AMERICAN ASSOCIATION OF EXPORTERS AND IMPORTERS

The Voice of the International Trade Community Since 1921

August 3, 2012

Via E-Mail (DDTCresponseteam@state.gov)

Directorate of Defense Trade Controls
Office of Defense Trade Controls Policy
U.S. Department of State
PM/DDTC, SA-1, 12th Floor
Washington, DC 20522-0112

Re: Comments on Amendment to the International Traffic in Arms Regulations: Definition for "Specially Designed"
RIN 1400-AD22

Dear Sir or Madam:

On behalf of the American Association of Exporters and Importers (AAEI), we respectfully submit these comments concerning the proposed rule on the Amendment to the International Traffic in Arms Regulations (ITAR) regarding the definition of "Specially Designed" that published in the *Federal Register* on June 19, 2012 (77 Fed. Reg. 36,428).

AAEI has been a national voice for the international trade community in the United States since 1921. AAEI represents the entire spectrum of the international trade community across all industry sectors. Our members include manufacturers, importers, exporters, wholesalers, retailers and service providers to the industry, which is comprised of brokers, freight forwarders, trade advisors, insurers, security providers, transportation interests and ports. Many of these enterprises are small businesses seeking to export to foreign markets. AAEI promotes fair and open trade policy. We advocate for companies engaged in international trade, supply chain security, export controls, non-tariff barriers, import safety and customs and border protection issues. AAEI is the premier trade organization representing those immediately engaged in and directly impacted by developments pertaining to international trade. We are recognized as the technical experts regarding the day-to-day facilitation of trade.

1. General Comments

AAEI appreciates the opportunity to comments on the definition of "specially designed" and the major areas that the Administration is seeking to modernize under the President's Export Control Reform Initiative. AAEI strongly supports the President's export control reform effort. AAEI has participated in consultations with Administration and Congressional staffs regarding recommendations for export control reform of the current statutory and regulatory regime.

We appreciate the enormity of undertaking the task of modernizing the U.S. export control system that has developed over 50 years and reforming it in a relatively short period of time and therefore commend the Directorate of Defense Trade

Controls (DDTC) and the Bureau of Industry and Security (BIS) for the extensive efforts and progress made to date.

2. Specific Comments

AAEI strongly supports the goal of a positive list of items that are controlled and the removal of common, overused and not well defined terms, such as "specially designed."

Nonetheless, the practical application of the proposed rules on specially designed could still be confusing in some respects.

Specifically, the proposed rule still appears to reflect an underlying focus on the design intent of the item rather than national security interests and military functionality of the item. We believe that manufacturers, exporters and others involved in the production and export of export controlled products could more easily interpret and comply with the rules if the definition moved further from the concept of design intent towards an analysis of the unique characteristics of the item that imbue it with the military functionality.

In addition to these unique characteristics, the importance of the item to be controlled to national security interests should be taken into consideration. We recognize that steps toward this alternative approach have already been taken, as seen in the language of paragraph (a)(1) of the proposed definition of specially designed, which positively lists that items with "properties peculiarly responsible" for characteristics described in the U.S. Munitions List are controlled. Because the stated goal is to create a positive list that moves items from control of the ITAR to the Export Administration Regulations, where possible, we believe a definition that enumerates even more discernible, limiting factors will more likely achieve the objective of increasing national security by focusing controls on the most critical items.

Beyond this conceptual ambiguity, we would like to present our views on some textual confusion and some suggestions for clarifying them. We offer the following suggestions to the proposed rule for inclusion in the final regulation to be issued by DDTC:

1. We suggest the below wording can be stricken, as the same idea is stated in the subsequent sentence:

> §120.11 Specially designed.
> When applying this definition, follow this sequential analysis: Begin with paragraph (a)(1) of this section and proceed through each subsequent paragraph. ~~If a commodity would not be controlled as a result of the application of the standards in paragraph (a) of this section, then it is not necessary to work through paragraph (b) of this section.~~ If a commodity would be controlled as a result of paragraph (a), then it is necessary to work through each of the elements of paragraph (b).

2. We suggest deleting the word "unassembled," as it does not add clarity to the provision. It is our understanding this paragraph refers to a part that has not been assembled into another item, not that the part itself is unassembled:

> § 120.41(b)(2) Is a single ~~unassembled~~ part that is of a type commonly used in multiple types of commodities not enumerated.

3. We suggest deleting the following text referencing "production":

> § 120.41(b)(3) Has the same form, fit, and performance capabilities as a part, component, accessory, or attachment used in or with a commodity that: (~~i) Is or was in production (*i.e.*, not in development); and~~ (ii) Is not enumerated on the U.S. Munitions List.

The likely intent of the text is to distinguish "production" from "development," however, we don't believe it adds clarity.

4. Quality improvements and feature enhancements can change the basic performance or capability of an item and therefore could be considered "development." We submit that the emphasis should be on the definition of "development" rather distinguishing it from "production." Consider the suggestion made above and eliminating Note to paragraph (b)(3) in its entirely.

5. We also suggest removing the Note to paragraph (b)(5), as it seems redundant and renders the provision too wordy, which adds to the confusion.

3. Conclusion

AAEI and its member companies greatly appreciate all the work and effort being made by DDTC, BIS and other agencies to achieve this goal. AAEI would be pleased to discuss these comments in more detail with DDTC leadership and staff.

Sincerely,

Marianne Rowden
President & CEO

cc: Douglas N. Jacobson, Co-Chair, AAEI Export Compliance & Facilitation Committee
Phillip Poland, Co-Chair, AAEI Export Compliance & Facilitation Committee

AMERICAN BAR ASSOCIATION

Section of International Law
740 15th Street, NW
Washington, DC 20005
Phone: (202) 662-1660
FAX: (202) 662-1669
http://www.americanbar.org/intlaw

Chair
Michael E. Burke, DC
mike.burke@agg.com
202-677-4046

Chair-Elect
Barton Legum, France
blegum@salans.com
+33-14-268-4870

Vice-Chair
Gabrielle H. Buckley, IL
gbuckley@vedderprice.com
312-609-7626

Finance Officer
Marcelo Bombau, Argentina
marcelo.bombau@bomchil.com
+54-11-4321-7500

Liaison Officer
Lisa J. Savitt, DC
lsavitt@crowell.com
202-624-2761

Membership Officer
Marilyn J. Kaman, MN
marilyn.kaman@courts.state.mn.us
612-348-8224

Secretary/Operations Officer
Sara P. Sandford, WA
ssandford@gsblaw.com
206-816-1464

Programs Officer
Adam B. Farlow, UK
adam.farlow@bakermckenzie.com
+44-20-7919-1000

Rule of Law Officer
Jason P. Matechak, VA
jmatechak@ird-dc.org
703-248-0161

Policy/Government Affairs Officer
Ronald J. Bettauer, VA
ron.bettauer@verizon.net
703-536-0729

Publications Officer
William B.T. Mock, Jr., IL
7mock@jmls.edu
312-987-2383

Diversity Officer
Gretchen C. Bellamy, FL
gretchenbellamy@alumni.duke.edu
305-284-2599

Technology Officer
Robert L. Brown, KY
rlb@gdm.com
502-587-3716

Communications Officer
Steven M. Richman, NJ
smrichman@duanemorris.com
856-874-4213

Immediate Past Chair
Salli A. Swartz, France
sswartz@artuswise.com
+33-14-502-3838

Section Delegates to the House of Delegates and At-Large Members
Michael H. Byowitz, NY
mhbyowitz@wlrk.com
212-403-1268

Jeffrey B. Golden, UK
j.b.golden@lse.ac.uk
+44-7785-500-811

ABA Board of Governors Liaison
Sandra R. McCandless, CA
sandra.mccandless@snrdenton.com
415-882-2412

Deputies to the Chair
Peter P. Perla, Jr., NJ – **Administration**
pperla@jplawfirm.com
973-824-9700

Melissa Ann Kucinski, MD – **Task Forces**
mkucinski@bulmandunie.com
301-656-1177

August 3, 2012

U.S. Department of Commerce, Bureau of Industry and Security
Publiccomments@bis.doc.gov

U.S. Department of State, Directorate of Defense Trade Controls
DDTCResponseTeam@state.gov

ATTN: Specially Designed Definition

Dear U.S. Department of Commerce and Department of State:

The American Bar Association ("ABA") Section of International Law ("Section") appreciates this opportunity to comment on the proposed rules published in the Federal Register by the U.S. Department of Commerce, Bureau of Industry and Security ("BIS") and the U.S. Department of State, Directorate of Defense Trade Controls ("DDTC") on July 19, 2012 (77 Fed. Reg. 118, 36409-36419 and 36428-36433, respectively) regarding the proposed definition for "specially designed."

We present these views exclusively on behalf of the Section. They have not been approved by the House of Delegates or the Board of Governors of the ABA and, accordingly, should not be construed as representing the policy of the ABA itself.

The ABA is the largest voluntary professional association in the world. The Section, with over 20,000 members, is the ABA leader in the development of policy in the international arena, the promotion of the rule of law, and the education of international law practitioners. Many of its members are experienced in the export control laws of the United States and other countries.

We applaud the U.S. Government's efforts to amend the International Traffic in Arms Regulations ("ITAR") and the Export Administration Regulations ("EAR") as part of the President's ongoing Export Control Reform effort. The proposed definition of "specially designed" is a very good improvement over earlier versions. It is quite apparent from the draft, from comments of agency officials, and from the experience of our members that it was an enormous challenge to meet all nine of your goals with the definition. With clarifications via interpretation of the new elements, this will be an even better effort.

We believe it is important to publish the redrafted United States Munitions List ("USML") categories and Commerce Control List ("CCL") entries to reflect positive, objective criteria in the control lists and to avoid overlapping or conflicting claims of jurisdiction. Because the definition of the term "specially designed" is a precondition to the publication of the control lists in final form, we believe the proposal should be finalized with clarifying interpretations of the type suggested below.

Section Fall Meeting • Dublin, Ireland • October 11 – 15, 2011 ABA/Section Midyear Meeting • New Orleans • Louisiana • February 1 – 7, 2012
Section Spring Meeting • New York City • April 17 – 21, 2012 ABA/Section Annual Meeting • Chicago, Illinois • August 2 – 7, 2012

Our specific comments on key aspects of the proposed definition follow.

Software and Technology and Technical Data (BIS comment only)

We understand BIS intends that software and technology "peculiarly responsible" is captured by paragraph (a)(1) by its use of the term "item." Officials have indicated that paragraphs (a)(2) and (a)(3) do not capture software or technology, and we recommend that BIS confirm this to make the regulatory history clear.

Software and Technology and Technical Data (DDTC comment only)

Paragraphs (a)(1), (a)(2), and (a)(3) apply only to "commodities" and do not capture software or technology. We understand from officials that in the Export Control Reform effort, DDTC has not used and will not use the term "specially designed" to modify technical data or software in any subparagraph of the various categories of the USML to be rewritten. We urge DDTC to confirm this.

Section 120.3 of the ITAR (DDTC comment only)

DDTC indicates that the term "specially designed" will apply exclusively to a defense article "enumerated or referenced" in a control paragraph or subparagraph of a USML category. To achieve this important and laudable goal, we understand DDTC will modify Section 120.3 of the ITAR to eliminate terms such as "developed, configured, adapted, or modified for a military application." Changes to §120.3 of the ITAR are essential to achieve several of the stated goals of the new definition for "specially designed." These include clarity of the control lists and avoiding overlaps between the control lists.

"As a Result of 'Development'"

We understand the Administration intends this phrase—"as a result of 'development'"— to mean that, during the development period, the developer takes an affirmative step with a view to achieving or exceeding the performance levels, characteristics, or functions in the relevant ECCN or USML paragraph. To the contrary, if the developer does not take such an affirmative step, the item being developed does not meet the "as a result of 'development'" standard. We urge the Administration to clarify this position in an interpretive note.

As proposed, the "specially designed" definition would make significant use of the existing term "development." However, BIS has indicated in the proposed note to paragraph (b)(3) that some changes to an item that is already in "production" would not constitute "development." In particular, BIS has specified that for items in production, "activities, *such as* those pertaining to quality improvements, cost reductions, or feature enhancements, remain in 'production'" as long as these activities do not change the "basic performance or capability of the commodity" (*emphasis added*). We suggest that the Administration clarify the use of the term "such as" certain design changes that are in the "production" time-frame and are therefore not within the scope of the phrase "as a result of 'development'". In other words, are certain minor changes that do not change the basic performance capability of a commodity, but change its form or fit, outside the scope of the term "as a result of 'development'"?

We believe there may be "low hanging fruit" regarding the types of minor changes to form or fit that could help to define the Administration's regulatory intent and identify items that have no military or intelligence capability and do not meet the criteria of paragraph (a) regarding the "as a result of 'development'" standard. In particular, if BIS and DDTC retain the language in (b)(3) that does not appear to release an item if there have been any changes to its form or fit, we would suggest that the note to (b)(3) be revised to clarify that other activities that do not change the basic performance capabilities of an item would not constitute "development" in the context of the "specially designed" definition. Alternatively, the Administration should clarify whether any of the following types of changes to form or fit do fall within the standard for "as a result of 'development."

We believe the following changes in the form or fit of parts, components, attachments, and accessories do not meet the standard for "as a result of 'development'". These are examples of common types of modifications that have presented jurisdiction issues in the current undefined definition of "specifically designed" and the term "modified" under Section 120.3 of the ITAR and with the undefined term "specially designed" in the CCL. The types of modifications described below are not likely to qualify for release under paragraphs (b)(2) and (b)(3) of the proposed definition of "specially designed." In many instances, these common types of modifications may also not qualify for the exclusions of (b)(4) or (b)(5) because the changes often must be made for each use of a part, component, attachment or accessory.

If the Administration believes the following types of modifications are captured by (a), then we urge the Administration to interpret (b)(3) or modify the text of (b)(3) to exclude defined or published minor modifications of the following types. We also believe several of the following examples may be excluded from "specially designed" with an interpretation that parts, components, accessories, and attachments are within the range of form and fit already in production by the manufacturer even though the modification is a change in the form or fit.

We urge the Administration to address the application of the final rule to these examples regarding changes in form or fit while the "performance capabilities" of the unenumerated items and the modified item remain the same:

1. Changes from British Imperial/SAE sizes to metric sizes;
2. Moving an input or output from one location on an item to another location;
3. Increasing or decreasing the size of an item within the range of sizes already in "production" for items not listed or enumerated;
4. Changes to the mounting brackets, fastener locations, and other mounting characteristics of an item;
5. Changes to the number of sub-component units used within the range of numbers already in "production" for items not listed or enumerated (for example, changing a rear windshield defroster to have eleven defroster wires instead of ten or twelve, or changing the number of vents in an air conditioning system);
6. Changes to data values used by electronic parts within the range of the values already used in items in "production" (for example, entering tire size into a speedometer assembly so that it can calculate speed, or entering cabin square footage into a climate control system so that it can maintain temperature);
7. Selections from among existing options already in "production" for items not listed or enumerated (for example, choosing a particular combination of windshield washer sprayer

pumps, fluid tube sizing, and nozzles that has never before been used, where all of the individual options are already in "production").

Without such clarification, paragraphs (a) and its "as a result of 'development'" standard and subparagraph (b)(3) of the proposed definition, when taken together, appear to mean that only commercial off the shelf ("COTS") items with no changes whatsoever in form or fit are released from the definition of "specially designed." In connection with the above examples, the result is that a single modification in form or fit of any type to an unenumerated item for a single use in an enumerated item will be captured by the broad scope of paragraph (a) of the definition of "specially designed" and will not be released from the definition by paragraph (b) of "specially designed." Also, the result is that only interchangeable parts, components, accessories, and attachments for use in both enumerated and unenumerated items will be released by (b)(3).

This standard, while clear, does not appear to be consistent with the statement in the preamble to the rule that the new 600 series ECCNs "should not control items that (a) have predominant civil applications and performance equivalents to those used for civil applications and (b) do not have significant military or intelligence applicability…" This standard may also be inconsistent with the objective of not moving items under a lower control status, such as EAR and ECCN 9A991, to a higher status, such as 600 series in an "x" subparagraph. (77 Fed. Reg. 36,410.)

Market-based Agency Jurisdiction, Accident of First Sale, Predominant Use, and General Purpose Design Intent

The phrase "as a result of 'development'" as applied with the definition of the development period will resolve three related historic concerns. Those historic concerns with the current text of Section 120.3 regard (a) the shifting of jurisdiction based upon unpredictable market conditions over time after release of the product, (b) the accident of first sale after release of a product with general purpose design intent or civil-only design intent, and (c) predominant use criteria.

We understand that the proposed definition for "specially designed" will eliminate the manufacturer's obligation, if one ever existed, to monitor spikes in purchases for military use after release of the product to the market. In other words, the proposed definition removes any requirement for a manufacturer or reseller to predict future market uses or document historic percentages to measure predominant use. To its credit, for quite some time, DDTC has considered the first sale as just one factor among many other. However, suggestions within the last year or so imply an obligation to monitor end use.

The historic concerns of the private sector regarding the measurement and prediction of future sales by use are driven by three overlapping factors that make it impossible in many supply chains to measure, let alone predict the percentages of commercial versus military end uses. First, several manufacturers of parts and components sell through independent distributors who do not report the end uses to the manufacturer. Second, distributors may know the end use break-down for their own sales to some degree, but they have no means to see that information for other distributors. Third, both manufacturers and resellers of parts and components do not know whether a given integrator will use its parts for military application or civil application. Integrators are not always willing to share that information with parts and component vendors. The day has long passed since a given buyer of parts and components in the aircraft, vehicle, or electronics market deals exclusively in military end use or exclusively civil end use.

The accident of first sale to a military user has been most problematic with the release of a product for general purpose. Yet the release of products or components with intent to sell as many parts and components as possible is a common market strategy in the aircraft, vehicle, and electronics markets. It simply makes business sense from the perspective of the manufacturer. From the perspective of the military, its procurement of COTS or general purpose products helps keep down tax payer costs. For some years now, DDTC has not considered a first sale to a military buyer as dispositive of jurisdiction under Section 120.3.

We commend the Administration for resolving the long-standing problems of market-based agency jurisdiction, the accident of first sale, and jurisdiction based upon predominant use rather than defined functionality. But for careful drafting, these problems could have reappeared in the 600 series of the CCL. The lessons of the past should apply to both the USML and the CCL. We ask the Administration to confirm our understanding of its intentions to remove any perceived obligation to monitor post-release sales, and to ensure a first sale to or predominant use by military end users will not confer "specially designed" status and suggest that clarifying language to this effect would be a welcome addition to Section 120.3.

