The licensing officer questioned why it was not classified as 9A610.

The reason we classified the display as 3A611.a is DOC rejected our license last fall for a Head-up Display classified as 9A610.a and told Rockwell Collins they believed it was still ITAR Controlled.

Our subsequent DOS license was also RWA'ed with State claiming the device was Commerce controlled. Rockwell Collins then provided an explanation on how they arrived at 9A610.a as the appropriate classification of the HUD, and then asked the two agencies to please discuss the matter and give us the correct classification.

After approximately 4 weeks, Rockwell Collins was directed to seek a State Department license for the HUD as a CAT XI(c) device. Rockwell Collins maintains that Head-up display's and Head-down displays are devices that perform the exact same function in an aircraft, utilizing similar technology.

When the reforms to Category XI of the ITAR became effective on December 30, 2014, Rockwell Collins reclassified our military aircraft displays to 3A611.a, based on previous guidance from the US Government that these displays were military electronics.

We feel that the correct area of classification would be in 9A610 because these displays are only used in a aircraft to display Avionics data. Our suggestion would be to add in verbiage to Cat VIII and 9A600 series to address Displays.
Rolls-Royce plc
62 Buckingham Gate
London SW1E6AT
United Kingdom

30 April 2015

Regulatory Policy Division
Bureau of Industry and Security
U.S. Department of Commerce
Room 2099B, 14th Street and Pennsylvania Ave. NW
Washington DC 20230

Submittal via Regulations.gov Portal
Request for Comments, March 2, 2015

Subject: Controls on Military Aircraft and Military Gas Turbine Engines on the Commerce Control List

1. Rolls-Royce plc offers the following comments to the Bureau of Industry and Security (BIS) in response to the request on March 2, 2015 (80 Fed. Reg. 11315).

STA Exception & Prior Consignee Statement

2. Rolls-Royce welcomes the concept of the STA and has already started to see some potential benefits, particularly on collaborative defense programs. However, the STA does not authorize the use of 9E619.b and 9E619.c technology, a license is required. Specifically, Paragraph (c)(1) of License Exception STA may not be used for 9E619.b or. c technology. This leads to items that have different ECCN’s having multiple authorizations and compliance requirements. We are therefore put-off using this license exception more fully for the time being.

3. In addition, the Prior consignee statement as per § 740.20(d)(2) states the foreign nationals approved are restricted to A:5, but this appears to be contradictory to the advice in the BIS deemed re-export guidance as of 31.10.2013. Further guidance on this would be welcomed.

4. Rolls-Royce welcomed the recent oral guidance from BIS officials (during one of the weekly phone calls with industry) that prior consignee statements are not required where the recipient is a foreign government. We are content to follow this guidance, but the text of the regulations seems to indicate such statements are required from all recipients. This has been causing some confusion and disagreement with customers and partners in the supply chain who have not heard of or do not recognize the oral guidance. We therefore propose some written
guidance on this matter to clarify once and for all whether a prior consignee statement is required for governments and if so, under what specific circumstances. BIS could require either no prior consignee statement (as with license exception GOV), or written notice to the Government similar to EAR § 749.20(d)(4) for releases of software source code or technology.

5. For example, EAR § 749.20(d)(2) provides that for exports or re-exports (other than transfers of software source code within a single country), a person relying on license exception STA must seek a prior consignee statement. The language of the regulations appears to indicate that such prior consignee statements are required from governments.

6. Paragraphs (d)(2)(i) through (vi) of this section imply that statements are required for all transactions. In addition, paragraph (d)(2)(vii) is required for all transactions in “600 series” items and paragraph (viii) of this section is required for transactions in “600 series” items if the consignee is not the government of a country listed in Country Group A:5 (See Supplement No. 1 to part 740 of the EAR).

7. The reference to a section not required for a government consignee would seem to indicate that the other sections are required for government consignees.

Letter of Assurance (LoA)

8. Rolls-Royce has been seeing many different types of LoAs, some much more detailed than others. It would therefore be useful to have a BIS template for a standard/model LoA. This would ensure consistency and full compliance with BIS requirements.

General Prohibition Three

9. Rolls-Royce proposes that additional clarification be provided in relation to the re-export and export from abroad of the foreign-produced direct product of US technology and software (Foreign-Produced direct Product Re-exports).

10. The Letter of Assurance requirement, as per Supplement 2, to Part 748 (o)(3)(i), does not take into account country group D:3, D:4, or D:5, for 600 series controlled items. Part 736, General Prohibition Three, implements additional country scope of prohibition for "600 series" items. If technology subject to 9E619 is exported to the UK, an LoA is required. The LoA can be enhanced when there is a requirement to obtain an LoA for 600 series technology, to also include country groups D:3, D:4, and D:5.

11. The Letter of Assurance as per Supplement 2, to Part 748 (o)(3)(i) - only references "export": "If you are submitting a license application to export technology controlled for national security reasons.." Does this requirement apply to re-export or re-transfer license applications submitted by non-US persons?

License - Riders and Conditions

12. It would be helpful if there was a BIS template/guidance issued for how an "Applicant Informs all consignees" of the license riders and conditions. Rolls-Royce has been seeing varied approaches to this requirement and some contractors in the supply chain are demanding
written acknowledgements and others are not. Clarification on this matter would help to ensure full compliance with BIS intentions.