Example under the Phrase "As a Result of 'Development'"

The application of the "as a result of 'development'" standard in the proposed definition is limited by the principle that it will only apply to enumerated items. For this reason, it is essential for Government and the private sector to understand how the "as a result of development" standard works when applied to the 600 series in subparagraph "y." As suggested by BIS and DDTC, we give an example and seek confirmation from the Administration on whether the "specially designed" standard would apply.

For example, assume a developer is developing an aircraft tire for a new commercial aircraft platform that is properly classified under ECCN 9A991.b. The affirmative steps of this developer with a view to making an "aircraft tire" for a commercial aircraft would not fall within proposed ECCN 9A610.y.a.1. This is so because in the view of the developer the aircraft tire is not:

> [F]or a commodity subject to control in this ECCN or a defense article in USML Category VIII and not elsewhere specified in the USML or the CCL, and other aircraft commodities "specially designed" for a military use.

However, we are concerned that regulators or enforcement personnel in the future would interpret the penultimate paragraph of ECCN 9A610.y to mean that an aircraft tire made with a view during development to use the tire "for" a specific civil aircraft classified under ECCN 9A991.b of the CCL is a "specially designed" component and is therefore captured by ECCN 9A610.y.1. Such an interpretation would cause a roll back of the type that would cover virtually all aircraft tires, and we do not believe the Administration intends such an interpretation or consequence. The aircraft tire is currently excluded from tight controls under the footnote to Category VIII(h) and would likely be classified under ECCN 9A991.b under the current rules without the burdens of the proposed 600y series. The language of concern is "elsewhere specified in the . . .CCL. . ." Our concern in this paragraph is not with regard to end items specified in proposed ECCN 9A610 but rather ECCN 9A991.a. To be explicit, we do not believe that the tire referenced above is "as a result of 'development'" specially designed for a commercial aircraft under ECCN 9A991 even though the

developer has a specific aircraft in mind and knows the aircraft is classified under ECCN 9A991.b. We urge the Administration to clarify the rule-making record when it finalizes the rules.

ECCN 9A991.b for civil aircraft is subject to AT controls only. In this example, we understand BIS may respond that (b)(3) under the release portion of the definition of "specially designed" will apply. Such a response by BIS would imply that the "as a result of 'development'" standard has no meaning or limitation on the application of "specially designed"; and, as a result, the aircraft tire is caught under the catch provisions of (a)(2) but released under (b)(3). Therefore the tire is classified as ECCN 9A991 as a part for civil aircraft. If that is the intention of BIS, we urge clarification of the rule-making record when the rule is finalized.

Aircraft Tires and Other Conflicts between Proposed Category VIII(h)(1) and Proposed ECCN 9A610.y. Partially Resolved by Interpretation of "As a Result of 'Development'"

Aircraft tires are not enumerated in DDTC's proposed Category VIII in a separate, unique subparagraph. 76 Fed. Reg. 68694, 68697 (November 7, 2011) (hereafter Category VIII). All "specially designed" parts and components are "enumerated" in a fairly broad catch-all for selected aircraft platforms identified at Category VIII(h)(1):

> (h) Aircraft components, parts, accessories, attachments, and associated equipment as follows:
>
> > 1. Components, parts, accessories, attachments, and equipment "specially designed" for the following U.S.-origin aircraft: B–1B, B–2, F–15SE, F/A18E/F/ G, F–22, F–35 (and variants thereof), F–117, or United States Government technology demonstrators.

This is a broad catch-all that is limited solely by the specified military platforms. For the enumerated platforms, "specially designed" tires may be captured under Category VIII(h)(1); however, as noted below, aircraft tires are also enumerated in the proposed BIS rule at ECCN 9A610.y.1.

Tires are not enumerated under Category VIII subparagraphs (h)(2) through (19). For this reason, "specially designed" tires may be captured by proposed Category VIII(h)(1) but in no other subparagraph of Category VIII(h).

The BIS counterpart to Category VIII is proposed at 76 Fed. Reg. 68675, 68688 **(**November 7, 2011) (BIS Proposal). At ECCN 9A610.y.1. of the BIS Proposal, "aircraft tires" are captured if the aircraft tires are "specially designed."

> [F]or a commodity subject to control in this ECCN or a defense article in USML Category VIII and not elsewhere specified in the USML or the CCL, and other aircraft commodities "specially designed" for a military use, as follows:
>
> > 1. Aircraft tires.

The BIS Proposal seems to capture aircraft tires "specially designed" for the aircraft platforms enumerated at Category VIII(h)(1). The BIS Proposal also seems to capture aircraft tires and other items enumerated in "y" when for "aircraft commodities" "specially designed" for a military use.

We note that under the current ITAR, Category VIII(h) apparently excludes tires from parts and components controls, and for that reason it is not clear why aircraft tires should be subject either to the 600 series or proposed Category VIII(h). The current ITAR text provides:

(h) Components, parts, accessories, attachments, and associated equipment (including ground support equipment) specifically designed or modified for the articles in paragraphs (a) through (d) of this category, *excluding aircraft tires* and propellers used with reciprocating engines. (*emphasis added*).

For this reason, it is not clear to us that aircraft tires should be subject either to proposed Category VIII(h)(1) or the 600 series of the proposed CCL. We urge the Administration not to expand controls over aircraft tires not now controlled.

There appears to be a conflict between Category VIII(h)(1) and ECCN 9A610.y.1. Moreover, the conflict also seems to apply to every other subparagraph of ECCN 9A610.y and Category VIII(h)(1). We urge the Administration to clarify the proper classification of "specially designed" parts and components enumerated in ECCN 9A610.y for aircraft designated at Category VIII(h)(1).

Definition of the "Development" Period

As defined in the proposal, the period of development ends with the start of "production." While the "as a result of" standard reintroduces a type of design intent, it is limited in that it comes to an end with the beginning of production and, most importantly, it is not a general criterion to be used under Section 120.3 of the ITAR or under the EAR to reach beyond expressly enumerated items under entries or commodities under ITAR category subparagraphs that call out "specially designed" items. Under the "as a result of 'development'" standard, a manufacturer will not be required to monitor market-based developments after the start of production. As noted above, agency jurisdiction and classification under the 600 series will not shift from time-to-time as purchasing patterns change between commercial and military buyers. We recommend that the Administration confirm this for the rule-making record when it issues the final rule.

"Necessary" in (a)(2)

In (a)(2), we recommend a note to explain the meaning of "necessary." It is not a term historically used in the EAR or ITAR in this context. We recommend that BIS and DDTC interpret or explicitly modify "necessary" to mean "peculiarly responsible" for achieving defined control criteria or functionality of the end product in which the part or component is used, as established in (a)(1). This would better meet the stated objectives. However, we understand from the Administration that it does not believe the "peculiarly responsible" or "required" standards currently used in the Wassenaar Arrangement for other purposes are sufficiently broad to capture appropriate parts and components. If the Administration intends that the term "necessary" capture a broader scope of parts and components, we recommend a note of clarification to make the rule-making history clear.

Enumerated in an Entry of the CCL or in a Category on the USML modified by "Specially Designed"

Under (a)(2), can you please confirm "an enumerated or referenced" commodity or defense article means solely a commodity or defense article included in a control paragraph modified by "specially designed" in the text of the USML category or CCL paragraph? Such an interpretation is consistent

with the fourth objective described in the preamble and the clear statements in the preamble to the proposed definition.

"Function as Designed" in (a)(2)

Under (a)(2), does "function as designed" mean the function as advertised or held out to the public by the direct and indirect buyers of a manufacturer's part or component? Such an interpretation is consistent with objective two, to use "objective, knowable" criteria for the definition of specially designed. A fact is not "objective or knowable" if one manufacturer must ask another manufacturer about its product "as designed." Does the phrase "function as designed" provide any other limit on what the manufacturer must determine its part or component is "for" or is "necessary for" in its customer base or in the market place? As noted elsewhere in these comments, we trust the Administration will interpret the definition of "specially designed" to limit decisions by the developer to the development period without market-based jurisdiction and classification and the shifting conditions of the marketplace.

"Necessary" to "Function as Designed" in (a)(2)

We urge the agencies to give advice under (a)(2) on the application of the standard for items "necessary" for enumerated or referenced parts and components to "function as designed." Officials of the agencies had indicated that (a)(2) is broad. The proposed rule also indicates that "specially designed" does not include items merely because they could be used in an enumerated or referenced item. This leaves some uncertainty as to where the line may be redrawn.

We urge the agencies to consider the following examples. Assume the following parts are not enumerated in the proposed rule issued by DDTC at Category VII(g). Assume further that each of the parts or components were developed with a view to use in a vehicle enumerated in Category VII(a), (b), and (c) of the proposed rewrite of the UMSL. Also assume these components are not interchangeable with any component used in an unenumerated end item on the USML or CCL and that these components are not classified components. Under these assumptions, which of the following are captured by proposed ECCN 606.x, 606.y, or EAR99?

1. Air conditioner.
2. Internal door handle assembly.
3. Windshield wiper assemblies.
4. Airbag systems that utilize a different supply voltage than a commercial equivalent.
5. Radiator with slightly larger or smaller intake or outflow holes to fit the coolant system hoses on a military vehicle when compared with an unenumerated vehicle.
6. Axle bearing.
7. Gear for the drive chain.

Could the agencies please also clarify whether an air conditioning system for an enumerated vessel in proposed Category VI is "necessary to function as designed" under (a)(2) of the proposed definition of specially designed?

Specially Designed for an Enumerated End Item AND Enumerated in 6XXy

It will be necessary to resolve overlaps for parts and components specially designed for

enumerated end items on both the USML and the CCL versus parts and components also enumerated in a 600 series ECCN at subparagraph "y." We understand that in such a case because subparagraph "y" is more specific and more objective, it prevails and the item is not also within the scope of subparagraph "x." We hope the Administration will confirm and clarify this position.

Request for Guidance Regarding the Scope of (a)(3)

The "catch" portion of the proposed definition of specially designed would capture an accessory or attachment "used with an enumerated or referenced commodity or defense article to enhance its usefulness or effectiveness." Assume each of the following is advertised for use with an enumerated or referenced commodity or defense article after the USML and the CCL are rewritten. Do any of the following meet the standard regarding enhancement of "usefulness or effectiveness"?

1. A sling for an M16.
2. A cleaning kit for an M16.
3. An airtight and waterproof case for use with night vision goggles.

We urge the agencies to clarify the "enhancement of usefulness or effectiveness" standard by indicating whether these examples and others meet the standard and do so with the final implementation of the rules. After promulgation of the rules, we urge the agencies to regularly post advisories that include additional examples of accessories and attachments that meet and do not meet the standard of (a)(3).

Form, Fit, "and" Function and Release under (b)(3)

Under (b)(3), an item under the EAR and a commodity under the ITAR modified by "specially designed" text is released from the scope of "specially designed" if it has the same "form, fit, and function" as a commodity unenumerated on the USML and an item not enumerated on the CCL. In addition, an item controlled under the EAR solely for AT reasons is outside the scope of "specially designed." Historically, minor dimensional changes in shifting from imperial to metric dimensions for precision parts and components have presented jurisdictional issues. In recent years, DDTC has not taken jurisdiction over some parts and components with such minor modifications to "fit" or "form" when the functionality remained the same and variations were all consistent with civil or commercial standards, including but not limited to FAA standards. Many of these decisions were made in the context of a Commodity Jurisdiction determination by DDTC. Moreover, the footnote to Category VIII(h) excludes a part or component that can be used in both a military aircraft and in an aircraft with an FAA type certificate. We understand the Administration interprets (b)(3) to: (a) require precisely the same "form, fit, and performance" with no minor changes, such as imperial versus metric dimensions, and (b) the scope of the exception under the current Category VIII(h) footnote will not be lost or narrowed given the scope of the (b)(3) release. We urge the Administration confirm these interpretations when it issues the final rule to make the regulatory intent clear.

Developed with Reasonable Expectation of Use in or with both Enumerated and Unenumerated Items or Commodities

Release pursuant to (b)(4) is determined by a developer's reasonable expectation of use as documented during development. The qualifying expectation is of a use in an unenumerated item on either the CCL or USML or such a use in addition to a reasonable expectation of a use in or with an enumerated item or commodity. Administration officials have indicated that a manufacturer need not revisit those expectations after release of the item or commodity to the market. We urge the Administration to confirm this interpretation with inclusion of clarifying language in the final rule.

Further, provision (b)(4)(i) of the BIS proposed definition "releases" from control under "specially designed" a part or component that is developed with a reasonable expectation of "use in or with commodities *described* on the CCL" (emphasis added). We suggest "described" should be changed to "enumerated" to make the definition parallel in construction to the DDTC proposed definition covering items with a reasonable expectation of use in or with defense articles enumerated and not on the USML.

"Particular Application" and Release under (b)(5)

In (b)(5), the release is based upon the "reasonable expectation" of the manufacturer or developer that the unit is not for use for a "particular application." Every development is for one or more "particular" applications even if the item is developed for a general purpose. It is commonplace for manufacturers of parts and components to do market research in aerospace, vehicles, and electronics to determine whether use in a given function or performance level may have a market. However, that research often will not disclose whether the buyers will use that function for military or civil applications or both. We do not anticipate the Administration intends (b)(5) to be an empty box and release no items or commodities. We urge the Administration to interpret (b)(5) and explain whether market research precludes a release under (b)(5) if the research or other knowledge indicates a potential market for an unenumerated mechanical function or electronic function but does not indicate whether the future buyers will use the function for a civil application, a military application, or both.

"Reasonable Expectation" and Release under (b)(5)

Does "reasonable expectation" have the same definition of "knowledge," including "high probability," as defined in Part 772 of the EAR? We believe the "high probability" standard is appropriate and achieves the Administration's national security goals. If this is the standard, we trust the Administration will confirm that. However, Administration officials have indicated the "reasonable expectation" standard is established and interpreted in federal law in other areas outside of export controls and sanctions. If so, it would be useful for the Administration to provide a clarifying note and, especially for the export control bar, to indicate which body or bodies of law have interpreted the standard.

Ongoing Publication or Posting on Guidance

Throughout this letter, we have asked the agencies to give examples that clarify the application of the criteria under the various provisions of the proposed definition of specially designed. After promulgation of the proposed rule in final form, we also urge the agencies to continue to post advisories that include additional examples regarding end items, parts, components, accessories, and attachments that meet and do not meet the various standards within the definition of "specially

designed." We urge the agencies to publish new examples periodically until the published interpretations provide a full and robust interpretation of each standard sufficient to permit the private sector to self-classify specially designed items on the CCL and commodities on the USML. The addition of examples should be more than a one-time exercise. Rather, it should be an ongoing process of publishing interpretations.

Classification Disputes and Agency Jurisdiction

The goals of the Export Control Reform Initiative as it relates to the creation of positive control lists are to create lists that complement each other, avoid overlaps, and avoid control gaps between the USML and the CCL. We recognize the rewriting of the lists is a major improvement in national security and that with the rewriting of the lists, the number of conflicting claims of authority between DDTC and BIS will be dramatically reduced. We recommend processes that will reinforce and institutionalize these goals over the long term.

First, for the fewer remaining jurisdictional conflicts, we recommend that the Administration establish a single decision-maker to resolve such disputes. For example, the National Security Advisor would be a good candidate for this role.

Second, BIS should consider repealing Section 734.3(b)(1)(i) of the EAR. Each control list should be considered on an equal footing without any regulatory presumptions. Rather, objective classification processes and standards should apply.

Third, DDTC should consider modifying Section 120.3 of the ITAR to eliminate terms such as "developed, configured, adapted, or modified for a military application." It is essential to eliminate these terms in order to avoid overlapping agency jurisdiction. Similarly, the UMSL should be considered on an equal footing with the single-decision maker without a regulatory preference. Without these procedural changes, a major flaw of the current system will remain. A well-managed corporate export control program may seek a classification or CCATs request from BIS and be left with the potential that a prosecutor or future managers of DDTC will disregard the BIS decision. It is the senior officials in the Administration who should assure internal coordination of classification decisions of the two agencies. This is not a burden that should remain on well-intended and compliance-minded exporters. This is so, no matter how few disputes there may be in the future. More importantly, the procedures we recommend will avoid the temptations of future classification officials and managers in the agencies to forget the current lessons well-recognized by Defense, State, and Commerce in the Export Control Reform Initiative. These procedures will avoid the temptation to return to a long-forgotten time when the rules were intentionally opaque decisions were based on a rule providing unlimited discretion without changes in the list to reflect decisions, and jurisdiction decisions were enforced retroactively.

Reference to *Lachman* and Other Circuit Court Decisions

The preamble to the BIS proposed definition refers to the *Lachman* decision. We see no particular value in this reference and it provides some potential for confusion. The decision in *Lachman* does not address the clearer and more objective standard in the proposed rule to define "specially designed." We underscore that Commerce and State may by regulation define the scope of license requirements and violations by regulation to be a narrower scope of required licensing and prescribed conduct than the much broader potential scope of the International Economic

Emergencies Powers Act or the Arms Export Control Act. The *Lachman* interpretation of the undefined term "specially designed" does not limit the authority of Commerce and State now to define the term because their organic statutes authorize such. Of course, all statutes and regulations must meet constitutional standards. Moreover, we believe *Lachman* relies too heavily on subjective intent to serve the goals of Export Control Reform. We note that the *Lachman* decision of the First Circuit is in conflict with the Seventh Circuit's decision in *Pulungan*. If the preamble in the pending proposed rule refers to case law, perhaps it should also refer to the Seventh Circuit's decision in its *Pulungan* decision, because it raises limits under the Constitution on rules not sufficiently clear that a person knows how to avoid conduct that is in violation of the agency's rules. That seems more relevant to the pending rule- making exercise than *Lachman*. The other option for BIS would be to make no references to case law. It is clear the intent of the agencies in this rule-making exercise is to improve and clarify the term "specially designed." The agencies clearly do not intend to leave the term undefined. The reference to the *Lachman* decision either adds nothing or at worst creates unintended confusion.

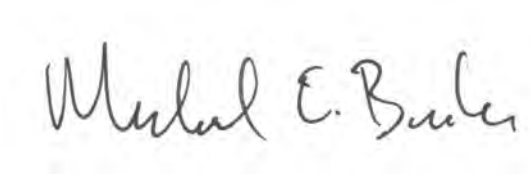
Seeking Reduction in the Multilateral Regimes for the Use of "Specially Designed"

We recommend that the Administration move to implement the rewritten control lists as soon as possible. The tremendous challenge of defining "specially designed" illustrates that the United States and its regime partners should work to reduce the use of the term "specially designed" and replace it with objective control criteria with defined functionality. While the multilateral efforts will require commitment of many years, the gains to the national security will be well-worth the effort, and we urge Defense, State, and Commerce to commit to that effort.

Conclusion

We commend Defense, State, Commerce, and the NSC staff for their tremendous effort in defining "specially designed" in regulations that will determine agency jurisdiction, classifications, and license requirements. With the additional interpretations we suggest, we urge the agencies to finalize the "specially designed" rules and move on to the tasks of reporting to the relevant oversight committees and publishing the rewritten control lists.

Sincerely,



Michael E. Burke
Chair, Section of International Law

AEROSPACE INDUSTRIES ASSOCIATION

August 3, 2012

U.S. Department of State
Bureau of Political-Military Affairs
Department of Defense Trade Controls Policy
2401 E Street, N.W.
Washington, D.C.

ATTN: Ms. Candace Goforth
Director, DTC Policy

SUBJECT: RIN1400-AD22 Amendment to the International Traffic in Arms Regulations Definition of "Specially Designed"

Dear Ms. Goforth:

The Aerospace Industries Association (AIA), on behalf of its members, commends the Department for development of a definition standard for "specially designed." We also appreciate the proposed structure to determine if an article is "specially designed" on the United States Munitions List (USML) if it is not actually identified by description or technical parameters on the USML "positive list." It is helpful that the proposed definition is similar to the definition proposed by the U.S. Department of Commerce, as harmonized definitions will help exporters interpret the ITAR and EAR consistently.

Additionally, we appreciate the overall approach in structuring the definition. In theory, the implementation of the definition to operational practice in the jurisdiction and classification procedure is facilitated through the "decision tree" approach for the "catch" (those items meeting the specially designed criteria) and "release" (those items meeting one or more of the three "specially designed" criteria, but excluded from being treated as specially designed under the ITAR). However, the use of the proposed definition on an individual part/component basis will create a significant implementation and compliance burden for exporters, without further clarification.

In particular, AIA members are concerned that the proposed definition will require an exporter (or original equipment manufacturer) to determine if the item has "properties that were

peculiarly responsible for achieving or exceeding" performance levels; was an accessory or attachment that "enhance the usefulness and effectiveness;" is a "single unassembled part" used in "multiple types of commodities;" "has the same form, fit, and performance capabilities" of an item that "is or was in production;" and "was or is being used with a reasonable expectation of use in or with defense articles." This extensive analytical requirement has the potential to result in exporters classifying parts/components differently and/or a significant increase in the number of commodity jurisdiction requests, due to the unintended consequences of misclassification of items. The comments outlined below are intended to encourage consideration of clarifying language that will help to ensure that the proposed definition for "specially designed" does not inadvertently undermine the potential benefits of an enumerated listing of items on the USML and overburden the U.S. Government with requests for clarification to avoid compliance ambiguity.

Additional consideration is also warranted for how the proposed 22 CFR 120.41 definition fits with the existing structure of the ITAR. 22 CFR 120.3 "Policy on Designating and Determining Defense Articles and Services" criteria should be deleted or revised to reference Section 120.41 indicating that 120.41 codifies 120.3 through the "catch and release" concept applicable to determining USML jurisdiction and classification. A footnote in 120.3 could explain the purpose/function of 22 CFR 120.41, or the following could be included in 120.41 itself as a preamble:

"An article or service may be designated or determined in the future to be a defense article (see §120.6) or defense service (see §120.9) if it:

(a) Is identified on the United States Munitions List (see §121 United States Munitions List); or
(b) Meets the definition of "specially designed" for an article on the United States Munitions List, even though it may not be enumerated on the USML (see §120.41)and is controlled in a "catch all" paragraph on the USML; or
(c) Is determined by the Department to have significant military or intelligence applicability such that control under this subchapter is necessary."

Since the "Policy on Designating and Determining Defense Articles and Services" is the beginning criteria for U.S. exporters to use in self determinations of jurisdiction, the language in §120.3 and §120.41 must be considered together to clearly diagram the decision process steps that implement the regulatory requirements for jurisdiction self determination in an operational business process. Without revision of §120.3 or its deletion, the full intent of a positive USML coupled with clarification of those items not enumerated on the USML but "specially designed" may result in reliance on the existing language in §120.3 and have the unintended consequence

of treatment of items as USML that the Department believes are more properly regulated on the Commerce Control List as "600" series items.

We further recommend that the language and definitions regarding "development" be correlated to the Dept. of Defense acquisition milestones in terms of technology development phase (https://dap.dau.mil/aphome/das/Pages/Default.aspx) to improve clarity using terminology commonly understood and accepted by defense contractors.

In addition, AIA submits the following more detailed comments on details of the proposed definition:

- The definition uses the term "commodity" to mean any article, material or supply, except technology/technical data or software. The Department of Commerce proposed definition uses the term "item" in its equivalent paragraph (a)(1). We believe the term should also apply to technology/technical data and software as well as hardware, in parallel to the Department of Commerce definition.
- Paragraph (b) should be rephrased to read "A part, component, accessory, or attachment that would be controlled by paragraph (a) of this paragraph is not specially designed if it:"
- Proposed 120.41(b)(2) may be unduly restrictive. There are many simple components
  "of a type commonly used in multiple types of commodities." Limiting this release paragraph to single, unassembled parts may result in over-controlling items and driving additional ITAR licensing volumes that will burden the Department. There are several changes that could improve this paragraph:
  - We urge the Department to consider expanding (b)(2) to including components "of a type commonly used in multiple types of commodities." Without the addition of "components to (b)(2), the proposed wording will place significant limitations on the numbers of components that will be eligible for "release" under (b)(2).
  - An alternate approach that could work would be to define the exclusion in terms of the functionality of the items, to include fastening, positioning/supporting, serving as a conduit for the transfer of fluids, electricity or signals.
  - At a minimum, the Department should add other part types to the list of examples to make clear that a broader set of parts is intended to be released under this paragraph, for example, clamps, brackets, connectors, tubes, fuel lines and wire harnesses.
- Proposed 120.41(b)(3) may also be unduly restrictive. While we understand and appreciate that the Department does not want this paragraph to focus solely on

function, as opposed to form/fit, requiring identical form/fit will result in capturing items that are insignificant and have performance characteristics that are equivalent to items that are not controlled on the ITAR. The Department should consider language that would allow a part/component to fall within the (b)(3) release if differences are limited to dimensional variations (i.e. fit) that do not enhance or upgrade the performance capability of the item.

- Proposed 120.41(b)(3) should also include a new sub-item (iii) to allow for commodities that have been formally determined by DDTC as Commerce-controlled items under the EAR in a commodity jurisdiction (CJ). This will prevent an unnecessary revision to the "specially designed" catch-all in the ITAR. The Department may want to consider the following proposed text for inclusion in 120.41(b)(3)(iii): "Is determined as subject to the Export Administration Regulations pursuant to a Commodity Jurisdiction issued by DDTC." In addition, (b)(3)(iii) could also require CJ documentation recordkeeping as is proposed in (b)(4) –(5).
- The Department of Commerce's proposed specially designed definition includes a Note to paragraph (a)(1) (77 Fed. Reg. 36,419) which illustrates well the intended meaning of "peculiarly responsible" in (a)(1). AIA recommends expanding the proposed Note to paragraph 120.41(a)(1) to add analogous language.
- It remains unclear how tooling, test and support equipment are intended to be covered by the definition. The Department should clarify whether it intends tooling, test and support equipment to be caught in any of the "catch all" paragraphs.
- The Note to paragraph (b) defines the "catch all" paragraphs. AIA notes that the phrases that are called out as indicating a "catch all" were not utilized in all of the proposed USML categories, even where we interpret that to be the intent (for example, in proposed Category XIX). As the Department moves forward to finalizing the USML categories, any paragraphs intended to be "catch alls" should match the language in this definition. Note 1 to paragraph (b)(3) should be clarified by striking the reference to "serial production." That term is no longer utilized expressly in (b)(3) and it could complicate interpretations of the term that is utilized, "production."
- Note 1 and 2 to paragraph (b)(3): "Production" and "Development" are both used throughout the ITAR and are currently not defined. As these notes are currently written, the provided definitions in Note 1 and Note 2 apply only to the definition of "specially designed," which implies that the Department has a separate definition for those terms as used on other areas of the ITAR (i.e., 120.9 Defense Services, 120.10 Technical Data, Part 125 and 126). AIA recommends the inclusion of these definitions in Part 120 to apply wherever used in the ITAR.

- Note 3 to Paragraph (b)(3): What is the difference between "feature enhancements" allowing a commodity to remain in production versus a "change [to] the basic performance or capability" placing a commodity back into development? U.S. exporters would benefit from additional clarification, including consideration of either defining "feature enhancements" or adding some examples of what constitutes an enhancement.

Thank you once again for the opportunity to comment on this important proposed rule. Please feel free to contact us if you have any questions about these comments.

Best regards,

Remy Nathan

Remy Nathan
Vice President, International Affairs
Aerospace Industries Association

AIAC Aerospace Industries Association of Canada | L'Association des industries aérospatiales du Canada

August 3, 2012

U.S. Department of State
Bureau of Political-Military Affairs
Department of Defense Trade Controls Policy
2401 E Street , N.W.
Washington, D.C.

Attention: Ms. Candace M.J. Goforth, Director Office of Defense Trade Control Policy

Subject: RIN1400-AD22 Amendment to the International Traffic in Arms Regulations Definition of "Specially Designed"

Dear Ms. Goforth:

The Aerospace Industries Association of Canada (AIAC) is a not-for-profit organization advocating on aerospace policy issues that have a direct impact on aerospace companies in Canada. On behalf of its members, AIAC wishes to submit the following comments regarding the proposed rule referenced above.

The "specially designed" definition proposal is welcomed by AIAC as part of the President's Export Control Reform Initiative (ECRI) which supports the Administration's plan to make the USML and CCL positive, tiered, and aligned with the view to eventually comining them into a single control list. The decision tree structure and 'catch and release' approach is logical and intends to simplify the widely used term "specially designed" throughout the International Traffic in Arms Regulations (ITAR) and Export Administration Regulations (EAR). While we appreciate the new approach to determining what items are "specially designed" for military use, we would like to comment on aspects of the proposal concerning implementation of the new definition.

First, to ensure consistency in the "specially designed" definition proposed by the US Department of Commerce (DOC), **AIAC recommends that the US Department of State Directorate of Defence Trade Controls (DDTC) proposed definition of "commodity", for consistency, matches the proposed definition of Item by the DOC whereby the term '"commodity" should be the same as the DOC proposed paragraph (a)(1) in the "catch" part of the 'specially designed" definition. Specifically, AIAC recommends the term "commodity" explicitly include technology and technical data and assistance, and software as well as just hardware.**

Second, as part of the 'release' of items from the 'specially designed' net, proposed paragraph (b)(2) appears unduly restrictive as it only applies to "single unassembled parts…".

255 Albert Street, Suite 703 Ottawa, Ontario K1P 6A9 | Tel.: (613) 232-4297 Fax: (613) 232-1142 | Email: info@aiac.ca www.aiac.ca

This could be remedied by including in the scope "components of a type commonly used in multiple types of commodities..."

Third, as part of the 'release' of items from the 'specially designed' catch-all net, proposed paragraph (b)(3) also appears unduly restrictive. As this paragraph focuses on form/fit/performance rather than function, requiring identical form/fit/performance will result in catching items that do not warrant "600 series" control and that have performance characteristics equivalent to items that are not controlled on the CCL. BIS should consider allowing a part/component to fall within the (b)(3) release if differences are limited to dimensional variations.

Fourth, AIAC is concerned about whether the definition of "specially designed" is applicable to parts and components that have previously been subject to a US Department of State Commodity Jurisdiction (CJ) that determined such part and component was under the jurisdiction of the US Department of Commerce. In particular, if a part or component was determined to be under DOC jurisdiction in a DOS CJ, the "specially designed" definition should not be applied to such component and parts whereby the control of such parts and components may return to ITAR controls. In this regard, **AIAC recommends that proposed paragraph (b)(3) should also include a new sub-item (iii) to allow for commodities that have been determined by DDTC as Commerce-controlled items in a commodity jurisdiction in order to not revert back to ITAR controls and be subject to the "specially designed" catch-all.** Text for proposed paragraph (b)(3)(iii) for the Department to consider could be along the lines of: "Is determined as subject to the Export Administration Regulations pursuant to a Commodity Jurisdiction issued by DDTC." In addition, (b)(3)(iii) could also require CJ documentation as is proposed in §120.41 (b)(4) –(5).

Lastly, to enhance clarity and reduce confusion for the exporting community concerning relation between §120.3 and §120.41, **AIAC recommends that the preamble or opening paragraph in proposed §120.41 indicate that §120.41 codifies §120.3 through the "catch and release" concept applicable to determining USML jurisdiction and classification. Likewise, §120.3 "Policy on Designating and Determining Defense Articles and Services" should be revised to explicitly refer to § 120.41indicating that §120.41 codifies §120.3 via the "catch and release" concept.**

On behalf of its members, AIAC wishes to thank you for the opportunity to comment on this important proposed rule. Please feel free to contact us if you have any questions about these comments.

Sincerely,

Jim Quick
President & CEO

Alcoa

201 Isabella St at 7th St Bridge
Pittsburgh, PA 15212-5858 USA
Tel:1 412 553 4545
Fax :1 412 553 4498

August 2, 2012

BY E-MAIL

Candice M. J. Goforth, Director
Office of Defense Trade Controls Policy
Directorate of Defense Trade Controls
U.S. Department of State
SA-1, 12th Floor
2401 E Street NW
Washington, DC 20522-0112
DDTCResponseTeam@state.gov

ATTN: **Specially Designed Definition**

RE: Alcoa Inc. – Comments on Proposed Definition for *Specially Designed*

Dear Ms. Goforth:

Alcoa Global Fasteners, Inc., *dba* Alcoa Fastening Systems ("AFS"), appreciates this opportunity to comment on the Department of State, Directorate of Defense Trade Controls' ("DDTC") proposed definition for *Specially Designed*, dated June 19, 2012.[1] While AFS believes the proposed definition clarifies the vast majority of fasteners and fastening systems that have no genuine military purpose or military feature are not defense articles, AFS offers the following comments and suggestions to assist DDTC in ensuring that the final rule meets the articulated goals in the notice.

I. Alcoa Fastening Systems

Alcoa Inc. is a world leader in the production and management of primary aluminum, fabricated aluminum products and alumina. Alcoa has 61,000 employees spread over 31 countries and reported 2011 revenue of $25 billion. Through its AFS business unit, Alcoa designs, manufactures and sells over $1 billion dollars annually in fasteners, fastening systems, installation tooling, and bearing products for civil and military applications worldwide.

II. Fastener Systems and Bearing Products

Fasteners and fastening systems used in civil and military applications can range from relatively simple hardware devices, such as nuts, nut plates, bolts, lockbolts, and screws, to more complex multi-subcomponent fasteners and fastening systems such as panel fasteners, blind

---

1 Proposed amendment to the International Traffic in Arms Regulations: Definition for *Specially Designed*, 77 Fed. Reg. 36428 (June 19, 2012).

fasteners, fluid fittings and latches.[2] Because they simply hold things together, they perform the same function regardless of the components they connect, and their ultimate utility is independent of the end-item in which they are installed.

Bearing products include such items as spherical bearings, tie rods and rod ends. These bearing products are used in many kinds of civil and military articles that have components in assemblies that must rotate or oscillate such as landing gear or flight controls.

Generally, fasteners, fastening systems, and bearing products used in civil and military applications have the same performance levels and are functionally interchangeable, because the materials and specification requirements for AFS products used on many kinds of articles are the same, regardless of whether they are civil or military end-items.[3] Additionally, many of the original designs for fasteners, fastening systems and bearing products are decades old and are based on consensus standards and/or established industry specifications.[4] Only in rare instances would the military or civilian nature of an article affect the design of these products.

III. Specific Comments on Proposed Definition of *Specially Designed*

AFS believes that most fasteners, fastening systems and bearing products used on military and space articles would not be controlled under the ITAR if the proposed definition for *Specially Designed* is adopted, unless the part has a genuine military purpose.[5]

However, certain provisions within the revised definition may still not preclude the interpretation that would potentially control fastening systems, fastener installation tooling, bearing products and other similar low level items under the ITAR that we believe DDTC does not intend to control. In hopes of clarifying that DDTC does not in fact desire to control such articles on the USML, we offer the following comments and suggestions.

---

2 The AFS product lines commonly used by all customers include: blind bolts, blind rivets, fluid fittings, inserts and studs; installation/removal tools; latching systems; nuts; panel fasteners; pins; bolts and screws; lockbolts, spherical bearings, tie rods and rod ends. *See* AFS aerospace product brochure at: http://www.alcoa.com/fastening_systems/en/pdf/Aerospace_Products_Brochure.pdf, and AFS commercial product brochures at: http://www.alcoa.com/fastening_systems/commercial/en/home.asp.

3 Fasteners are typically made from aluminum, alloy steels, stainless steels, titanium and nickel alloys, and are designed based on the strength, physical characteristics, and corrosion resistance of the particular material. Such fasteners are used on articles made from the same kinds of materials (including composites) that are used in similar civil and military applications.

4 Certain discreet features of fastening systems may be covered by published patents, but such features are common to the particular system and have equal applicability in civil and military applications, e.g. AFS Eddie-Bolts® with the Spline-Lok® feature or AFS XPL® lockbolts with its double-grip feature.

5 A fastener that is designed to contribute to the low observable characteristics of an end-item would not be "... of a type commonly used in multiple types of commodities not enumerated on the U.S. Munitions List or the Commerce Control List, ...", and therefore would not fall within the scope of § 120.41(b)(2).

As part of our comments, we are providing examples of parts from two types of fastening systems and our bearing product line used on civil and military articles in Section IV below to demonstrate our understanding of the application of the draft definition. The parts are not listed in the examples in (b)(2), but these are also the kinds of low level parts we believe are not intended to be controlled on the USML as our examples suggest.