**Deemed Re-export Guidance**

13. EAR License D:5 country group foreign national condition does not link back to the BIS Deemed re-export guidance. Rolls-Royce would like to understand the thinking behind this.

**Jurisdiction/Classification – Steps to Facilitate Self-Determination**

14. BIS and Dept of State has been encouraging non-U.S. companies to make their own determination of jurisdiction and classification for transitioning items. This has been a significant concern and challenge for non-U.S. defense industry participants in Europe; both end manufacturers and suppliers. Simply put, companies are fearful of U.S. enforcement activities for well-meaning attempts to classify, particularly where they have been unable to get a US supplier to provide a classification or the information necessary to undertake self-determination. Rolls-Royce is aware of the recent US Government response to an enquiry by the UK Export Group for Aerospace and Defence (EGAD) stating that non-US recipients, not just the OEM, may proceed with self-classifications where such information cannot be obtained from the original US source. However, the risks of getting such self-classifications wrong were also emphasized. Addressing this concern correctly will ease the burden both on BIS and DDTC in responding to CJ and CCATS, as well as on U.S. manufacturers or exporters who will be approached repeatedly for written assurances from UK companies, such as Rolls-Royce plc, which may lead to additional U.S. CJ and CCATS requests.

15. Rolls-Royce therefore encourages BIS to coordinate with DDTC and provide additional guidance for non-U.S. companies in terms of what they think is reasonable and proportionate when undertaking self-classifications, particularly when they simply cannot get the information required from the US supplier/exporter.

16. More importantly, we would urge BIS and DDTC to consider taking steps to encourage U.S. suppliers/exporters to provide complete classification information to UK industry and other non-U.S. parties. It would be particularly helpful if U.S. industry could be informed that they should proactively provide full classification information, including any provisos or license restrictions, to foreign recipients and that they should fully co-operate should recipients request information if they have to undertake their own self-classifications.

**Re-exports of Transitioned Items Under DDTC Authorizations**

17. Many DDTC licenses and authorizations are nearing the end of their two year period of validity for items, software and technical data that have transitioned to EAR control. Some of these DDTC licenses or authorizations provided for multiple steps for manufacture and subsequent re-exports. It is clear that new exports would not be permitted after the two year transitional period (or if the license or agreement otherwise expires). It is still not fully clear whether a string of exports and re-exports, if begun prior to the effective date of ECR or during the two year transition period, can be completed afterwards. We would therefore encourage BIS and DDTC to allow further re-transfers under the original DDTC license in such circumstances provided the DDTC license remains valid.
Conclusion

18. Rolls-Royce plc continues to welcome and support the US Export Control Reform program and has been actively transitioning numerous licenses from the ITAR regulations over to the new EAR – 600 Series. Although this has been a significant exercise as so many of our parts and products have had to be re-classified with new licenses being put in place, we are already starting to see some of the potential benefits of the new EAR regulations affecting gas turbine engines, particularly the number of license exceptions that are available. However, our experience to date suggests that many suppliers and contractors still do not fully understand the nuances of the new license exceptions and record-keeping requirements and on-going guidance and communication will therefore be essential well beyond the 15 October deadline for transition.

Yours sincerely

Warren Bayliss
Head of Export Controls – Defence Aerospace
Dear Mr. Wolf,

On behalf of Rolls-Royce North America Holdings Inc. (the Company), I am pleased to respond to the March 2, 2015, Federal Register Notice requesting comments on the proposed ECR revisions for Controls on Military Aircraft and Military Gas Turbine Engines on the Commerce Control List.

Rolls-Royce offers the following items up for discussion to enhance understanding and functionality of the regulations:

1. **Reconsider controls on 9A619.y items.** Most, if not all, y items would be caught and released after a complete “Specially designed” analysis. This is especially true for clamps, shims and identification plates, as well as tubes and hoses. There would be little harm in simply eliminating the ECCN.
   a. Identification plates are generally sheet metal. Information is added, but the technology (drawing) would not be specially designed.
   b. Hoses and tubes are generally standard stock available with standard connectors. There is no special performance other than to move fluids.

2. **Reconsider Forging and Casting Notes.** These notes only include 9A619.c and 9A619.x. This is confusing and inconsistent, particularly as regards 9A619.d and 9A619.e. A redraft to consolidate these ECCNs would clarify this important area. The note is also not included in other 9A ECCNs including 9A991. This should be consistent across all applicable ECCNs or removed.

3. **600 Series services.**
   a. As items transition from the ITAR to the EAR, the direction remains unclear how to treat “defense services” as applied to 600 series items. The history of ECR suggests 600 series items should be treated as militarily significant, but there is no regulatory justification for applying the “defense services” rationale to 600-series items.
   b. The ITAR definition of export specifies the transfer of technical data or the provision of a defense service must be to, on behalf of, or for the benefit of a foreign person. This definition excludes the provision of these items to US persons abroad (e.g. US military, US business associates). The EAR description of “Export of technology or software” §734.2(a)(2) specifies the export of technology includes any release of technology in a foreign country. §734.2(a)(3) defines the release of technology as including oral exchanges or the application of personal knowledge or experience abroad. Therefore, services or technology provided from one US person to another while abroad is an export subject to the EAR.
As an example, the ITAR does not regulate the provision of defense services to the US military abroad. However, the EAR does. Since this activity is an export in subject to the EAR, it has predominantly been authorized as an EAR controlled item exported under the DDTC approval for the export of the defense articles used in the performance of the defense services. However, if no defense articles are required for the performance of the service (e.g. technical training, some repair and maintenance, exchange of technology between business associates traveling together) then the service would need to be approved under the EAR independently. License exceptions GOV and TMP may apply to individual situations, but the fact that these events are considered to be exports at all, and subject to the EAR, requires that recordkeeping and Destination Control. This creates a burden on business to scrutinize and control events which the common person would not consider to be exports. An alternate solution would be to mirror the ITAR definition of “export” in the EAR to eliminate the double standard for service and technology transfers between US persons while abroad.