1. Inadvertent Capture of Low-Level Parts

AFS is concerned that as the proposed rule is currently written, standard types of fasteners and bearing products such as latches, blind bolts, panel fasteners, fluid fittings[6], spherical bearings and rod ends that have been configured for a military aircraft could still be construed as a defense article lacking further clarity in the list of examples in (b)(2) that are "single unassembled parts of a type commonly used in multiple types of commodities". All of the parts, as can be the case for the nut plates referenced in (b)(2), are multi-subcomponent items.[7] As demonstrated in the specific examples below, our analysis suggests these are dual use articles because each is of a type used in civil and military articles; however, the dimensions of the part may vary to properly mate with another component, to fit within a specific space, or to conform to a curved surface on the fuselage of a military aircraft. These design considerations are common to military and civil aircraft, but the resulting parts perform the same function. To further clarify the intent of (b)(2), it would be helpful to have a more comprehensive list of items in this section. In this regard, we would suggest adding other categories of parts that are intended to fit the definition in (b)(2) such as latches, blind bolts, panel fasteners, fluid fittings, bearings, and rod ends.

2. Inadvertent Capture of Fastener Installation Tooling

AFS originally addressed this point in our comment letter to the DDTC for the proposed revision of Category VII of the USML (letter dated February 8, 2011, included in the published comments for 75 Fed. Reg. 76930 (December 10, 2010)). As we commented earlier, the proposed Cat VII does not clearly address fastener installation tooling, and the draft definition for *specially designed* may not provide the clarity needed for all interpreters of the ITAR to reach the same conclusion that unique, but low level tooling is not on the USML.

---

6 Fluid fittings are used in low and high pressure fluid systems to connect hoses to components such as actuators that are used to control a system on civil or military aircraft, e.g. landing gear, flight controls.

7 Many standard kinds of fasteners, including nut plates, are comprised of several subcomponents that must be assembled into a completed fastener or bearing assembly in order to create the "single unassembled part" referred to in (b)(2) of the draft definition. Nut plates for example can be a single element part, or can be comprised of three subcomponents (plate, nut element and clip to retain the nut on the plate). AFS believes all such fasteners and similar parts fall within the meaning of (b)(2).

AFS urges revision of (b)(3) to better clarify the application of the "form … of … an accessory".[8] This part of the rule may subject some AFS fastener installation tooling, which has been customized at the request of a military customer for purposes of installing fasteners on military articles, to control under the ITAR even though the fit (means for engaging the fastener) and performance levels are the same, although we do not believe DDTC intends to capture such tooling. The customization of installation tooling is done primarily to compensate for access issues so that fasteners and fastening systems may be properly installed, but the overall function of the tooling is not changed.

For example, in order to install fasteners in hard-to-reach areas in a given location on a military article, AFS may modify part of the installation tooling (*e.g.*, a shorter or longer nose assembly, or different length extension on a socket assembly) so that a standard power or hand tool with the modified accessory may be used to easily reach the intended site of the fastener. We are concerned that such modifications could be interpreted as *specially designed* and control otherwise dual-use tooling under section (a)(3) of the proposed definition when there is no express "release" in section (b) when such a modification is first requested by a military customer but has equal utility in the civil markets.[9]

Accordingly, we respectfully suggest that DDTC clarify either the definition of "form" as used in (b)(3) since tooling with different forms that have the same performance capabilities as tooling used on civil articles are not controlled, or better address the criteria under (b)(4) to avoid capturing customized tooling that have no military purpose.[10]

IV. Specific Examples for Application of Proposed Definition for *Specially Designed*

In reviewing the proposed definition for *specially designed*, AFS selected three common types of parts as examples that were then evaluated against the criteria in the proposed revision to the USML for *Category VIII*[11], and the proposed definition as follows:

---

8 Lacking a better category for fastener installation tools, AFS currently considers tooling to be an accessory that is needed by aircraft manufactures and maintenance facilities to install and repair fasteners. Installation tooling would therefore not be 'released' under section (b)(2), which addresses parts, even though it is used to install fasteners 'released' under this section. If the DDTC intended to release fastener installation tooling under (b)(2) as part of a fastener system, then this would need to be expressly stated.

9 (b)(4) could be interpreted to include such modified tools, but its application is ambiguous particularly if the first request for a modification is from a military customer even though it is reasonable that a civil customer could encounter the same access issues, on for example a small business jet, and therefore require the same tooling at a later time.

10 It is noted that various fastening systems with different "forms" are also intended to be interchangeable. For example, lockbolts and threaded pins are interchangeable and used depending on clearance for tooling; panel fasteners can be used instead of latches at the designer's discretion; blind bolts are used in lieu of lockbolts or threaded pins when access for installation is from one side.

11 76 Fed. Reg. 68694 (Nov. 7, 2011). All references to Category VIII ("*VIII*") and its subsections refer specifically to this draft rule to revise § 121.1, Category *VIII* of the USML.

1. Latch designed for F-35:

   The proposed revision to *VIII(h)(1)* suggests the latch may be *specially designed* for the aircraft, but the latch is not *specially designed* for the items listed in (h)(2) through (h)(19) based on our understanding of its use. In reviewing the criteria under *specially designed*, AFS believes the latch may not be captured under (a)(1) through (a)(3) because there is no performance level, characteristics, or functions enumerated for a latch on the USML, it is not genuinely necessary for the function of the defense article, and it is not an accessory or attachment.[12] However, since the latch has unique dimensions, and interpretations can vary, AFS assumed the latch was captured by (a)(1) or (a)(2), and moved to the analysis in (b).

   On reviewing the latch under (b)(1), we first determined the part is not listed on the USML, (e.g. under Cat. *VIII* proposed revision). Then, our review of the latch under (b)(2) concluded the latch is not *specially designed* because it "is a single unassembled part that is of a type commonly used in multiple types of commodities not enumerated on the U.S. Munitions List or the Commerce Control List …"[13] Latches made from the same materials with slightly different dimensions and features that have the same function are used on both civil and military articles.

2. Fluid fittings designed for F-35 or F-18:

   The review of the fluid fitting for the F-35 took the same path as for the latch in the above analysis. *VIII(h)(1)* suggests the fitting is specially designed for the F-35, and requires further review. On reviewing the part against the criteria of *specially designed*, the fitting does not appear to meet the requirements of (a)(1) or (a)(2), but since the dimensions may vary slightly, we assumed the part was captured under section (a). In this case, the part is not listed on the USML (b)(1), and "is a single unassembled part that is of a type commonly used in multiple types of commodities not enumerated on the U.S. Munitions List or the Commerce Control List …" thus the part is 'released' under (b)(2) and is not *specially designed.*

   In the case of the fluid fitting used on the F-18, the analysis is slightly different, but the conclusion is the same that the fitting is not *specially designed.* In this

---

[12] A dual-use structural panel fastener could be easily used in lieu of a latch, albeit with minor modifications to the aircraft. Panel fasteners and latches provide similar solutions to fasten panels to some structure on an aircraft and are frequently selected based on the preference of the aircraft designer rather than some unique function or characteristic of the defense article to perform its intended function.

[13] AFS understands "of a type commonly used in multiple types of commodities not enumerated on the US Munitions List or the Commerce Control List" as used in (b)(2) to apply broadly to all fasteners used on man-made items regardless of their form, material, dimensions, applied coatings or lubricants, provided these features do not contribute to the low observable characteristic of the end item or other unique characteristic that warrants control. AFS also understands articles not "enumerated" on the control lists include such articles as commercial airliners, farm equipment, computer furniture, etc. AFS suggests adding an explanatory note to clarify the meaning of (b)(2).

instance, the particular fluid fitting is used on an early version of the F-18 Hornet (A-D), and it is not *specially designed* for any items in *VIII(h)(2)* through *(h)(19)*, thus *VIII(h)(1)* indicates the fitting is controlled under the Export Administration regulations.[14] However, if the fluid fitting was used only on a later version of the F-18 E/F/G (Super Hornet), the fitting is still not *specially designed* under (b)(2) because it "is a single unassembled part that is of a type commonly used in multiple types of commodities not enumerated on the U.S. Munitions List or the Commerce Control List …" Fluid fittings with slightly different dimensions that have the same function and performance levels are used on both civil and military articles in the same kinds of applications.

3. Rod end designed for F-35:

   A rod end is designed for use on the landing gear of the F-35. Similar to the analysis in the second example above, *VIII(h)(1)* captures all parts 'specially designed' for the F-35, but there is no further reference to landing gear in *VIII*. On reviewing the definition for specially designed, sections (a)(1) or (a)(2) could 'capture' this rod end due to its unique dimensions, but section (b)(2) 'releases' this rod end because it "is a single unassembled part that is of a type commonly used in multiple types of commodities not enumerated on the U.S. Munitions List or the Commerce Control List …". Rod ends made from the same materials, with the same function, are used in many types of articles.

V. Conclusion

Alcoa appreciates the significant efforts of DDTC in revising the definition for *specially designed* and providing industry the opportunity to provide input. We hope our comments, suggestions, and examples will help to further clarify the application of the proposed definition.

Should you have any questions or require further information, please do not hesitate to contact the undersigned at TJ.Adcock@Alcoa.com or (724) 337-2071.

Respectfully submitted,

TJ Adcock
Director, Global Trade Compliance
Alcoa Inc.

---

[14] 76 FR 68694, § 121.1(h)(1) exempts from control on the USML all parts that are common to early versions of the F-18. It is further noted that the fitting in use on the F-35 is the same type used on the F-18, but modified slightly to suit the application. This modified fitting is not *specially designed* under (b)(2).

Bob Schuettler
Director, Corporate Export Licensing

ATK
1300 Wilson Blvd, Ste 400
Arlington, VA 22209

703.412.5991
703.412.5996 fax
703.853.0265 cell
bob.schuettler@atk.com

www.atk.com

02 August 2012
Ms. Candace M. J. Goforth
Director, Office of Defense Trade Controls Policy
U.S. Department of State
PM/DDTC, SA-1, 12th Floor
2401 E St, NW
Washington, DC 20037

Subject: **RIN 1400-AD22, Amendment to the International Traffic in Arms Regulations: Definition for "Specially Designed"**

Dear Ms. Goforth:

Alliant Techsystems Inc. (ATK) appreciates the opportunity to comment on the subject advanced notice of proposed rulemaking (ANPR) to provide a clear, concise, and common definition of "specially designed" for use across the EAR and the ITAR. The iterative revisions to the definition have resulted in a succinct definition which is easy to follow and understand. ATK believes the decision tree process, outlined on page 36430, will be very helpful in working through the definition and encourages the Directorate to create an interactive tool to assist industry.

Not to detract from the quality and positives of the proposed definition but ATK provides the following comments for areas of further refinement based on our review of the ANPR.

- **Relationship to Section 120.3** – A definition of "specially designed" and the revision of the USML into a positive list will be hampered and confused if Section 120.3 is not revised. A rewrite of Section 120.3 should reflect the objective criteria being used by the Departments of State, Defense and Commerce in creating a 'bright line' between the USML and CCL.

- **Proposed 120.41(b)(2)** – Proposed paragraph (b) addresses part, component, accessory, or attachment but proposed paragraph (b)(2) uses 'part' within the exclusion. Read together, a "component," "accessory," or "attachment" would be excluded by proposed paragraph (b)(2) if it is a 'part', which by definition they are not. To avoid this confusion, ATK recommends revising proposed paragraph (b)(2) by removing the following phrase from the definition: "Is a single unassembled 'part' that".

- **Proposed 120.41(b)(3)** – Limiting proposed paragraph (b)(3) to "the same form, fit, and performance capabilities…" will needlessly catch parts, components, accessories, and attachments. ATK recommends proposed paragraph (b)(3) be revised to read, in part, as follows: "Has the same or similar form and fit and the same performance capabilities…" This will allow parts, components, accessories, and attachments with minor form, fit variations to still be released under proposed paragraph (b)(3).

- **Note 2** – ATK recommends the inclusion of software as a "commodity" within the note.

- **Note to paragraph (a)(1)** – ATK recommends the explanation and illustrative example of "peculiarly responsible" contained in the note be enhanced and expanded upon (reference the proposed Note to paragraph (a)(1) in the Department of Commerce's ANPR (Vol. 77, FRN 118, pg. 36419)).

- **Note 1 and 2 to paragraph (b)(3)** – "Production" and "Development" are both used throughout the ITAR and are currently not defined. As these notes are currently written, the provided definitions in Note 1 and Note 2 apply only to the definition of "specially designed," which implies that the Directorate has a separate definition for those terms as used on other areas of the ITAR (i.e., 120.9 Defense Services, 120.10 Technical Data, Part 125 and 126). ATK recommends the inclusion of these definitions in Part 120 to apply wherever used in the ITAR.

- **Note 3 to paragraph (b)(3)** – The note differentiates between development activities for "feature enhancements" versus those "that change the basic performance or capability". ATK requests clarification, definition, and examples to differentiate between the two types of development activities.

ATK again thanks the Directorate for the opportunity to comment on the ANPR and applauds the Directorate's continued efforts to clarify and update the Regulations.

Sincerely,

Robert Schuettler
Director, Corporate Export Licensing
Alliant Techsystems Inc.

AUECO
ASSOCIATION OF UNIVERSITY EXPORT CONTROL OFFICERS

August 3, 2012

Office of Defense Trade Controls Policy
U.S. Department of State

RE: Amendment to the International Traffic in Arms Regulations: Definition for "Specially Designed" (RIN 1400-AD22)

To Whom It May Concern,

I am writing on behalf of the Association of University Export Control Officers (AUECO), a group of senior export practitioners at twenty-five accredited institutions of higher learning in the United States. AUECO members monitor proposed changes in laws and regulations affecting academic activities and advocate for policies and procedures that advance effective university compliance with applicable U.S. export controls and trade sanction regulations.

AUECO is specifically interested in contributing to the export reform effort in order to ensure that the resulting regulations do not have an adverse impact on academic pursuits. As a result, AUECO is providing the following comments with respect to the U.S. Department of State's request for public comments on its proposed definition for "specially designed".

The development of positive lists with objective parameters to describe controlled items is important for the export community. The development of control criteria based on the specific characteristics which make them defense articles rather than on design intent removes ambiguity and promotes compliance for the export community. Nonetheless, AUECO recognizes that the complete elimination of catch-all control criteria may not be possible.

To the extent that "specially designed" must remain as a catch-all in the description of defense articles subject to the ITAR, AUECO supports the goal of providing a clear definition of "specially designed" that meets the nine objectives outlined in the July 15, 2011, proposed rule. AUECO also supports the effort to have the definition of "specially designed" in the International Traffic in Arms Regulations (ITAR) be as close as possible to that in the Export Administration Regulations (EAR). We concur that a clear, common, and objective definition of "specially designed" is important to the export reform initiative, particularly as items are moved from the USML to the CCL.

<u>Recommendations for the definition of "specially designed"</u>

The proposed definition of "specially designed" first catches items that may be subject to control in paragraph (a) and then releases items which are not subject in paragraph (b). We suggest that the language in the introduction to paragraph (b) be changed from "a part, component, accessory, or attachment is not controlled by a U.S. Munitions List "catch-all" paragraph if it" to "a part, component, accessory, or attachment is not "specially designed" if it". This change in language eliminates the need

to define a “catch-all paragraph” (i.e. allows for the removal of the Note to paragraph (b)) and more closely aligns with the proposed EAR definition.

Paragraph (b)(5) is designed to address potential overreach of the “specially designed” designation to parts, components, accessories or attachments originally developed for a general purpose not specific to the related USML item. The proposed language is “Was or is being developed with no reasonable expectation of use in a particular application”. This language could also describe many basic research activities, but in the university environment, such activities typically fall under the definition of fundamental research, and would thus be outside the scope of the ITAR. We find the proposed language confusing with respect to applied research, as it is hard to imagine an item being developed without consideration of potential applications. We suggest that the wording of (b)(5) be changed to “Was or is being developed with no reasonable expectation that its predominant use would be in an application which would cause it to be “specially designed” in (a)”. This change would serve to clarify that the consideration is limited to the particular USML reference causing the evaluation of the part, component, accessory or attachment.

The note to paragraphs (b)(4) and (b)(5) requires that contemporaneous documentation used to establish that the that the part, component or accessory is not “specially designed” be maintained. Additional guidance on suggested practices for record-keeping as well as a clear statement of any record-keeping requirements associated with exclusion of items as “specially designed” based on design intent would be useful to the export community. In particular, we are concerned that absent such guidance, the definition may fail to meet the objective of being easily understood and applied by exporters, prosecutors, juries and the U.S. Government.

Additional Comments

AUECO has previously expressed concern that the proposed revisions to the ITAR will adversely impact fundamental research at U.S. universities. We are particularly concerned that in addition to items becoming controlled simply due to an inability to divine design intent, that the funding based catch-all in many of the proposed USML categories will sweep items into the USML based simply on Department of Defense (DoD) funding. This catch-all is in some ways more inclusive and troublesome than the design intent criteria, which has been targeted for removal by the export reform initiative, because it does not require that the item have any uniquely “military” application, characteristic or use.

The proposed definitions of “specially designed”, “development”, “defense services” and their inclusion in USML item descriptions, taken together with the DoD funding catch-all creates a control regime so broad as to preclude experimentation in fundamental research under DoD contract, prime awards or subcontracts, if that experimentation requires use of any hardware.

As an example, consider Category VIII “(f) Developmental aircraft and ‘‘specially designed’’ parts, components, accessories, and attachments therefor developed under a contract with the U.S. Department of Defense” (emphasis added). Suppose that a DoD component contracts with an U.S. university to conduct fundamental aerospace research (no restrictions on publication or participation and no national security controls). The university research team intends to validate certain novel aerodynamic principles through experimentation using a model airplane modified specifically for the research effort.

Under the proposed "specially designed" definition, the "specially designed" parts of the model plane may be no longer subject to the ITAR (they become subject to control in the 600 series of the Commerce Control List (CCL)). However, the model airplane in the example would become a defense article because it has "properties peculiarly responsible for achieving or exceeding the controlled performance levels, characteristics, or functions described in the relevant USML Paragraph"; in this case, simply by virtue of the fact it was "developed" under a DoD contract. Because the proposed definition of "development" includes all stages prior to serial production, such as design research, design concepts, etc., the term is apparently intended to include all basic and applied research activities. Further, in accordance with the proposed "defense services" definition relating to "integration" of ITAR or EAR components into a defense article, integrating anything into that model plane will constitute a defense service and thus an export license or Technical Assistance Agreement would be required for any foreign person to participate in the research, regardless of whether or not all the information relating to that component and the model airplane is in the public domain (see ITAR §124.1(a)).

AUECO believes that taken in total, the proposed rules will have unintended consequences, creating a chilling effect on the university research community and interfering with basic and applied research. If scientists cannot experiment to reduce scientific principles to practice, or apply the results of fundamental research to specific problems without export licenses being required to facilitate that experimentation, they will be reluctant to participate. Many U.S. universities are bound by institutional or state non-discrimination policies which prohibit exclusion of foreign national participation in educational and research activities based on that foreign nationality. Such universities, which include some of the premier research universities in the U.S., may not be able to participate at all in DoD funded research contracts if the simple presence of DoD funding causes the research to become controlled.