4. **9B619 – Related Control Note.** Updated definitions are not consistent regarding tooling. The direction is unclear whether tooling falls under 9B619 or under XIX(f)(1)/VIII(h)(1) for specified programs. Although the note appears to clearly state 9B619, licenses are being Returned Without Action.

Overseas industry reports the following:

1. **Retransfer issues.**
   a. Great uncertainty over jurisdiction and classification. Rather than overwhelm the system with CJs and CCATs, the U.S. government could consider a no-fault position for incorrect classifications made in good faith.
   b. Reexports of Transitioned DDTC Authorizations. Although the two-year transitions period for aerospace items expires on October 15, 2015, it remains unclear how firm that deadline may be. Non-U.S. companies would benefit from a statement that they may use DDTC license to reexport transitioned EAR items after October 15, so long as the first export in a chain of exports and Reexports occurred before October 15.

2. **STA.**
   a. Works reasonably well in a narrow scope. However, the recordkeeping requirements are essentially transferred from the US to overseas partners. Many firms prefer to use the old system and avoid the paperwork.
   b. Prior Consignee Statements by Governments. EAR 749.20(d)(2) is not clear if it requires Prior Consignee Statements from foreign governments. A simply statement from BIS could easily clarify the matter.

If you require additional information or would like to discuss in greater detail, please contact me at 703.621.2751 or via email at Jeff.Merrell@Rolls-Royce.com or Colin Donahue at 317.230.6854 or via e-mail to Colin.P.Donahue@Rolls-Royce.com.

Sincerely,

William J. Merrell, Vice President
Strategic Export Control Americas
Rolls-Royce North America

[Signature]
Specially Designed in 9x610 and 9x619

The March 2, 2015 Notice of Inquiry seeks comment on the clarity of ECCNs 9x610 and 9x619. The USML is being revised to create a more “positive list” so that, with some exceptions, the USML would not use catch-all phrases, such as “specially designed” to control unspecified items. All other items were to become subject to the jurisdiction of the EAR.

The implication of the March 2 Notice is that 9x610 and 9x619 must use catch-all phrases to control unspecified items. This was clearly the intent with respect to unspecified components being transferred from the USML. However, this comment identifies possible ways to improve the clarity of 9x610 and 9x619 by deleting over-use of specially designed in other respects in those and related ECCNs.

9A003 “Specially designed” assemblies and “components”, not controlled by USML XIX or 9A619, incorporating any of the “technologies” controlled by 9E003.a, 9E003.h, or 9E003.i for ... gas turbine engine propulsion systems ...

The referenced technologies appear to make “specially designed” redundant. “Not controlled by USML XIX or 9A619” would help the exporter decide where to look for controls which take priority under the order of review.

9A610.a ‘Military aircraft’ “specially designed” for a military use that are not enumerated in USML paragraph VIII(a).

Note 1. For purposes of paragraph .a the term ‘military aircraft’ includes the following types of aircraft to the extent they were “specially designed” developed for a military use ... The words “for a military use” do not provide performance levels, characteristics, or functions against which to measure the applicability of (a)(1) in the definition of “specially designed.” This leaves “As a result of development “ in (a)(1) as the only relevant criterion. Changing “specially designed” to “developed” would improve clarity.

9A610.x “Parts,” “components,” “accessories,” and “attachments” that are “specially designed” for a commodity controlled by this ECCN 9A619 9A610 (other than ECCN 9A619.c) or for a defense article enumerated in USML Category XIX VIII and not specified elsewhere on the USML or in ECCN 9A619.y 9A610.y

To correct typos.

Specify that the (a)(2) and (b) portions of the definition of “specially designed” apply to the use of “specially designed” in 9A610.f, h (first use), and u.

Relating these items to VIII(a) and 9A610.a aircraft supports a conclusion that they are accessories or attachments of such aircraft. However, 9A610.x (after typos are corrected per above) reads as though it is the only portion of 9A610 which controls accessories and attachments related to such aircraft. Moving 9A610.f, h (first use), and u (and perhaps also 9A610.g, i, v, and w) to become part of 9A610.x would have the advantage of
applying to them the 9A610.x Note 1 on unfinished products.

If, instead, it is intended to apply the (a)(1) portion of the definition of “specially designed” to the use of “specially designed” in 9A610.f, h (first use), and u, the paucity of technical information against which to measure performance levels, characteristics, and functions suggests consideration of changing “specially designed” to “developed.”

9A610.h ... and “equipment” “specially designed” developed for military high altitude parachutists such as suits, special helmets, breathing systems and navigation equipment.

9A610.j Ground effect machines (GEMS), including surface effect machines and air cushion vehicles “specially designed” developed for use by a military.

9A610.y ... and other aircraft commodities “specially designed” developed for a military use, as follows, and “parts,” “components,” “accessories,” and “attachments” “specially designed” therefor:

It is counter-intuitive that components of 9A610.y components need to be controlled given that components of 9A610.x components are not controlled.

9A619.a “Military Gas Turbine Engines” “specially designed” developed for a military use...

Note. For purposes of 9A619.a, the term “military gas turbine engines” means gas turbine engines “specially designed” developed for “end-items” enumerated in USML Categories VI, VII or VIII or on the CCL under ECCNs 0A606, 8A609 or 9A610.

9A619.b Digital engine controls ... “specially designed” developed for gas turbine engines controlled in this ECCN 9A619.

9A619.c If specially designed for developed with knowledge they would be for use only in gas turbine engines controlled in 9A619.a, hot section components ...

9A619.d If specially designed for developed with knowledge they would be for use only in gas turbine engines controlled in 9A619.a, uncooled turbine blades, vanes, disks, and tip shrouds.

9A619.e If specially designed for developed with knowledge they would be for use only in gas turbine engines controlled in 9A619.a, combustor cowls, diffusers, domes, and shells.

9A619.f Engine monitoring systems ... “specially designed” developed with knowledge they would be for use only for gas turbine engines and components controlled in this ECCN 9A619.

The phrase “developed with knowledge they would be for use only (in) (for) gas turbine engines controlled in 9A619.a” recommended as a substitute for “specially designed” in 9A619.c,d,e,f is the equivalent of the following phrase recommended for USML XIX(f)(2,3,4,5): “developed with knowledge they would be for use only in gas turbine engines controlled in this category.” The USML XIX recommendation is based on the text of (b)(4) in the ITAR 120.41 definition of “specially designed.” It is reasonable to
conclude that this phrase describes the 9A619.c controls prior to their transfer from the USML to the CCL Old VIII(b) controlled “specifically designed military hot section components.” A case can be made that 9A619.d, e, and .f should be deleted, because they were not controlled by old VIII(b).

9A619.y ... as follows, and “parts,” “components,” “accessories,” and “attachments” “specially designed” therefor.

9A991.c Aero gas turbine engines and “parts” and “components” “specially designed” therefor, not controlled by USML XIX or ECCNs 9A003, or 9A619

9B610 Test, inspection, and production “equipment” and related commodities “specially designed” developed for the “development” or “production” of commodities enumerated or otherwise described in ECCN 9A610 or USML Category VIII

9A610 and VIII do not contain enough performance levels, characteristics, or functions to permit measurements against these (a)(1) criteria, leaving “As a result of development” as the only relevant portion of (a)(1).

The words “or otherwise described” inadvertently control “development” or “production” of equipment described in decontrol Notes, such as the first sentence of Note 2 to VIII(a)(11) and Note 2 to 9A610.a.

9B610 Related Controls. USML Category VIII(h)(1) controls “parts,” “components,” “accessories,” “equipment,” and “attachments” “specially designed” for used only in the aircraft enumerated or otherwise described in Category VIII(h)(1). ...

The Note to VIII(h)(1) interprets “specially designed” to mean “used only in.”

9B610.a Test, inspection, and production “equipment” “specially designed” developed for the “production,” “development,” operation, installation, maintenance, repair, overhaul, or refurbishing of commodities enumerated or otherwise described in ECCN 9A610 (except 9A610.y) or USML Category VIII ...

The heading of 9B610 does not include operation, installation, maintenance, repair, overhaul, or refurbishing.

9B610.b “Environmental test facilities” “specially designed” developed for the certification, qualification, or testing of commodities enumerated or otherwise described in ECCN 9A610 (except for 9A610.y) or USML Category VIII ...

9B619 Test, inspection, and production “equipment” and related commodities “specially designed” developed for the “development” or “production” of commodities enumerated or otherwise described in ECCN 9A619 or USML Category XIX

9A619 and XIX do not contain enough performance levels, characteristics, or functions to permit measurements against these (a)(1) criteria, leaving “As a result of”
development” as the only relevant portion of (a)(1).

It is not intended to control equipment for the “development” or “production” of equipment “described” in Note 1 to XIX(a)(8) if the end result of the CJ is an EAR99 classification.

9B619 Related Controls. USML Category XIX(f)(1) controls “parts,” “components,” “accessories,” “equipment,” and “attachments” “specially designed” for used only in the aircraft enumerated or otherwise described in Category XIX(f)(1). ...

The Note to XIX(f)(1) interprets “specially designed” to mean “used only in.”

9B619.a Test, inspection, and production “equipment” “specially designed” developed for the “production,” “development,” operation, installation, maintenance, repair, overhaul, or refurbishing of commodities enumerated or otherwise described in ECCN 9A619 (except 9A619.y) or in USML Category XIX ...

The heading of 9B619 does not include operation, installation, maintenance, repair, overhaul, or refurbishing.

9B619.b “Equipment,” cells, or stands “specially designed” developed for testing analysis, and fault isolation of engines, “systems,” “components,” “parts,” “accessories,” and “attachments” enumerated or otherwise described in ECCN 9A619 (except for 9A619.y) on the CCL or in Category XIX on the USML.