Closing

AUECO supports the goals of the export reform initiative, particularly the effort to create positive lists and "bright lines" for controlled items. We believe that such positive lists promote export compliance, and that every effort should be made to limit the use of catch-all descriptions of items controlled on the USML and CCL. We understand that complete elimination of the "specially designed" catch-all is not possible at this time and appreciate the adoption of a clear definition of the term.

It is important that the proposed definitions and USML categories work in concert to protect U.S. national security without unnecessarily impeding fundamental research activities critical to maintaining the U.S. defense industrial base. For this reason we strongly encourage the Department to revisit the proposed rules amending the ITAR taken as a whole and assess their cumulative impact before implementing any changes. This is particularly critical for the academic research community and those DoD agencies and programs that currently rely on and fund fundamental research at U.S. universities. We thank the Department of State for the opportunity to comment on the proposed definition.

Sincerely,

Kelly Hochstetler
Chair

auecogroup@gmail.com
http://aueco.org/

The Boeing Company
1200 Wilson Blvd
Arlington, VA 22209-1989

August 1, 2012

Ms. Candace M. J. Goforth
Director, Office of Defense Trade Controls Policy
Directorate of Defense Trade Controls
Department of State
2201 C Street, NW
Washington, DC 20520-0001

Subject: **RIN 1400-AD22, Amendment to the International Traffic in Arms Regulations: Definition for "Specially Designed"**

Dear Ms. Goforth:

The Boeing Company (Boeing) welcomes the opportunity to respond to the referenced Proposed Rule.

The proposed definition of "specially designed" as applied within the U.S. International Traffic in Arms Regulations (ITAR) has evolved substantially from earlier iterations. We appreciate the effort of the Directorate of Defense Trade Controls (DDTC) in developing a definition for this important and previously-undefined term. Equally important, we also note the consideration given to comments received from industry during the public review process and from the advisory groups at the Department of State and at the Department of Commerce.

Establishing a solid definition of "specially designed" that is the same in both the ITAR and the Export Administration Regulations (EAR) will increase regulatory understanding for small and large exporters alike. Export control regulations are complex, and when clarity is maximized, processes can be streamlined, and compliance strengthened. Because "specially designed" is an important element of USML controls, this definition is a significant step.

This version of the definition is clearer and more understandable than earlier proposed versions. We concur with the language that has been included that narrows the scope of the definition to better align with the criticality of the item, and to avoid inadvertently capturing commercial products. We seek, however, confirmation from DDTC that this definition will only capture the items currently captured under the ITAR's "specifically designed, modified, or configured" for a military application catch-all control. The BIS Proposed Rule on "specially designed" affirms this (page 36410, column one) but the DDTC Proposed Rule does not.

BOEING

We do have one comment on the proposed definition with regard to section (b)(3), which reads as follows:

(b) A ''part,'' ''component,'' ''accessory,'' or ''attachment'' that would be controlled by paragraph (a) of this paragraph is not ''specially designed'' if it:
...

(3) Has the same form, fit, and performance capabilities as a part, component, accessory, or attachment used in or with a commodity that:
(i) Is or was in ''production'' (i.e., not in ''development''); and
(ii) Is either not enumerated on the CCL or USML, or is enumerated in an ECCN controlled only for Anti- Terrorism (AT) reasons;

Boeing is concerned that the term "fit" will inadvertently capture parts, components, accessories, and attachments that undergo minor size changes unrelated to function or performance capabilities. A part with the "same form, fit, and performance capabilities" could be interpreted to mean an identical part. If that is the intended standard, then this exclusion is severely limited.

We do not believe that DDTC should, as a policy matter, seek to control minor modified parts, components, accessories and attachments when the change is minimal and required only to accommodate installation or use on a USML or 600 Series-controlled item. Examples include slight modifications to shape, dimension, length, thickness, or accommodations for installation, such as structural openings, location/number of hole drilling sites, etc. Controlling such items would not align with the stated goal of the Export Control Reform initiative of "permitting the U.S. Government to focus its resources on controlling and monitoring the export and re-export of more significant items". Clarification of the intended scope of "fit" would be helpful guidance for exporters and could take the form of policy guidance or a Note to the definition.

Boeing recommends that clarification should be provided that "fit" does not encompass minor changes to size, dimensions, or installation elements that derive from commercial technology and processes, and do not change functionality or performance capabilities.

Thank you again 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 e-mail at stephanie.a.reuer@boeing.com.

Sincerely,

Stephanie A. Reuer
Director, Global Trade Controls

PUBLIC SUBMISSION

As of: June 28, 2012
Received: June 26, 2012
Status: Pending_Post
Tracking No. 810688b2
Comments Due: August 03, 2012
Submission Type: Web

Docket: DOS-2012-0043
Amendment to the International Traffic in Arms Regulations: Definition for ‘‘Specially Designed’’

Comment On: DOS-2012-0043-0001
International Traffic in Arms Regulations: Definition for "Specially Designed"

Document: DOS-2012-0043-DRAFT-0001
Comment on DOS-2012-0043-0001

Submitter Information

Name: Mary Beth Coholan
Address:
39 Chaucer Circle
Baldwinsville, NY, 13027
Email: jeepmbc@aol.com
Government Agency Type: State

General Comment

I am writing to show my support in regards to the Proposed Amendment to the Definition of “Specially Designed”.

The new definition brings with it a “much needed” clarity that has made it possible to exclude from control simple or multi-use parts such as springs, bolts, rivets, solder and fasteners. The time involved on the part of the State Department in the CJR process for these types of articles was tremendous I’m sure, not to mention the additional burden that was placed on the exporter of these articles. As a member of the export community for over 30 years, I strongly support this new rule and the clarification it brings!

Esterline Corporation
500 108th Avenue NE
Suite 1500
Bellevue, WA 98004

Tel: 425-453-9400
Fax: 425-453-2916
www.esterline.com
NYSE symbol: ESL

August 3, 2012
12-C-RRB-035

Candace Goforth, Director
Department of Defense Trade Controls Policy
Bureau of Political-Military Affairs
U.S. Department of State
2401 E Street N.W.
Washington, D.C.

Subject: RIN 1400-AD22 "Specially Designed" Definition

Dear Ms.Goforth:

Esterline Technologies Corporation, a manufacturer of a wide variety of parts and components for the aerospace and defense sector, appreciates the opportunity to comment on the U.S. Department of State's proposed definition of "specially designed." It commends the Directorate of Defense Trade Controls (DDTC) for the progress made since the definition proposed in RIN 0694–AF17 (76 FR 41958, July 15, 2011) and supports the goals and objectives of the Export Control Reform (ECR) Initiative.

Esterline agrees with the nine objectives set forth in this proposed rule for the definition of "specially designed" and supports the idea of a two-part "catch and release" structure. Esterline has considered the proposed definition against those nine stated objectives and has tested the definition against its products.

Esterline has concluded that the proposed definition must be further revised to meet the nine stated objectives and prevent unintended negative consequences. These include over-controlling some items, under-controlling others, and imposing a greater compliance burden on small and medium entities than they already face.

Summary of Comments and Recommendations

Esterline offers the following summary of its comments and recommendations to substantially improve the proposed definition. The comments and recommendations are explained in detail later in this letter.

Proposed Definition Paragraph	Comment/Recommendation
(a)	Clarify policy objective for modification of items
(a)(2), (a)(3)	Clarify the "catch" and merge the paragraphs
(b)(2)	Clarify and broaden the "release" for simple, multi-use minor components
Notes to (b)(3)	Clarify and broaden the "release" for items with minor differences
new (b)(6)	Prevent increased control of items covered by existing CJ Ruling
Unspecified	Clarify policy intent for software and materials

Additionally, Esterline offers the following related comments and recommendations, also explained later in this letter.

Related Issues	Comment/Recommendation
USML	Consider effects of USML "catch-all" controls based on specific end items with respect to "specially designed" definition
USML	Resolve uncertainty between Category XI and other categories
Final Rule	Make concurrent changes to avoid unintended consequences
Final Rule	Allow an extended final comment period

In the remainder of this letter, Esterline will discuss why it believes the proposed definition fails to meet several of the nine stated objectives as well as broader stated objectives of the ECR Initiative. It will then offer several case studies that illustrate what it believes would be the unintended negative consequences of the proposed definition. Finally, Esterline will amplify on its suggested changes and the reasoning underlying them.

Measuring Proposed Definition against Nine Stated Objectives

Esterline assesses below the currently proposed definition for "specially designed" against the nine objectives in the July 15 proposed rule:

(i) Does the definition preclude multiple or overlapping controls of similar items within and across the two control lists?

No. As proposed, the definition results in multiple possible control categories for similar items with minor variation in features. The terms "function as designed" and "enhance its usefulness or effectiveness" in paragraphs (a)(2) and (a)(3) of the definition are vague and broad. The term "as a result of 'development'" is not clear as to which article is under development. Missile Technology Control Regime (MTCR)-related definitions currently found in the EAR raise questions about the scope of development in the context of the other multilateral regimes.

Generally, any part installed in military equipment may be argued to be "caught" by paragraph (a)(2) or (a)(3). Conversely, items with very minor dimensional or material differences are not "released" by paragraph (b)(3). Further, existing ambiguities in the USML remain in place.

As noted in Case Example 1 below, under the rules proposed for the ECR Initiative, a D-subminiature connector with slight design change may fall under ECCNs EAR99, 6A998.a, 7A994, 9A991.d, 0A606.y.6, 9A610.x, or other ECCNs, or under USML Category VIII h, XI c, or other USML categories, depending on whether it has a separable element and on the application in which it is used.

Hence, the ambiguity in control category currently plaguing U.S. export controls would remain and could become worse.

(ii) Is the definition easily understood and applied by exporters, prosecutors, juries, and the U.S. Government?

No. The ambiguity described above would prevent the definition from being easily understood and applied. The terms "properties peculiarly responsible", "function as designed", and "enhance its usefulness or effectiveness" in paragraphs (a)(1), (a)(2), and (a)(3) are subjective and therefore not amenable to consistent application.

Further, exporters have difficulty understanding control categories that depend on the design intent behind very minor feature variations. The application of drastically different controls depending on relatively insignificant variation does not seem logical to exporters.

The definition would continue the need to apply complex analysis to simple, multi-use items. Many exporters produce thousands of similar products all having minor variation. Control categories must be determined for all products, even those not shipped outside the U.S., to comply with deemed export rules. Applying complex analysis to thousands of similar, simple items cannot possibly result in easy understanding or application, and is likely to cause a fairly high error rate in classifications.

Given that the proposed definition is already confusing to subject matter experts within the exporting community, it will certainly be confusing to prosecutors, juries, and CBP agents.

(iii) Is the definition consistent with definitions used by the multilateral export control regimes?

Unclear. The MTCR is the only one of the four multilateral export control regimes that includes a definition for "specially designed." The MTCR definition of "specially designed" is more limited in its scope than the definition in *United States v. Lachman* (1st Cir. 2008). Compatibility of the definition with *Lachman* is a stated goal of the ECR Initiative in RIN 0694-AF36, published at 77 FR 36409, June 19, 2012.

Assistant Secretary of Commerce Kevin Wolf indicated in remarks before the U.S.-Sweden Defense Industry Conference on May 17, 2011, that applying the MTCR definition to the other three regimes is considered unacceptable by the Department of Commerce and the other U.S. Government agencies primarily concerned with export controls for a number of reasons. Using the MTCR definition would result in inadvertent decontrol of articles that should be controlled under the Wassenaar Arrangement. No definition could be simultaneously consistent with the MTCR and *Lachman*. Hence, a definition for "specially designed" that works for all the regimes must have broader scope than the MTCR definition and may over-control in the MTCR context.

The proposed definition, however, is not consistent with the application of military list controls by other signatories to the Wassenaar Arrangement. The United States today applies "specially designed" broadly to simple parts and components. This creates difficulties when foreign items enter the United States. The items are usually not considered military list before entry, but are military list after entry. The controls applied to a foreign part in a global supply chain depend on whether the item ever entered the United States. Inconsistent application of rules by Wassenaar Arrangement signatories causes problems for U.S. corporations that must manage global supply chains. The proposed definition would continue this broader treatment by the United States of many simple components as "specially designed."

(iv) Does the definition exclude items specifically enumerated on either the USML or the CCL; and does it avoid a definitional loop by using "specially designed" as a control criterion?

Yes. Note 1 to the definition and paragraph (b)(2) accomplish this purpose.

(v) Is the definition capable of excluding from control simple or multi-use parts such as springs, bolts, and rivets, and other types of items the U.S. Government determines do not warrant significant export controls?

No. Certain simple items that the U.S. Government has determined do not warrant significant export controls (see ECCN 9A60.y.*xx* proposed by BIS in RIN 0694-AF36, published at 76 FR 68675, November 7, 2011) would fail to be "released" if intended for aircraft specified in the proposed change to USML Category VIII(h)(1) (see RIN 1400-AC96, published at 76 FR 68694, November 7, 2011).

Several of the case examples provided below demonstrate that simple or multi-use parts that do not warrant significant export controls are not excluded from control by the current proposed definitions in RIN 1400-AD22 and RIN 0694-AF36.

(vi) Does the definition apply to both descriptions of end items that are "specially designed" to have particular characteristics *and* to parts and components that were "specially designed" for particular end items?

Yes.

(vii) Does the definition apply to materials and software because they are "specially designed" to have a particular characteristic or for a particular type of end item?

Not as intended. The "catch" paragraphs (a) and a(1) apply to "items"; hence materials and software may be "caught". The "release" paragraphs (b)(1) through (b)(5) apply to "parts", "components", "accessories", and "attachments"; hence, materials and software cannot be "released".

(viii) Does the definition prevent increase from current control level to "600 series" control or other higher end controls of items?

Not Applicable. This objective is particular to the EAR.

(ix) Does the definition prevent historically EAR-controlled items from becoming ITAR-controlled?

No. Paragraphs (b)(1) through (b)(5) do not "release" from the USML items currently subject to the jurisdiction through formal DDTC Commodity Jurisdiction determination, if they otherwise meet the definition of "specially designed" in RIN 1400-AD22. This would result in a return to ITAR control for items on which the U.S. Government has already made a determination that EAR control is appropriate.

Measuring Proposed Definition against Broader Objectives of ECR Initiative

DDTC requested comment on whether clarity and understanding is enhanced, and whether the definition provides a "bright line" between commodities controlled by the USML and CCL. Under the proposed definition, similar simple items can be controlled under many different export control classifications. Public understanding is therefore not yet enhanced.

Esterline requests that DDTC also consider the economic impact of the part-by-part classification analysis that the proposed definition would require of entities that manage inventories consisting of tens of thousands of small parts and minor components. Many of these entities are small and mid-sized businesses. An analysis that can take hours per part is an excessive burden on industry. A simpler "release" criterion for simple multi-use items is essential to reducing that burden,

At first blush, many small entities would appear to benefit from the proposed definition of "specially designed" and its counterpart proposed by the Department of Commerce's Bureau of Industry and Security for use in the Export Administration Regulations (EAR) (See RIN 0694-AF66 published at 77 FR 36409, June 19, 2012). Specifically, they would arguably benefit by no longer having to register as manufacturers/exporters of defense articles pursuant to ITAR Part 122, would no longer have to pay ITAR license application fees, and would no longer have to comply with ITAR Part 129 brokering controls.

However, Esterline strongly believes that the proposed definition must be considered in the context of the overall ECR Initiative. All the proposed changes must be read and evaluated together to understand their likely effect. Considering the proposed definition of "defense services" (See RIN 1400-AC80 published at 76 FR 20590, April 13, 2011), the foregoing benefits are likely not to be as great as hoped. The reason is that manufacturers of parts and minor components proposed for the "600-series" ECCNs or Commerce Military List (CML) frequently provide a service commonly called "application engineering" to their customers. This may include advice or other assistance in the integration of the manufacturer's item into a customer's end item. If the part or component is controlled on the CML, the end item is likely to be controlled on the USML, and the application engineering is a defense service if furnished to a foreign person. The manufacturer would thus still have to register under ITAR Part 122, still have to apply for ITAR Part 124 Technical Assistance Agreements, and still have to comply with ITAR Part 129 brokering controls; while also being subject to licensing under the EAR.

This possibility of dual licensing in connection with integration assistance, as well as the additional analytical burden that the current Commerce and State proposed "specially designed" definitions will place on manufacturers of small parts and minor components, is why Esterline fears the currently proposed definitions may actually

increase the complexity of many U.S. companies' export control compliance environments. If so, then their compliance costs and risks of committing inadvertent violations will also increase. This is surely not in keeping with the original objective of the ECR Initiative to "build higher walls around fewer things" and thus reduce the regulatory requirements on U.S. businesses and their foreign customers.

Case Examples

Esterline provides the following case examples to illustrate why it believes the proposed definition requires changes.

Case Example 1 – Electrical Connectors

A basic model D-subminiature electrical connector is a simple, multi-use item broadly used in military and civil applications. For purposes of this analysis, consider the following two intermating connectors. Connector A features fixed terminals for soldering into a printed wiring board and a fixed metal flange with mounting holes. Connector B features insert terminals for crimping to wires and an assembled metal shell with mounting holes. Both perform the same basic function. Under the current definitions in 22 CFR 121.8 and the proposed definitions in RIN 0694–AF17 published at 76 Fed. Reg. 41958 (July 15, 2011), Connector A is a "part" and Connector B is a "minor component". As standard off-the-shelf catalog items, both would currently be classified as EAR99 under the EAR.