9B619.y Bearing pullers “specially designed” developed for the “production” or “development” of commodities enumerated or otherwise described in 9A619 (except for 9A619.y) or USML Category XIX ...

9C610 Materials “specially designed” developed for commodities controlled by 9A610 not elsewhere specified enumerated in the CCL or the USML.

9C610 Related Controls. USML subcategory XIII(f) controls structural materials specifically designed, developed, configured, modified, or adapted for defense articles such as USML subcategory VIII.a aircraft. ...

XIII(f) does not control such materials.

9C610.a Materials not elsewhere specified enumerated in the USML or the CCL and “specially designed” developed for commodities enumerated or otherwise described in ECCN 9A610 (except 9A610.y) Note 2. Materials “specially designed” developed for both aircraft enumerated in USML Category VIII and aircraft enumerated in ECCN 9A610 are subject to the controls of this ECCN.

9C619 Materials “specially designed” developed for commodities controlled by 9A619 not elsewhere specified in the CCL or the USML.
9C619 Related Controls. USML subcategory XIII(f) controls structural materials specifically designed, developed, configured, modified, or adapted for defense articles such as USML subcategory XIX engines. XIII(f) does not control such materials.

9C619.a Materials not elsewhere specified enumerated in the USML or the CCL and “specially designed” developed for commodities enumerated or otherwise described in ECCN 9A619 (except 9A619.y)

9C619 Note 2. Materials “specially designed” developed for both an engine enumerated in USML Category XIX and an engine enumerated in ECCN 9A619 are subject to the controls of this ECCN 9C619.

9D619.b.7, 8, and 10 control software for landing gear, conformal fuel tanks, and various specified controls and “parts” and “components” “specially designed” therefor. However, the definition of “component” in part 772 states, “This is an item that is useful only when used in conjunction with an end-item.” Perhaps software for the development or production of landing gear, conformal fuel tanks, and the b.10 controls covers the aspects of those components thereof which are of concern. In that event, “and parts and components specially designed therefor” could be deleted.

9D619.b.”Software” “specially designed” for the “development” or “production” of 9D619.b.10. Digital engine control systems ... “specially designed” developed for gas turbine engines and components controlled in this ECCN 9A619.

9D619.b.11. Engine monitoring systems ... “specially designed” developed for gas turbine engines and components controlled in this ECCN 9A619.

9E619.c.”Technology” “required” for the “development” or “production” of...
9E619.c.6. Digital engine control systems ... “specially designed” developed for gas turbine engines and components controlled in this ECCN 9A619.

9E619.c.7. Engine monitoring systems ... “specially designed” developed for gas turbine engines and components controlled in this ECCN 9A619.
General Comment

One issue on the proposed rule is that it will help technological developments for the military. Our military would be reformed and have one of the best and powerful militaries in the world. Technological developments such as building an aircraft without the use of all fasteners (screws, bolts, nuts, nut plates, studs, inserts, clips, rivets, pins), washers, spacers, insulators, grommets, bushings, springs, wires or solder, regardless of form or fit. These aircrafts can be used for commodities like commercial use and have the durability that a commercial aircraft would have. Software would take care and make sure that the aircraft is working and could control things like front, turbine center, and exhaust frames. The technology developments of aircrafts using less gas and expenses can be developed and can cause the government to have spend less on military. The people of the nation and myself included would benefit from the government spending less money on the military because that money could be used on education, improving the infrastructure of the nation (highways, bridges, and etc.), and providing more financial aid assistance for people who want to go to college but cannot afford it. The money that was spent on the military could now be used to eliminate the deficit, and improve the economy so many people and the upcoming generation may be able to get jobs. Although, many people do say that improving our military will just cause us to want to do more and more and spend more money than saving, but many people do not understand that the technological developments could help many people get jobs and do research on things that many people do not often think much about. Many people believe that the United States should stay in isolationism and not improve the military, but the United States is one of the main countries who helps third world countries with military and we must have the most up to date military so we can help them be safe. There is no
alternative other than not making technological developments on military causing the nation and the people to be vulnerable.
May 1, 2015

SUBMITTED VIA EMAIL TO: PUBLICCOMMENTS@BIS.DOC.GOV

Regulatory Policy Division
Bureau of Industry and Security
Room 2099B
U.S. Department of Commerce
Washington, D.C. 20230


Dear Sir/Madam:

On behalf of The Timken Company ("Timken"), we are pleased to provide these comments responding to the Notice of Inquiry Regarding Controls on Military Aircraft and Military Gas Turbine Engines on the Commerce Control List ("CCL") administered by the Bureau of Industry and Security ("BIS").

Timken believes that precision bearings for AHRS, INS, and gyroscopes for use in or with the production of aircraft described in ECCN 9A610 are generally made with the same processes, meet the same commercial industrial standards, and have the same functionality for both ECCN 9A610 aircraft and aircraft properly classified under ECCN 9A991.b.

Timken believes bearings for use in or with the manufacture of AHRS, INS, and gyroscopes should either be designated under ECCN 9A610.y and removed from the ITAR entirely or made subject to a catch-all clause under the CCL. We have commented to the Directorate of Defense Trade Controls ("DDTC") that Category XII should not be amended to provide an enumerated clause that describes bearings as parts for enumerated gyroscopes, AHRS, or INS that operate at defined performance parameters. Catch and release provisions for bearings under the CCL will better achieve the goals of Export Controls Reform to exclude from the USML items in normal commercial use over time. An enumerated clause would be too rigid and static and would remain well behind the speed of developments for commercial avionics.
We appreciate the strategy of BIS to review regulations that mirror ECR changes in Category VIII, and Timken understands the general preference of BIS and the Administration to use enumerated performance criteria where possible. However, there are reasons described above why a policy-making strategy to make bearings subject to an enumerated clause is not the better alternative when compared to a catch and release provision and the future potential of describing bearings in a new subparagraph of ECCN 9A610.y.

Moreover, we expect that revisions to Category XII and mirror amendments to the CCL will not provide any performance criteria for bearings. If we are correct, this underscores that bearings should not be captured by an enumerated clause for gyroscopes, AHRS, and INS in either the USML or CCL. In anticipation of publication of a revised Category XII and a mirror change in the EAR, Timken is gathering information regarding common commercial use of bearings in gyroscopes, AHRS, and INS equipment. Timken will comment further when proposed Category XII and related CCL changes are available to the public.

Timken respectfully submits that the Administration should exclude bearings from the broad references to parts and components in Category VIII(c), add bearings to ECCN 9A610.y, and refrain from describing bearings in a proposal to revise Category XII.

Sincerely,

[Signature]

S. Ryan Hartong
Principal Analyst Trade Compliance
The Timken Company
Submitted Via Email

May 1, 2015

Regulatory Policy Division
Bureau of Industry and Security
Room 2099B
U.S. Department of Commerce
Washington, D.C. 20230

Attn: RIN 0694-XC023

Re: Notice of Inquiry: Request for Comments Regarding Controls on Military Aircraft and Military Gas Turbine Engines on the Commerce Control List

Dear Sir/Madam:

United Technologies Corporation ("UTC")\(^1\) appreciates the opportunity to submit these comments on the implementation of Export Control Reform ("ECR") with respect to military aircraft and military gas turbine engines. UTC strongly supports the Administration's goals of creating a positive, transparent and predictable structure within the categories of the Commerce Control List ("CCL"), and continually aligning this structure and associated export control policies with the changing technological and market conditions. As described in more detail below, UTC believes that the existing control structure in Export Control Classification Numbers ("ECCN") 9X610 and 9X619 could be further updated and clarified to better support these goals.

I. Alignment Between 9A610.y and 9A619.y Items

UTC supports the use of "y" entries to identify low-level items warranting no more that AT control, and encourages the Department to expand the paragraph on a case-by-case basis. One area for improvement, however, is that some items common to both aircraft and engines are treated differently in the 9A610.y and 9A619.y entries, respectively. For example, 9A610.y.8 controls hydraulic, oil, and fuel system filters and filter assemblies. ECCN 9A619.y.4 controls only fuel and oil filters. Engine hydraulic filters and any engine filter assembly are not elsewhere specified and, therefore, are controlled under 9A619.x. This also adds confusion where an item may connect the engine to the airframe. For example, a hydraulic hose connecting the engine to the airframe is an AT-controlled 9A610.y.10 part if it is in the aircraft bill of materials, but is a NS1/RS1-controlled 9A619.x part if it is in the engine bill of materials.

\(^1\) UTC is a global, diversified corporation based in Hartford, Connecticut, supplying high technology products and services to the aerospace and building systems industries. UTC's companies are industry leaders, among them Pratt & Whitney, Sikorsky, UTC Aerospace Systems, UTC Building & Industrial Systems, and United Technologies Research Center.
In the table below, UTC suggests common entries for both 9A610.y and 9A619.y (left hand column). The middle and right columns indicate the existing 9A610.y or 9A619.y controls, respectively.

<table>
<thead>
<tr>
<th>Proposed Common entry</th>
<th>Existing 9A610.y</th>
<th>Existing 9A619.y</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air and fluid (other than fuel) tanks and reservoirs</td>
<td>--</td>
<td>y.1. Oil tank and reservoirs.</td>
</tr>
<tr>
<td>Air and fluid lines and hoses, fittings, couplings, and brackets</td>
<td>y.10. Hydraulic and fuel hoses, straight and unbent lines, fittings, couplings, and brackets.</td>
<td>y.2. Oil lines and tubes; y.3. Fuel lines and hoses.</td>
</tr>
<tr>
<td>Filters and filter assemblies for fluid systems</td>
<td>y.8. Filters and filter assemblies for hydraulic, oil and fuel systems.</td>
<td>y.4. Fuel and oil filters.</td>
</tr>
<tr>
<td>V-Band, cushion, broomstick, hinged, and loop clamps</td>
<td>--</td>
<td>y.5. V-Band, cushion, broomstick, hinged, and loop clamps.</td>
</tr>
<tr>
<td>Identification plates</td>
<td>--</td>
<td>y.7. Identification plates.</td>
</tr>
<tr>
<td>Air and fluid manifolds</td>
<td>--</td>
<td>y.8. Air, fuel, and oil manifolds.</td>
</tr>
<tr>
<td>Check valves for fluid and pneumatic systems</td>
<td>y.4. Check valves for hydraulic and pneumatic systems.</td>
<td>--</td>
</tr>
</tbody>
</table>

In general, the term “fluid” is used to replace individual instances of oil, hydraulic, or fuel. This allows the inclusion of water lines for both aircraft (9A610.y.9, y.11, and y.17) and engines to drain condensation. Fuel tanks are specifically omitted from “y” due to their sensitivity. Air lines are included to capture air manifolds.