A customer desires a modification or redesign to each connector, in which quick-connect fasteners are installed in the mounting holes. This modification is not described in the manufacturer's standard catalog. Under the proposed State and Commerce "specially designed" definitions and other ECR Initiative proposals, the applicable export control classification would depend on the customer's application, assuming it is under "development":

Application	Current Rules		Proposed Rules	
	Connector A	Connector B	Connector A	Connector B
Civil railway train door circuit	EAR99	EAR99	EAR99	EAR99
Military tank hatch circuit	USML VII(g)	USML VII(g)	EAR99	0A606.y.6
Civil aircraft avionics (7A994)	EAR99	EAR99	7A994 or EAR99	7A994 or EAR99
Civil airborne radar control panel (6A998.a)	EAR99	EAR99	EAR99	6A998.a
Fighter aircraft avionics	USML XI(c)	USML XI(c)	USML XI(c) or	USML XI(c)

			VIII(h)	or VIII(h)
Civil aircraft bleed air circuit	EAR99	EAR99	9A991.d or EAR99	9A991.d or EAR99
F-16 fighter aircraft bleed air circuit	VIII(h)	VIII(h)	9A991.d or EAR99	9A610.x
F-22 fighter aircraft bleed air circuit	VIII(h)	VIII(h)	9A991.d or EAR99	VIII(h)

Note that questions over the application of "catch and release" to parts and components under ECCNs 7A994 and 9A991.d lead to some uncertainty in classification under the proposed rules. Also, since the proposed rule for USML Category XI has not been published, there is uncertainty about its implications with respect to USML Category VIII(h)(16) proposed in RIN 1400-AC96 (see 77 FR 68694, Nov. 7, 2011) and to the possibility of transfer to the CCL. Also, RIN 1400-AC96 would differently control "specially designed" minor components depending on whether they were used on a specifically listed aircraft under USML Category VIII(h)(1).

Using the proposed changes that Esterline recommends below, both connectors would fall under ECCN EAR99 across all applications.

Case Example 2 – Oscilloscope Probes

Oscilloscopes are "enumerated" under ECCNs 3A002, 3A292, and 3A992. ECCN 3A002 controls accessories without reference to "specially designed." ECCN 3A292 controls "specially designed" components. For analog oscilloscopes only, a Note to ECCN 3A292 identifies five specific "specially designed" "component" types controlled by the ECCN: plug-units, external amplifiers, pre-amplifiers, sampling devices, and cathode ray tubes. ECCN 3A992 does not control "parts" or "components".

Oscilloscope probes are accessories that enhance the function of oscilloscopes. Oscilloscope probes currently fall under ECCN EAR99, These are relatively minor items that do not "make a significant contribution to the military potential" of another country or threaten "the national security of the United States." Oscilloscope probes are normally "usable for" multiple equipment models from more than one manufacturer under ECCNs 3A002, 3A292, 3A992. They are, however, normally cosmetically styled, marketed, warranted, and calibrated for use with a particular manufacturer's oscilloscopes.

Under the proposed rule, a manufacturer of high-end oscilloscopes under ECCNs 3A002 and 3A292 will find the ECCN for its common oscilloscope probes may be increased from EAR99 to 3A002 or 3A292, even though they are usable in oscilloscopes under ECCN 3A992. The oscilloscope probes will be "caught" by paragraph (a)(3) because they enhance the usefulness of oscilloscopes. They will not be "released" by (b)(2) because they are not "parts". They will not be "released" by (b)(3) because they are not identical in form to other oscilloscope probes. They will not be "released" by (b)(4) because they are only used with commodities "enumerated" on the CCL. Finally, they will not be "released" by (b)(5) because there is an expectation of use with oscilloscopes.

Esterline believes this implication for oscilloscope probes is more restrictive than BIS' objectives for its proposed definition, and more restrictive than intended by *Lachman*.

Case Example 3 – Windshield Wipers

Under RIN 0694-AF36 (76 FR 68675, Nov. 7, 2011), windshield washer and wiper systems specially designed for military aircraft would be controlled for anti-terrorism under proposed ECCN 9A610.y.22. The same systems for civil aircraft are currently controlled for anti-terrorism under current ECCN 9A991.d. This leads to a conclusion that windshield washer and wiper systems do not warrant significant export controls. The same items, however, if designed for military land vehicles or naval surface vessels, would be controlled for national security and regional stability under proposed ECCNs 0A606.x and 8A609.x, respectively, because such items are not called out under the related ".y" lists in RIN 0694-AF17 (76 FR 41957, July 15, 2011) or RIN 0694-AF42 (76 FR 80282, Dec. 23, 2011). As with Case Example 1, the control list categories depend on the customer's application:

Application	Current Rules	Proposed Rules
Civil aircraft	ECCN 9A991.d	ECCN 9A991.d
Military cargo aircraft	USML VIII(h)	ECCN 9A610.y.22
U.S. military technology demonstrator aircraft	USML VIII(h)	USML VIII(h)
School bus	EAR99	EAR99
Armored vehicle	USML VII(g)	ECCN 0A606.x
Merchant vessel	ECCN 8A992.f	ECCN 8A992.f
Naval vessel	USML VI(f)	ECCN 8A609.x

Case Example 4 – Intermediate Assembly

Aircraft fuselages are major components that are not "enumerated" in RIN 1400-AC96, RIN 0694-AF36, the current USML, or the current CCL. They would be controlled under ECCN 9A991.d, ECCN 9A610.x, or USML Category VIII(h), depending on the aircraft. Aircraft fuselages are sometimes delivered as products by Tier 1 suppliers to aircraft manufacturers. Aircraft fuselages typically enter production before aircraft production.

Because aircraft fuselages are not "enumerated", components of aircraft fuselage would be "released" either by (b)(3) or (b)(4) unless the components had reached such a stage of manufacturing that they met the criteria of ITAR Part 121.10 or Note 1 to ECCN 9A610.x, depending on jurisdiction.

Changes Recommended to Definition of "Specially Designed"

In light of its foregoing comments, Esterline offers the following suggested changes to the definition of "specially designed":

1. **Clarify policy objective for modification in paragraph (a)**

   Paragraph (a) restricts the definition of "specially designed" with the term "as a result of development." The term "development" is consistently defined in the proposed Note 2 to paragraph (b)(3) and the MTCR; however, the MTCR distinguishes "specially designed" from "designed or modified" in that "specially designed" may only result from "development" whereas "designed or modified" may result from "development" or modification. Under the EAR, in 15 CFR 772, the term "designed or modified" is restricted to the MTCR context, implying that the distinction should not be made with respect to other multilateral regimes.

   Modification of parts and components already in production frequently, though not exclusively, takes place during the development of end items. Paragraph (a) is not specific as to which article is under "development" – the part, the component, or the end item. The implication of paragraph (a) is therefore not clear for the manufacturer of parts or components.

   The Department of Commerce stated in RIN 0694-AF66 its interest in consistency with *Lachman*, Modification at any phase of a product life cycle may result in substantial performance enhancements or additional characteristics, such that a modified item should be subject to the controls intended under *Lachman*.

   This implies that the proposed definition for "specially designed" would include modifications within its scope. Esterline's comments are based on this assumption; however, Esterline suggests that DDTC clearly state its policy objectives for modification within the proposed definition.

   Esterline observes that small entities should not be obligated to determine the particular project life cycle phase of an end item to determine the export control licensing requirement applicable to a "part" or "minor component," as this information is frequently not available to small entities.

   Esterline also suggests DDTC consider the effect of limiting the definition of "specially designed" to the phase before serial production. In *Lachman*, the defendants attempted to circumvent the EAR through a product with dual capabilities (two heating zones vs. five). Had the proposed definition of "specially designed" been in effect, the defendants in *Lachman* might have simply developed an article with a lower capability and then implemented a design change post-production to increase its capability. The definition should allow for "catching" post-production design changes that result in a substantially altered article.

2. **Clarify the "catch" paragraphs (a)(2) and (a)(3).**

   Esterline recommends changing paragraph (a)(2) to read: *is a part (see § 121.8(d) of this subchapter), component (see § 121.8(b) of this subchapter), or accessory or attachment (see § 121.8(c) of this subchapter) used in or with commodities enumerated on the CCL or the USML* and deleting paragraph (a)(3).

   Esterline believes that paragraphs (a)(2) and (a)(3) have this practical effect as written, due to uncertainty over the scope of the term "necessary ... to function as designed." It is unclear whether paragraph (a)(3) refers to end item system-level requirements or to all derived requirements at all hierarchical levels of design.

   It is also unclear whether a "part" or "component" would be "caught" for enhancing usefulness or effectiveness, because end items are often required to operate at several different levels of mission capability or effectiveness depending on probability of component failure; thus, enhanced capability or effectiveness is often also a required function. The distinction in purpose between parts and accessories is in any case meaningless and unhelpful.

   Further, small and medium-sized manufacturers of parts and minor components frequently do not know the end-item purpose or function for an item. They are already burdened with the obligation of determining the end item. They should not also be burdened with determining the purpose for which the part is installed. As noted in DDTC's objective (ii), exporters should not have to divine the intentions of the original designer. This is especially true when the designer is a former employee of different company.

   Finally, paragraph (a)(3) as written duplicates language that is already included in the definitions proposed for "accessory" and "attachment." This redundant language is potentially circular and should be eliminated,

   While the proposed language might "catch" slightly more items, it would be easier to understand, and Esterline recommends a stronger focus on what is "released."

   This change would be supportive of the nine objectives, most particularly (ii), to be easily understood and applied.

3. **Clarify and broaden the "release" paragraph (b)(2).**

   Esterline strongly recommends changing paragraph (b)(2) to read: *is a "part" or "minor component" of a type commonly used in multiple types of commodities (for examples, see Supplement X to Part 772).*

   Paragraph (b)(2) is unduly restrictive and fails to "release" many simple multi-use items that should not be construed as subject to Wassenaar controls.

   Esterline believes paragraph (b)(2) should include "minor components," provided that they are commonly used in multiple types of commodities, because manufacturers

and exporters need a common policy approach to simple, multi-use items. Such items may be either "parts" or "minor components" as defined in ITAR Part 121.8, depending on whether they contain separable elements. Simple multi-use items are usually treated identically by supply chain and logistics functions because they are all considered low-level commodities. Different policy treatment for simple multi-use items would create undue complexity and increase the expenses borne by small entities in classification analysis, and by the Department of Defense in managing its logistics system.

By qualifying "minor component" with "of a type commonly used in multiple types of commodities", and by providing a more expansive illustrative list, DDTC would prevent the inadvertent decontrol of commodities that are more complex than simple multi-use items.

Paragraph (b)(2) should not include "single unassembled." This term occurs both in paragraph (b)(2) and in the definition for "part" found in RIN 0694-AF17, whereas "not normally subject to disassembly without the destruction or impairment of design use" is only found in the proposed definition of "part." This results in a potentially circular definition that would be confusing to part and component manufacturers. .

The illustrative list should also be revised. It includes both single-element "parts" (washers and springs) and multi-element "parts" (nut plates), but is so brief that its application to other part types is unclear. This could lead to widely different subjective interpretations as to what (b)(2) was intended to "release." That is, does (b)(2) only release basic hardware and fasteners, or does it release all "parts"? Esterline recommends including an expansive reference list within the ITAR of simple multi-use commodity types that are "released" under (b)(2). This might include fixed resistors, capacitors, transformers, relays and contactors, switches, knobs, electrical connectors and sockets, etc.

This change would be supportive of the nine objectives, most particularly (i), to preclude multiple or overlapping controls of similar items within and across the two lists, (ii), to be easily understood and applied, (v) to exclude from control simple or multi-use parts that do not warrant significant export controls.

This change is particularly important to small entities because it would eliminate an unnecessary analysis burden that they would bear if the rule were adopted as written. It would also implement the stated intention to "release" simple, multi-use items.

4. **Clarify and broaden "release" in paragraph (b)(3).**

Esterline recommends adding an additional Note to paragraph (b)(3) along the following lines: *Items with the following types of modification are considered to have the same form, fit, and performance capabilities: cosmetic modifications, part marking modifications, and software modifications for reporting the equipment*

configuration identifier. Items with the following types of modification are considered to have the same form and fit: minor dimensional modifications such that the sum of all changes expressed as ratios to their original dimensions does not exceed .05, and installation of minor external hardware such as O-rings and threaded fasteners totaling less than 5% of the item's parts count. Internal modifications are only considered if they affect form, fit, and performance capabilities.

Exporters normally receive guidance from regulators that cosmetic and part marking variation does not affect classification on the USML or CCL. This should be explicitly stated for clarity. Because "part marking" is today often a digital output of software, the policy should extend to digitally reported configuration.

Esterline believes a single definition of "specially designed" cannot simultaneously maintain two historically different policies as USML items are moved to the CCL. Hence, some balance between the policies is necessary that will continue to "release" slightly modified dual use items rather than increase their control level.

The minor modifications described above are not sufficiently important to be considered as "specially designed." Classification of items with minor modifications of this type has been difficult for exporters to apply correctly for many years. Such minor modifications are routine in many small businesses. A substantial, continual effort is required to train designers that such modifications are relevant to export compliance. Training objectives are difficult to achieve because a particularly strict "form, fit, performance" standard result in multiple or overlapping controls for similar items, which appears illogical.

This change would "release" unimportant modifications within specific objective criteria, consistent with stated objectives (i) to preclude multiple or overlapping controls of similar items within and across the two lists, and (ii), to be easily understood and applied.

5. Address items covered by existing CJ Ruling and CCATS

Esterline strongly recommends adding a release paragraph (b)(6) to provide: *Has already been found by a U.S. Department of State Commodity Jurisdiction determination to be subject to the jurisdiction of another agency.*

As written, the proposed definition could return USML control over certain items already subject to the EAR through a Commodity Jurisdiction ruling. This would also increase control of similar or derivative items for which formal CJ determinations have been used as the basis for self-determination.

The U.S. Government has already formally ruled on the appropriate level of export control for these items.

According to objective (ix), these items should not be subject to an increase in control to USML. This should be explicitly stated in the rule.

6. **Clarify policy intent for software and materials**

   As written, the definition may only "catch" software and materials, but these cannot be "released." DDTC's policy objective for software and materials is not clear.

Other Recommended Changes

7. **Consider effects of USML "catch-all" controls based on specific end items**

   RIN 1400-AC96 proposes to control under USML Category VIII(h)(1) components, parts, accessories, attachments, and equipment "specially designed" for the following U.S.-origin aircraft: B-1B, B-2, F-15SE, F/A18E/F/G, F-22, F-35 (and variants thereof), F-117, or United States Government technology demonstrators. Taken with the definitions for "specially designed" proposed in RIN 0694-AF66 and RIN 1400-AD22, many simple multi-use items would remain subject to USML controls.

   Absent a broader "release" in the definition of "specially designed," this would dramatically increase the complexity and regulatory burden for small entities.

8. **Resolve uncertainty regarding classification of avionics**

   Proposed rules in RIN 0694-AF36, RIN 1400-AC96, and RIN 0694-AF66 will increase uncertainty over the correct classification for avionics, with certain avionics items moving from USML Category XI to USML Category VIII, and other avionics items being defined in ECCN 9A610 or other ECCNs. Esterline requests that DDTC and BIS clarify their policy for export control classification of avionics.

9. **Make concurrent changes**

   Further, to prevent unintended consequences, Esterline recommends that adoption of the proposed definition be made concurrent with the transition rule, with a corresponding change to 22 CFR 120.3, and with all rule changes transferring items from the USML to the CCL "600 series" ECCNs.

   Esterline believes 22 CFR 120.3 as presently written would trump the definition of "specially designed" and all enumerations under the "600 series" ECCNs, creating an uncertain and unstable rule.

   Many parts and components currently controlled under the USML could be placed under multiple USML categories. Unless all USML categories are concurrently addressed by the ECR initiative, the "specially designed" definition would lead to ambiguity in jurisdiction and classification.

10. **Extended final comment period**

    Esterline recommends that a final extended comment period be permitted after all critical elements of ECR are finally published in the Federal Register so that the final definition of "specially designed" can be evaluated in the context of all proposed transfers from the USML to the CCL.

Summary

Esterline is greatly encouraged by the progress made on the ECR Initiative to date. DDTC, BIS, and the DoD should be commended for their efforts. A good definition of "specially designed" meeting all the stated objectives, conforming to multilateral agreements, conforming to *Lachman*, and appropriately balancing historical BIS and DDTC policies is particularly difficult to obtain. The proposed definition provides a promising structure that can be modified to better achieve these objectives. Esterline hopes that DDTC, BIS, and the DoD will continue to engage with industry toward this end.

Regards,

Richard R. Baldwin
Director, Ethics & Compliance
Esterline Technologies Corporation

Ronald R. Roos
Deputy General Counsel
and Assistant Secretary,
International Trade and
Compliance

Exelis Inc.
1650 Tysons Blvd.
Suite 1700
McLean, VA 22102

703 790 6357
703 790 6406 Fax
Ron.roos@exelisinc.com
www.exelisinc.com

ITT EXELIS

August 3, 2012

To: DDTC Response Team

Subject: Specially Designed Definition

Comments on Proposed Rule: ITAR 120.41 Specially Designed [RIN 1400-AD22] [8-3-12 R2]

Discussion of Specially Designed Provisions of 120.41 (b)(2),(3)

120.41 (b)(2) as currently proposed under the rule:

> Is a single unassembled part that is of a type commonly used in multiple types of commodities not enumerated on the U.S. Munitions List or the Commerce Control List, such as threaded fasteners (e.g., screws, bolt, nuts, nut plates, studs, inserts), other fasteners (e.g., clips, rivets, pins), basic hardware (e.g., washers, spacer, insulators, grommets, bushings, springs), wire, and solder;

While a "single unassembled part" as illustrated within the provisions of (b)(2) is easily interpreted and applied to both the examples cited and related items not stated, there exist a tier of minor components, including mechanical and electrical components (e.g. a single pole switch, potentiometer, resistor, toroidal ferrite inductor, flex cable assembly, etc.) that have two or more assembled elements but which nonetheless cannot be excluded as "specially designed" under this provision as they do not meet the definition of a single unassembled "part" in accordance with ITAR 121.8(d).

In the interest of appropriately excluding non-militarily significant assembled parts and components from consideration as "specially designed" the following discussion and a proposed revision of (b)(3) is offered to better refine identification and retention of those parts and minor components as "specially designed" which truly possess unique or special performance capability qualities and thus merit control as "specially designed" under the U.S. Munitions List, and release those which do not.

120.41 (b)(3) as currently proposed under the rule:

> (b)(3) Has the same form, fit, and performance capabilities as a part, component, accessory, or attachment used in or with a commodity that: (i) Is or was in production (i.e., not in development); and (ii) Is not enumerated on the U.S. Munitions List;

Within defense articles, many parts and minor assembled components of electrical and mechanical nature may be combined to form other minor or major components of an end item. In such cases, the aggregate of a set of components together (e.g. a completed circuit card) are actually responsible for the defense article achieving "controlled performance levels, characteristics, or functions" for the defense article versus the particular contribution of a single part or minor component in isolation, which alone may possess no particular military significance, and presents no national security risk through transfer or dissemination of related technology or technical data.