II. Revisions to 9E619

A. Delete Note 2 to Related Controls

Related Controls Note 2 of 9E619 states that “Technology described in ECCN 9E003 is controlled by that ECCN.” Given the note’s placement in 9E619, it can be interpreted to mean that ECCN 9E003 takes precedence over the entries in 9E619, which is contrary to the Order of Review (Supplement No. 4 to Part 774, (a)(3)). For example, when determining the proper ECCN for a drawing (“technology”) for a cooled high pressure turbine blade “specially designed” for a 9A619.a gas turbine engine, Note 2 seems to indicate that ECCN 9E003.a.5 should be considered before 9E619.c.4. This adds considerable complexity to the classification process and is likely inconsistently applied throughout industry. UTC recommends deleting Related Controls Note 2, as this will have negligible impact on how items are controlled and it will reduce complexity and confusion.

B. Certain Entries are Overly Granular

UTC requests that the structure, but not the content, of 9D619.b, 9E619.b, and 9E619.c entries be modified so that it is only necessary to classify and identify software and technical data to the ‘.b’ or ‘.c’ level, not the more granular subcategories. For example, the current
structure of 9E619.c creates distinctions between 9E619.c.2 and 9E619.c.3, but the controls for both underlying commodities are identical. Such granularity complicates the classification process, licensing process, and license management and does not align well with the corresponding 9A619 parts or components.

III. 9C610 and 9C619 – Add Language Indicating Control of USML Items

UTC requests that 9C610 and 9C619 be updated to include materials that are designed exclusively for Category VIII and XIX commodities, respectively, and not elsewhere specified on the USML or CCL. Currently, 9C610 and 9C619 control materials “specially designed” for 9A610 and 9A619 commodities, but makes no mention of Category VIII or XIX items. If a material is specially designed for a Category VIII or XIX commodity, but it is not elsewhere specified in the USML or CCL, under the current regulations, the material is controlled as EAR99. UTC believes this is a gap in the regulations and suggests the following language:

9C619 Materials “specially designed” for commodities controlled by USML Category XIX or ECCN 9A619 not elsewhere specified in the CCL or on the USML (see List of Items Controlled).

a. Materials not elsewhere specified in the CCL or on the USML and “specially designed” for commodities enumerated in or otherwise described in USML Category XIX or ECCN 9A619 (except for 9A619.y).

Note 1: Except for ECCNs with geometric requirements (e.g., ECCN 1C202), materials enumerated elsewhere in the CCL, such as in a CCL Category 1 ECCN, are controlled pursuant to the controls of the applicable ECCN.

Note 2: Materials “specially designed” for both an engine enumerated in USML Category XIX and an engine enumerated in ECCN 9A619 are subject to the controls of this ECCN 9C619.

Under the current wording, a material that meets both 9C619 and 1C202 would be controlled by 1C202. If the material is not in the geometric form required by 1C202, it would be 9C619. However, due to the General Technology Note, technical data for the development or production of a 1C202 material, such as material composition, would be 1E001 even if that data is not specific to the geometric requirements. Unless such material can be definitely controlled in one ECCN, the associated technical data would then be either 1E001 or 9E619.

UTC recommends similar modification to 9C610. Additionally, UTC recommends the creation or addition of a 9C604 ECCN.

IV. Clarification on the Consultation or Use of ITAR Technical Data on EAR Items

Due to the nature of ECR, there are systems on the USML that contain specially designed parts, components, and subassemblies that are subject to the EAR. Examples include 9A619.a engines for a Category VIII(a) aircraft or a 9A619.x fan blade for a XIX(a) engine. In both
examples, the 9A619 items are designed using VIII(i) or XIX(g) mission data and may also interface directly with equipment that remains on the USML. In the case where an EAR-controlled item interfaces with a USML item, there will be data (dimensions, requirements, characteristics, etc.) common to both items.

Because the EAR-controlled item was designed and has parameters common with ITAR-controlled data, there is potential confusion regarding the jurisdiction of the EAR-controlled items. UTC suggests both the EAR and ITAR contain additional clarifying language similar to the language proposed below:

An item not listed on the USML is subject to the EAR, even if the item was designed with USML data.

Technical data directly related to an EAR-controlled item is subject to the EAR, even if that technical data is coincident with technical data for a USML item associated with (i.e., interfaces to, incorporates, or is a component of) an EAR-controlled item.

Note: Technical data common to an EAR-controlled item and a USML item (e.g., interface data) is subject to the EAR when associated with the EAR-controlled item, and is subject to the USML when associated with the USML item.

The proposed clarifying language should be added to the USML in order to clearly state what is not subject to the ITAR, and should be added to the CCL to provide clarification.

* * *

For additional information, please contact the undersigned at (202) 336-7467 or peter.jordan@utc.com.