While minor components under consideration for release as not "specially designed" through (b)(3) may not have commercially available equivalents which conform identically in the criteria of "form" and "fit", and therefore are by a design process ("development") tailored to particular configuration for their purpose within a defense article application, they frequently are identical, closely conforming, or typical in terms of their functional performance capability within the spectrum of widely available, non-USML components.

For example, a particular defense article application might require a resistor with a value of 0.00017 ohms, whereas standard commercially available values may be acquired in increments of 0.00015, 0.00018 and 0.00020 ohms respectively. In all other respects of environmental capability, mechanical shock resistance, etc., the standard commercially available resistors are compatible with the intended application. In such a circumstance, because the required resistor of 0.00017 ohms falls within the overall performance capability range of commercially available, non-defense article performance parameters, such an item should appropriately not be subjected to capture as "specially designed".

In another example, a requested alteration for a manufacturer to trim the standard lead length of a commercially available, non-defense article integrated circuit socket by .3mm to make it suitable for fit within a defense article application triggers the capture of the article as "specially designed" under the 120.41 (a)(2) provisions due to the necessary preceding "development" involving a minor design input for such alteration. However, in this example, the alteration in "form" and "fit" has no impact on the relevant electrical performance characteristics ("performance capabilities") of the subject article under consideration. Therefore, here also we would propose the article should not be captured as "specially designed" within the USML.

Our proposed revision focuses the release criteria on the performance capabilities of the article and whether such capability exceeds that of identical or similar types of articles. In fact, limiting the release criteria to articles which have the same (identical) form, fit and performance capabilities as under the current proposed rule would have the unintended effect of designating articles with the same form and fit but with *lower or inferior* performance capabilities as "specially designed". This logical outcome points toward the criticality of refining the release criteria to address the relevant performance capability parameters for articles of the same type or class under consideration.

In conclusion, we believe the release criteria of (b)(3) as currently proposed is unnecessarily limited. We believe our proposed revision to (b)(3) is consistent with criteria under ITAR 120.4(d)(1), (2) and (3) which emphasize that the "nature, function, and capability" of an article are key relevant criteria in terms of assessing an article's relationship to "predominant civil applications", "performance equivalents", and "significant military or intelligence applications". Accordingly, we suggest revising (b)(3) as follows:

Proposed revision:

> **(b)(3) Has performance capabilities not exceeding those of a part, component, accessory, or attachment used in or with a commodity that: (i) Is or was in production (i.e., not in development); and (ii) Is not enumerated on the U.S. Munitions List;**

Regards,

Ronald R. Roos
Deputy General Counsel and
Assistant Secretary,
International Trade and Compliance

CC: Lloyd Porter
Trade Compliance Manager
Communications & Force Protection Systems

Karen Jones
Director, Trade Compliance
Electronic Systems

August 3, 2012

Ms. Candace M. J. Goforth
Director
Office of Defense Trade Controls (DDTC) Policy
U.S. Department of State
Washington, DC 20520

VIA ELECTRONIC SUBMISSION ON WWW.REGULATIONS.GOV

RE: Specially Designed Definition – RIN 1400-AD22

Dear Ms. Goforth:

These comments are submitted on behalf of the Forging Industry Association (FIA) to both the Department of State and the Department of Commerce on the proposed definition of "specially designed" for use in the International Traffic in Arms Regulations (ITAR) and the Export Administration Regulations (EAR). FIA is the primary trade association representing the bulk of forging capacity in North America. The North American forging industry is comprised of approximately 500 forging operations in 38 states, Canada and Mexico.

Forging is one of the oldest known metalworking processes, where metal is pressed, pounded or squeezed under great pressure into high-strength parts known as forgings. The process is usually performed by preheating the metal to a desired temperature before it is worked. Forged parts are strong and reliable, and therefore vital in safety-critical applications. Rarely seen by consumers, forgings are normally component parts inside assemblies on aircraft, ships, and vehicles—anything that flies, floats or rolls.

On December 22, 2011, FIA provided comments to both the Departments of State and Commerce on proposed revisions to Category VIII related to aircraft and related items. In those comments, FIA applauded the Administration's overall efforts to amend the EAR in conjunction with amendments to the ITAR to describe more precisely which articles warrant continued control under ITAR and which are subject to the EAR.

In particular, FIA noted that, if our understanding of the proposed revisions was accurate, we would expect that upon finalization **ONLY** those forgings "specially designed" for a specific list of U.S.-origin aircraft that have low observable features or characteristics would be subject to continued control under ITAR. Further, we stated our belief that all other forgings "specially designed" for military aircraft would be subject to the jurisdiction of the EAR, as appropriate and consistent with multilateral export control regimes, including the Wassenaar Arrangement Munitions List (WAML). Because the proposed definition of "specially designed" under consideration would apply to all military end items, this reference to the WAML creates the need for additional clarity with regard to certain forgings that are shipped "unfinished" or "raw" and whether they are subject to export controls under the ITAR or the EAR. Many other forgings are shipped as finished parts, and we believe the decision as to whether they are "specially designed" will be made based on the part, not the fact that it is a forging.

The WAML's category 16 (which would be implemented in the newly proposed EAR ECCN 9A610.x) provides a control regime for forgings, castings and other unfinished products "specially designed" for specified end items such as weapons, ammunition, bombs, aircraft, etc. That control regime applies to unfinished products only "*when they are identifiable by material composition, geometry or function."*

> *Note 1: Forgings, castings, and other unfinished products, such as extrusions and machined bodies, that have reached a stage in manufacturing where they are clearly identifiable by material composition, geometry, or function as commodities controlled by ECCN 9A610.x are controlled by ECCN 9A610.x.*

Many aerospace forgings and some other forgings are shipped to the customer in "raw" form, and require substantial additional machining and manufacturing processes before being installed in an assembly or end item. In fact, the industry commonly refers to the "90/10 ratio" of what is shipped versus what ends up in the final product.

Such forgings are not "*identifiable by material composition, geometry or function"* when they are shipped to a customer. While such forgings may have a part number on them, FIA believes that a part number should not be enough to meet the definition of "*identifiable by material composition, geometry or function."* We suggest that an affirmative statement be made clarifying that the determination of whether a forging is "*identifiable by material composition, geometry or function"* cannot be made solely based on the existence of a part number.

Both the Department of State and the Department of Commerce have now proposed a final definition of "specially designed" (**Federal Register** / Vol. 77, No. 118 / Tuesday, June 19, 2012), and generally FIA believes that both proposed definitions would result in the same outcome as anticipated in our December 2011 comments, and would apply to forged parts contained in all categories of end items potentially subject to either ITAR or EAR. We believe this is the right approach, as it retains the ability to control forged parts that meet the definition of "specially designed" while creating a streamlined "decision tree" process for determining which forged parts no longer warrant controls under ITAR or EAR.

It is our understanding that if these definitions are adopted, the United States Munitions List (USML) will become a "positive list"—that is, any items to be controlled under ITAR will be specifically listed on the USML. All other items will be subject to EAR controls, but only if they meet the definition of "specially designed" included in the Commerce proposal, including the exclusion paragraphs.

We further understand that Commerce is attempting to create a "yes/no" decision tree process for determining whether an item, part or component is "specially designed" by posing a series of questions, beginning with a general definition and proceeding, if necessary, through several specific exceptions or exclusions. Under the proposal, if the answer is "no" at any point in the questioning, the item is not "specially designed" and no further analysis would be required.

However, we believe additional clarity is necessary in several areas in order to insure that the final definitions accomplish that goal without inadvertently "controlling" parts or components that do not warrant control. Our remaining comments will address those areas.

One of the exclusions (Exclusion paragraph (b) (2)) specifically excludes "any single unassembled "part" that is of a type commonly used in multiple types of commodities not enumerated on the USML or the CCL". Examples of "parts" listed in this exclusion are threaded fasteners (screws, bolts, nuts, nut plates, studs, inserts), other fasteners (clips, rivets, pins), and basic hardware (washers, spacers, insulators, grommets, bushings, springs). We would make two points with regard to this exclusion:

1. While we understand that this list is not intended to be all-inclusive, we believe it should be made clear in the final definition that for "parts" not specifically mentioned as examples, it is the "part" that controls

the determination, not the process by which the part is made. In the case of forgings, this will help forgers determine whether the forging (part) they produce is subject to this paragraph.

2. It is our understanding that Commerce intends to view "parts" broadly when determining whether they are "of a type commonly used in multiple types of commodities not enumerated on the USML or the CCL". Specifically, we understand that to mean that variations in such things as dimension, material, coatings or lubricants are not sufficient to cause a "part" to be "specially designed", unless one or more of those variations contribute to low observable features of an aircraft or some other unique characteristic of an end item warranting control. We suggest that be made clear in the final definition by stating affirmatively that such variations as dimension, material, coatings or lubricants do not cause a "part" to be "specially designed".

Another of the exclusions (Exclusion paragraph (b) (3)) would exclude a part, component, accessory or attachment that: "Has the same form, fit, and performance capabilities as a part, component, accessory, or attachment used in or with a commodity that: (i) Is or was in ''production'' (*i.e.,* not in ''development''); *and* (ii) Is either not enumerated on the CCL or USML, or is enumerated in an ECCN controlled only for Anti-Terrorism (AT) reasons." We believe further discussion and clarity is required regarding the terms "form" and "fit" as stated below:

1. As currently written, it appears that only identical parts used in both civilian and military applications would be considered within the definition, which does not adequately reflect the nature of the forging process. For example, a crankshaft used in a compressor onboard a submarine would have the same form and performance characteristics as a crankshaft used in an engine powering an armored vehicle, but not the same "fit", as it would have different dimensions. Numerous other "parts" that are forged would fall into that same category, thus we suggest that additional clarity is needed.

With those caveats, FIA supports the overall Administration approach, which would retain ITAR control of critical forged parts that contribute to the properties of key U.S.-origin aircraft having low observable features or characteristics. All other forgings would be subject to control under EAR, but only if they are "specially designed" for military end items, consistent with multilateral export control regimes.

FIA appreciates the opportunity to comment on this proposed definition. We would be happy to answer any questions regarding these comments or export controls and their effect on forgers. Please contact our Washington Representatives: Laurin Baker at 202-393-8525 or Jennifer Baker Reid at 202-393-8524 if you have any questions.

Sincerely,

Roy Hardy
Executive Vice President

1111 Superior Ave., Ste. 615, Cleveland, Ohio 44114, USA
Phone +1 (216) 781-6260 * Fax: +1 (216) 781-0102 * E-Mail: info@forging.org * Web: www.forging.org

GE
Aviation

Kathleen L. Palma
Executive
International Trade Compliance

1299 Pennsylvania Ave NW
Washington, D.C. 20004-2414
United States of America

T 202 637 4206
F 202 330-5119
kathleen.palma@ge.com

Ms. Candace M. J. Goforth
Director, Office of Defense Trade Controls Policy
U.S. Department of State
PM/DDTC, SA-1. 12th Floor
2401 E Street, NW, (SA-1)
Washington, D.C. 20037

August 3, 2012

Subject: "Specially Designed" Definition

Reference: Federal Register Notice: RIN 1400-AD22 [Public Notice: 7921]

Dear Ms. Goforth:

The General Electric Company, acting through its GE Aviation business unit (GE), submits the following comments for the referenced proposed amendment to 22 CFR Part 120 to add the definition "Specially Designed." GE appreciates the Department's effort to advance Export Control Reform by establishing a "bright line" between the USML and CCL, and believes that this proposed definition goes a long way towards achieving that objective. GE understands that this proposed definition is being published concurrently with a similar proposal by the Department of Commerce, and we will be submitting separate comments to the Department of Commerce on that proposal.

GE believes that the Department's proposal makes significant and positive changes to the prior proposed definition for "specially designed" in the December 2010 ANPRM (75 FR 76935), including:

- Providing a clear two step "catch and release" methodology;
- Simplifying and shortening the exclusion or "release" paragraphs;
- Creating a broad exclusion for simple common parts;
- Creating a straight-forward test for exclusion of common dual use parts and components;
- Providing a simple mechanism for self-determining jurisdiction when developing commodities for use in both defense articles and commercial items; and
- Striving for consistency between the ITAR and EAR versions of the definition.

The key points and specific comments that we have regarding the "specially designed" definition fall into two general categories:

Those involving the scope of the "catch" and "release" portions of the proposed definition . . .

- Clarify the impact on items subject to previous CJ's;
- Expand the scope of 120.41(b)(2);
- Loosen the restrictions of 120.41(b)(3);
- Address tooling, test and support equipment;
- Provide further guidance on the meaning of "peculiarly responsible";
- Relax the documentation requirement for 120.41(b)(4) and (b)(5); and
- Ensuring adequate consideration of the principle, "higher fences around fewer items."

Those necessary for clarification and consistency . . .

- Expand the definition of the term "commodity";
- Clarify the meanings of the terms "enumerated" and "catch-all";
- Strike the reference to "serial production";
- Rephrase the lead-in sentence of paragraph (b);
- Define a process "demoting" items later determined to be eligible for "release"; and
- Confirm that gas turbine engines and their parts and components "specially designed" for Aircraft controlled in USML Category VIII are not captured by any catchall paragraph in category VIII.

SPECIFIC COMMENTS ON SCOPE OF CATCH AND RELEASE PROVISIONS

1. Clarify the Impact on Items Subject to Previous CJ's.

An express clarification on the treatment of items that have been previously determined through the DDTC commodity jurisdiction process to be on the Commerce Control List (CCL) is needed. While the Department has publicly stated that there is no intent to pull such items back to the USML through this definition, and objective number 9 in the Supplementary Information states that nothing merely as a result of a definition should cause historically EAR controlled items to become ITAR controlled, a plain application of the proposed definition in the revised USML categories could result in such a situation.

GE recommends adding clarification confirming that the proposed rule will not reverse existing commodity jurisdiction determinations (CJs). The language should be consistent with the EAR proposed rule change (RIN 0694-AF36), published November 7, 2011.

GE provides the following example of items that were previously CJ'd by the Department of State but which would be pulled back into the USML by the application of "specially designed" in the new proposed Category XIX:[1]

- In a commodity jurisdiction issued in 2011 (CJ-704-11), the Department of State determined that the CPX38-1BTP Development engine, which shares many parts with the GE38 military engine, is subject to Department of Commerce jurisdiction and on the CCL.
  - As part of the CJ, the Department of Commerce advised that the ECCN for the engine would be 9A001.a.
- The proposed new USML Category XIX(f)(1) describes components and parts "specially designed" for, among other engines,[2] the GE38 engine.
  - As such, those parts common to both the CPX38-1BTP and the GE38 must be analyzed through the 120.41 sequence.
- These parts will be "caught" under paragraph 120.41 (a)(2) as they are necessary for the GE38 engine to function as designed.
- However, many of these parts do not clearly fall into any of the paragraph (b) "release" paragraphs.[3]
- The result is that there will be mixed jurisdiction between State and Commerce, contrary to what is stated in the issued CJ letter.
  - The common parts will be USML XIX(f)(1).
  - The engine and remaining parts will be classified under the CCL.

---

[1] This is one example, but a review of the CJ list on the DDTC web site suggests that there are more than a few other similar situations.

[2] GE draws the Department's attention to our comments to the proposed Category XIX(f)(1) where we indicated our belief that the final regulation should not call out specific engine model families, and that many of the components, etc. not falling into Category XIX(f)(2) should not be considered "specially designed" in this subparagraph. In those comments GE proposed language that would reference the capabilities and technologies list enumerated under XIX(a) as a more appropriate descriptor.

[3] They are not released under (b)(3) because the CPX38 is not yet in production, and (b)(4) may or may not be useful based on interpretation of the paragraph and its corresponding note.

- If and when the CPX38-1BTP engine goes into production, the parts can then be "released" under (b)(3).

To address this issue, GE recommends including an additional "release" paragraph[4] in the proposed definition with language and corresponding notes such as the following:

> "(6) Is an item covered by a Commodity Jurisdiction Determination issued by the Department of State, which is deemed thereunder to be not subject to the licensing jurisdiction of the Department of State."
>
> "Note to paragraph (b)(6): Previously issued Commodity Jurisdiction determinations for items deemed to be subject to the EAR shall remain valid and their parts, components, accessories, attachments, and directly-related technical data covered in the CJ determination shall remain subject to the jurisdiction of the Department of Commerce."

The suggested addition will preserve the validity of previous CJ determinations. This is particularly important for situations where a precedent CJ included a CCL classification in addition to a jurisdiction assessment. Without this clarification, exporters may suddenly discover items previously assessed as "EAR99", or other CCL entry, are transitioned to the "600-Series" with corresponding increased levels of control. Further, this note will clarify that exporters do not need to start again with assessments of products that were subject to prior CJs and would eliminate the potential for parts and components of an end item that was previously determined to be Commerce pursuant to a CJ from potentially being subject to the ITAR.

GE considers this change a "must have" because without it commodity classifications may go backward from current law. If the Department intends to pull any items back to the USML that may have been ascribed to the CCL through a prior CJ, it should do so only through enumeration of the item or its characteristics on the USML, and not through a catch-all provision.

2. Expand the Scope of Proposed 120.41(b)(2).

The scope of proposed 120.41(b)(2) may be unduly restrictive. There are many simple components "of a type commonly used in multiple types of commodities" that have low technical content, are used in a wide variety of commercial machinery and mechanical devices,[5] and do not warrant being controlled at the level of more significant components. Limiting this release paragraph to single piece parts[6] may result in over-controlling items and driving licensing volumes that will continue to burden the Department and Industry.

We propose the following 3-part approach, which will be less restrictive while still meeting US Government export reform objectives:

> First, we urge the Department to define the paragraph (b)(2) release in terms of the purpose or functionality of the parts. Those that have simple defined functions, are of very low technical content, and of no military significance should be released. Parts whose primary purpose is to position or support, fasten, or serve as a conduit for the transfer of fluids, electricity, or signals between other components, meet these three criteria. Components that measure, process, or otherwise directly

[4] This will also enable the Department of State, through the CJ process to move additional items from the USML on a case by case basis.

[5] Examples include a common clamp that is an assembly of a base plate and a strap of different material. Another is a wiring harness, whose only function is to connect two electrical components, and which provides no military function of its own. These types of items have been deemed not subject to the licensing jurisdiction of the Department of State in past CJ applications and have been readily licensed when requested. Carving them out here would reduce the license application and management workload in both Industry and the Department.

[6] The term "single, unassembled part" appears to be drawn from the 120.1(d) definition of a "part." However, the examples that are provided in the proposed 120.41 definition consist, for the most part, of single piece part types of parts.

contribute to the performance of the item enumerated on the U.S. Munitions List or Commerce Control List (e.g. thermocouples, pumps, oil coolers, airfoils, casings, bearings) would not be released by this carve out[7].