Sincerely,

Peter S. Jordan
Director, Senior International Trade Counsel
United Technologies Corporation
Below are comments in response to:
DEPARTMENT OF COMMERCE Bureau of Industry and Security
Notice of Inquiry: Request for Comments Regarding Controls on Military Aircraft
and Military Gas Turbine Engines on the Commerce Control List

These comments relate to the BIS FAQs and the “transfer to the CCL of items that the President
has determined do not warrant control on the United States Munitions List (USML), including
certain military aircraft,…”

“BIS Webpage FAQs

600 Series Items
Q.4: What is the classification of parts and components that are (a) not enumerated or
otherwise described on the USML and (b) common to the C-130 and L-100/L-382
aircraft but not any other aircraft?

Answer: The manufacturer of the aircraft, the Lockheed Martin Corporation, and the
Department of State have confirmed that all models and versions of both types of aircraft
are within the scope of USML Category VIII(a)(14) (22 CFR § 121.1). This means that
parts, components, accessories, and attachments for use in or with the C-130 or L-100/L-
382 aircraft that are not enumerated or otherwise described on the USML are controlled
under ECCN 9A610.x, or if specifically identified in 9A610.y, controlled under 9A610.y,
unless one of the release provisions in paragraph (b) to the EAR's definition of "specially
designed" applies (15 CFR § 772.1). In addition, the Rolls Royce 501 D engine used on
L-100/L-382 aircraft and other aircraft in production controlled under ECCN 9A991, is
controlled under ECCN 9A991.d. Parts common to the T-56 military engine used on the
C-130 and other military aircraft and the 501 D used on the L-100/L-382 aircraft are
also controlled under ECCN 9A991.d.”

The BIS FAQs state that “…the Department of State have confirmed that all models and versions
of both types of aircraft [C-130 and L-100/L-382] are within the scope of USML Category
VIII(a)(14) (22 CFR § 121.1).

“Category VIII—Aircraft and Related Articles
(a) Aircraft, as follows:
(14) Aircraft with a roll-on/roll-off ramp, capable of airlifting payloads over 35,000 lbs.
to ranges over 2,000 nm without being refueled in-flight, and landing onto short or
unimproved airfields;…”

“Note 1 to Paragraph (a): Aircraft specially designed for military applications that are
not identified in paragraph (a) of this section are subject to the EAR and classified as
ECCN 9A610,...”

With a definition of range of:
“NOTE 2 TO PARAGRAPH (a): “Range” is the maximum distance that the specified aircraft system is capable of traveling in the mode of stable flight as measured by the projection of its trajectory over the surface of the Earth. The maximum capability based on the design characteristics of the system, when fully loaded with fuel or propellant, will be taken into consideration in determining range. The range for aircraft systems will be determined independently of any external factors such as operational restrictions, limitations imposed by telemetry, data links, or other external constraints. For aircraft systems, the range will be determined for a one-way distance using the most fuel-efficient flight profile (e.g., cruise speed and altitude), assuming International Civil Aviation Organization (ICAO) standard atmosphere with zero wind.”

Comment: The Category VIII(a)(14) requirement for transport aircraft is to control those aircraft with the stated features which can carry 35,000 lbs. to an unfueled defined range of over 2,000 nm. Below are the published USAF ranges for C130 models carrying a 35,000 lbs payload.

From USAF C130 Specifications:

Range with 35,000 pounds of Payload:
- C-130E, 1,438 miles (1,250 nautical miles)
- C-130H, 1,496 miles (1,300 nautical miles)
- C-130J, 1,841 miles (1,600 nautical miles)
- C-130J-30, 2,417 miles (2,100 nautical miles)

The specifications of the L-100/L-382 approximate those of the C130H models.

Following the above public specifications, only the C130J-30 has a range that meets the Category VIII(a)(14) requirement for control under the ITAR Munitions List. Consequently, according to Note 1 to Category VIII(a), all C130 transport models except for the newest production C130 model (the C130J-30), would be properly classified on the EAR Commerce Control List in ECCN 9A610.

In addition, the definition for range in Note 2 to Category VIII is inconsistent with the entry VIII(a)(14). When applying the range definition, the assumption is that the aircraft range is defined to be calculated to fuel exhaustion. This would be inconsistent with paragraph VIII(a)(14), which states the aircraft is described to continue to a “landing onto short or unimproved airfields.” The concept of flying to fuel exhaustion is neither practical nor representative of safe aircraft operation as reflected by both USAF and U.S. Navy regulations requiring all flights to plan to land with 10% of their fuel or a minimum of 20 minutes flight time remaining. Ranges calculated by manufacturers normally contain minimum fuel reserves. Using the example of the standard C130J above with a stated range of 1,600 nautical miles and
assuming fuel reserves of 25%, it still does not meet the VIII(a)(14) “over 2,000 nm” requirement.

In conclusion, based on published specifications of C130 aircraft carrying a 35,000 lbs. payload, none of the C130 models except the C130J-30, warrant control on the United States Munitions List (USML), and would properly be classified on the CCL under ECCN 9A610.

If the State department desires to retain all C130 aircraft on the U.S. Munitions List, the control entry and range definition need revision. The range for carrying a 35,000 lbs payload would need to be reduced. The definition for range should specifically explain any fuel reserve requirements in order to be consistent with the VIII(a)(14) wording and to more closely follow accepted industry/military standards as to fuel reserve requirements and published data.

Bruce Webb

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