Second, we suggest that using the existing 120.1(d) definition of a "part," rather than creating yet another new undefined term, would be simpler and less confusing.[8] Section 120.1(d) already contains the concept of a single unassembled element which is not normally subject to disassembly without the destruction or the impairment of design use, and Industry is already familiar with its use under the ITAR; but it does not preclude the release of low technology inseparable assemblies.

Third, to add further clarity, we propose providing a set of examples that illustrate the range of items that this paragraph is intended to release.[9]

Applying these criteria, GE recommends rewording paragraph 120.41(b)(2) and adding a new note as follows (deletions as strikethrough's and additions in bold):

> "(2) Is a ~~single unassembled~~ **part** that is of a type commonly used in multiple types of commodities not enumerated on the U.S. Munitions List or the Commerce Control List, **whose primary purpose is to fasten** ~~such as threaded fasteners~~ (*e.g.*, screws, bolts, nuts, **rivets, pins**, **solder**, **clips, clamps,** nut plates~~studs, inserts~~), ~~other fasteners (e.g., clips, rivets, pins), basic hardware~~ **position or support** (*e.g.*, washers, spacers, insulators, grommets, bushings, **rings, gaskets, packing, studs,** springs, **inserts, brackets, blocks, mounts, ferrules, connectors**), **or serve as a conduit for the transfer of fluids, electricity, or signals between other components (e.g. tubes, conduits, hoses, cables, conductors, fuel lines, oil lines, air lines,** wire**, wire harnesses).**"
>
> **"Note to paragraph (b)(2): A "part" whose purpose is to perform any function other than to fasten, position, support or serve as a conduit for the transfer of fluids, electricity, or signals between other components, does not meet the criteria for "release" and would therefore not be released under paragraph (b)(2)."**

3. Revise paragraph 120.41(b)(3).

The scope of proposed 120.41(b)(3) may be unnecessarily limited to items that share exact dimensions.[10] While we understand and appreciate that the Department does not want this paragraph to focus solely on function, also requiring identical form and fit will result in capturing items that are insignificant and have performance characteristics and technology that are equivalent to items that are not controlled on the ITAR. Modifications by the application of commonly available commercial technology to the fit or form of

---

[7] We also believe that using this concept along with these classes of parts will be consistent across all defense related industries.

[8] A reading of (b)(2) and the definition of "part" together, would be parsed as "... a single unassembled [*single unassembled element of a major or a minor component, accessory, or attachment which is not normally subject to disassembly without the destruction or the impairment of design use*] that is of a type commonly used in multiple types of commodities not enumerated on the U.S. Munitions List or the Commerce Control List ... ."

[9] The current language in the proposed 120.41(b)(2) provides a series of examples, all of which have very low technical content. Most of the examples are single piece part hardware items. But, as these are examples, and not defining criteria, it is unclear whether the intention is to limit application of this release language to items that are single piece parts. It should be noted that at least one example, 'nut plate', is a minor assembly of piece parts including a plate and a series of nuts. GE proposes to expand the examples provided to more clearly identify an 'upper limit' of the types of items not addressed by this carve-out.

[10] GE believes this exclusion has great potential to further the USG interest of higher fences around fewer items. However, in order for this exclusion to reach its full potential, GE recommends a few adjustments that will reduce the administrative burden of reviewing items that can safely be excluded without detriment to national security.

an item that result in the part functioning for the exact same purpose without enhancing performance or otherwise adding performance criteria should not cause the part or component to be included.[11]

Therefore we propose that the exclusion be based on the equivalence in function of the items and the technology behind the performance, and not require that the items have the same exact dimensions. The Department should change the language to allow a part or component to fall within the (b)(3) release if differences are limited to dimensional variations that do not enhance performance.[12]

GE recommends changing (b)(3) and adding a new note as follows (deletions as strikethrough's and additions in bold):

> "~~Has the same~~ **Is equivalent in** form, fit and performance capabilities ~~as~~ **to** a part, component, accessory, or attachment used in or with a commodity that:
> (i) Is or was in production (*i.e.*, not in development); and
> (ii) Is not enumerated on the U.S. Munitions List."
>
> **"Note 4 to paragraph (b)(3). An article is equivalent for purposes of (b)(3) if it is identical in performance capability, and the same, except for differences that do not enhance or upgrade its performance capability, in form (i.e. configuration, including the geometrically measured configuration, density, and weight or other visual parameters which uniquely characterize the article) and fit."**

4. Address tooling, test and support equipment.

While the new proposed Category XIX(f)(1) includes "specially designed" equipment, it is not clear where tooling, test and support equipment are intended to be covered in the proposed definition.[13] If the intention is to "catch" this equipment, there should be "release" paragraphs that are applicable to tooling, test and support equipment as well. We can see no rationale for not excluding simple tooling and equipment (e.g. wrenches, winches, dollies), where it that has the equivalent form, fit and function to equipment used with production articles, or was developed for dual use or no specific use.[14] Further, it is not clear whether or not a "monitoring system" that is used for both XIX engines and CCL category 9 engines would be controlled under XIX(f)(3).

---

[11] An engine mounting fitting with dimensions unique to a particular transport aircraft used by the Air Force but otherwise no different, in terms of size, strength, materials, from many other commercial mounting fittings used on commercial aircraft, should not be captured on the USML simply because of specific dimensions that do not change or enhance the level of performance of that fitting. If the mounting fitting were modified to enable vertical flight, or a booster device were added to strengthen signals or power in the examples above, under the approach outlined above these articles would not qualify for release under (b)(3) because the performance in each case would have been enhanced.

Another example is an engine cable harness whose primary function is to transfer control signals. The harness does not process or enhance the signal. A change in dimension or shape may have no effect on the performance of the harness's function.

One more example is a coffee maker designed for use on a commercial aircraft that is adapted for a military transport aircraft by the lengthening of the cable and/or changing in shape of the outer shell. These modifications do nothing to enhance the device's coffee-making, nor do they add any other performance capabilities.

[12] There are numerous examples of CJ's where the Department has determined that these types of items are not on the USML based on the rationale that although an item was modified to fit a military application, the nature of the modification was minor and consistent with similar modifications for other military and commercial applications. See, among many other examples, CJ156-10, CJ 157-10, CJ158-10 and CJ088-12, as well as the list of CJ's publically described on the DDTC web-site under Commodity Jurisdiction Final Determinations, http://www.pmddtc.state.gov/commodity_jurisdiction/determination.html.

[13] While the 120.41(a) "catch" criteria do not clearly include these items, the 120.41(b) "release" criteria specifically only address parts, components, accessories, and attachments.

[14] For example, test stands used for GE38 and CPX38 engine development have identical performance, but may be adjustable to handle a unique feature of the commercial engine (e.g. when used in a turbo-prop rather than a turbo-shaft configuration).

GE recommends adding the words "tooling and test and support equipment" to both Note 2 and the lead-in sentence in paragraph (b).

5. Provide Further Guidance on the Meaning of "Peculiarly Responsible."

The term "peculiarly responsible" is a highly useful concept for determining if an item is important enough to be controlled. However, even this term is not without nuance. While the Department has included a note with an example of an article that would be "caught" by (a)(1), we urge the Department to include an example of an item that would not be caught, and explain the differences in order to help Industry understand the range of its applicability. The Department of Commerce's proposed "specially designed" definition includes a Note to paragraph (a)(1) (77 Fed. Reg. 36,419) which illustrates well the intended meaning and range of "peculiarly responsible" in (a)(1). GE recommends expanding the proposed Note to paragraph 120.41(a)(1) to add analogous language.

6. Relax the Documentation Requirement for 120.41(b)(4) and (b)(5).

The documentation requirement for 120.41(b)(4) and (b)(5) should be relaxed when there is a long history of use of parts, components, accessories or attachments[15] in or with production items that are not controlled on the USML[16]. GE proposes that the Department adopt a grandfather provision for handling such cases, where, as of the date of the implementation this rule, a commodity has actually been used in or with a commodity that is not controlled on the USML and is or was in production.

GE proposes rewording the Note to paragraphs (b)(4) and (b)(5) as follows (changes in bold):

> "Note to paragraphs (b)(4) and (b)(5): For a defense article . . . may not be excluded from being "specially designed" by either paragraph b)(4) or (b)(5). **The only exception to this documentation requirement is where a commodity that as a result of paragraph (a) is controlled as "specially designed" has actually been used in or with a commodity that is not controlled on the USML and is or was in production prior to [the effective date of this rule].**"

7. Higher Fences around Fewer Items.

GE's understanding of the US Government's proposals for export reform is that one of the goals is to have "higher fences around fewer items" and to remove as many items from the higher levels of export control as possible without detriment to national security. To assist the Department and its interagency partners in its deliberations of our above comments along with other comments from exporters, we attach to this letter a list of gas turbine engine-related components. This list contains the types of parts and components we believe should be removed from those higher control levels. This list includes components not enumerated on the USML or CCL, and that are low technology, tend to consist of more than a single piece part, are not listed on the Department's proposed list of paragraph (b)(2) examples,[17] and may not be the same exact dimensions from one engine to another. Many of the components on this list, subject to interpretations, would not be "released" under either paragraphs (b)(2) or (b)(3). We request that the administration consider this list in the context of the comments received to inform its decisions on the final definition of "specially designed."

---

[15] Or tooling, test or support equipment to the extent such equipment is caught by paragraph (a)(1).

[16] For example, a company may have been utilizing certain equipment in connection with the development and improvement of a commercial item that was also used for a similar military item, but (unlike in an actual product for sale) may not have documentation that specifically addresses the elements of (b)(4) or (b)(5) with regard to the equipment.

[17] Please note that this list also contains an industry definition for some of the items that are listed in the (b)(2) examples.

SUGGESTED CHANGES FOR CLARIFICATION AND CONSISTENCY

GE recommends the following clarifications and other changes to the proposed rule:

1. The proposed definition uses the term "commodity" to mean any article, material or supply, except technology/technical data or software. The Department of Commerce version of the proposed definition uses the term "item" in its equivalent paragraph (a)(1), a term which includes technology/technical data and software. We believe that "commodity" should be defined to include software[18] as well as hardware, in parallel to the Department of Commerce definition.[19]

2. Note 1 defines the term "enumerated" differently than the Department of Commerce version. As this term is critical to the sequential analysis process in 120.41, and it is important that exporters be able to take a consistent approach to this analysis across both regulatory regimes, we suggest that the two definitions be substantially the same. Further, the addition of the phrase "not controlled in a 'catch all' paragraph" is very important to avoid a circular reference between (b) paragraphs and the definition of "enumerated" in Note 1. As defined, (b)(1) would release all parts, etc. in 'catch all' paragraphs, and conversely no parts, etc. would be released via (b)(3). We propose the following, and we intend to make a corresponding comment to the Department of Commerce:

> "The term 'enumerated' refers to any article (i) on either the U.S. Munitions List or the Commerce Control List not controlled in a 'catch-all' paragraph, and (ii) when on the Commerce Control List, controlled by an ECCN for more than AT-only reasons."

3. The Note to paragraph (b) defines the "catch all" paragraphs somewhat differently than the Department of Commerce version.[20] GE also notes that the phrases that are called out as indicating a "catch all" do not include all of the forms of this term utilized in the proposed new USML categories (for example, see proposed Category XIX(f)(1) & (2)). We suggest that the note indicate that these phrases are examples and not exclusive.

4. Note 1 to paragraph (b)(3) should be clarified by striking the reference to "serial production." That term is not utilized expressly in (b)(3) and it could complicate interpretations of the term that is utilized, "production."

5. The lead-in sentence of paragraph (b) should be changed as follows (deletions as strikethroughs and changes in bold):

> "A part, component, accessory, or attachment ~~is not~~ **that would be** controlled by ~~a U.S. Munitions List "catch all"~~ **paragraph (a) of this paragraph is not "specially designed"** if it: . . . ."

---

[18] The State Department has taken a significantly different approach to software in the definition of "specially designed" than has the Commerce Department. The State Department does not include software in the "catch" paragraph (a), while Commerce does include it. Should the Department decide to take an approach to that of Commerce, GE would propose that in certain circumstances some software items should have "release" avenues in the (b) paragraphs similar to those applicable to parts and components.

[19] In addition, we urge the Department to consider changing its approach regarding software, and to use the term "specially designed" instead of "directly related" for the description of software in all applicable categories on the USML. The term "specially designed" is better suited to dealing with software code which has a palpable manifestation in the operation of defense articles. We are not suggesting, however, that this change should be applied to technical data, which should continue to be described using the term "directly related."

[20] In particular, we note the use of the word "non-specific" in the Commerce definition, and the use of the phrase ". . . if they were 'specially designed' . . ." in the State Department definition, and ". . . because they were 'specially designed' . . ." in the State Department definition.

This clarification prevents any potential ambiguity by bringing the language into parallel structure with paragraph (a) and mirroring the language in the Department of Commerce's definition.

6. Inevitably there will be articles that will be initially captured on the USML by application of the definition of "specially designed" that are later determined by the Department to be of such a kind that they should be released from their applicable "catch-all" paragraph. We urge the Department, when finalizing the USML categories and this definition, to define a process involving Industry input and US Government analysis for determining that such specific items are not "specially designed" without the need to change the definition itself, or to notify Congress under Part 120.4.[21] Should the Department believe that the existing Commodity Jurisdiction procedure should be used, we strongly urge a clarification in 120.4 to expressly authorize a determination by the Department that an item is not captured in a "catch all" category for reasons other than the existence of doubt as to whether the item is on the USML.

7. A specific change needs to be made in connection with the use of "specially designed" in the context of the new proposed Category VIII(h)(1). There is potential confusion in this context. Category XIX has been created as the USML category that covers engines. We believe that if an engine or its components is not enumerated in Category XIX, the components, parts, accessories, attachments and equipment "specially designed" for the US-origin aircraft described in Category VIII(h)(1) are not intended to be read to include such engine and equipment. Any engines not specifically described in Category XIX are intended to be moved to the new 600 Series in the CCL, and should not be pulled into the USML by operation of "specially designed." We request that the Department make appropriate changes to eliminate any such confusion.

Thank you for the opportunity to provide you our comments. If you have any questions or require additional information concerning this submission, please contact the undersigned at (202) 637-4206 or by e-mail at: kathleen.palma@ge.com or Mr. George Pultz at (781) 594-3406 or by email at george.pultz@ge.com.

Sincerely,

Kathleen L. Palma

Kathleen Lockard Palma
Executive
International Trade Compliance

[21] For example, if an item, such as a simple low-tech assembly, does not meet the narrow criteria of (b)(2), the Department should be able to use its discretion to approve a CJ to move it to the CCL without needing to change the criteria to fit that assembly.

ATTACHMENT

Gas Turbine Engine-related Components

Adapter or Fitting - A modifying part designed to permit the use of a given item with another item when the two items are not designed for direct mating to each other.

ALTERNATOR - See GENERATOR, ALTERNATING CURRENT

Amplifier - A device which by means of electron tube(s), transistor(s), or similar items in conjunction with associated circuits controls a local source of power. Its output characteristics are related to the input signal(s), but are of greater amplitude with respect to current or voltage.

ANNUNCIATOR - A signaling apparatus which operates electromagnetically and serves to indicate visually and audibly, whether a current has flowed, or has changed direction of flow in one or more circuits.

Armature - The rotating part of an electrical machine which generally includes the winding and the commutator.

Attenuator - A device for reducing the strength of an alternating current signal, without causing appreciable signal distortion by maintaining correct impedance match.

Block - A piece of material, usually with one or more plane or approximately plane faces, used to strengthen or sustain. Also Clamp, Shoe, and Stop.

Bolt - A cylindrically shaped, externally threaded fastener, having a head designed to be held or driven by a wrench or other external gripping device. The head is not designed to be driven or held by an inserted driver or by thumb and fingers. See also Screw.

BOOT, DUST AND MOISTURE SEAL - A flexible, protective covering over a joint opening, or terminal. See also Cover and Cap.

Boss - A locally thickened area integral with a casting or forging, or fabricated to a sheet metal surface, etc., designed to increase strength around a hole or inserted part. Example: Material added for a screw thread, bolt, bushing, or bearing.

BRACE - A structural part serving primarily to increase the rigidity between two or more parts.

Bracket - A projecting part serving primarily to support another part.

BRAID, WIRE - An item formed by interwoven strands of metallic material, designed to surround and protect hoses, tubes, cables, and the like.

BRUSH, ELECTRICAL CONTACT - An item specifically designed to transfer electrical energy to or from another conducting surface. Either the brush or the surface is moving during the transfer of energy.

VSV bushings are very sensitive.Cabinet - A structure designed to enclose, mount and/or support electrical or mechanical equipment.

Cable - A group of wires bound or twisted together and used for transmitting a force.

Clamp - A device partially or wholly surrounding one or more parts, which holds or positions them by compression. The compression is obtained from an appropriate screw, toggle, or the like. Also Clip.

Clip - A device partially or wholly surrounding one or more parts, which holds or positions them by compression. The compression is obtained from the spring action of the clip material. See also Clamp.

Coil - An item generally consisting of one or more turns of wire or similar conductive material, specifically designed to concentrate magnetic flux generated by the flow of an electric current induct in itself an electromotive force; or add or subtract inductive reactance in a circuit.

Conductor - A wire or combination of wires (solid, stranded, or tinsel) or other materials not insulated from each other suitable for carrying electric current.

CABLE - A random length of insulated conductor(s).

WIRING HARNESS, BRANCHED - An item conforming to the definition of WIRING HARNESS, with branches or forks. Conduit - A tubular part, rigid or flexible, used to enclose a conductor(s) or lead(s).

Connector - An item serving to make a junction or attachment of a part, such as cable or wire, to another part or parts.

Coupler - A component which provides a means of transfer of electrical energy between two items or components while providing for impedance matching or balancing between the lines.

Coupling - A device designed to connect two parts together or facilitate attaching one part to another part

Cover - A part which partially encloses an object or closes, partially or completely, an opening. A cover does not have its own means of attachment.

Distributor - A device for controlling or accomplishing the distribution of electricity or fluid.

Doubler - A reinforcing piece generally used on sheet metal devices to strengthen areas around openings.

DYNAMOTOR - An item which combines both electric motor and generator action in one magnetic field, either with two armatures on one shaft or one armature having two or more windings.

Elbow - A fitting which forms an angle of less than 180 degrees.

ELECTRODE - An item of electrically conductive material which acts as a terminal through which an electric current enters or leaves a liquid or gas.

EXCITER, IGNITION - An assembly of component parts which provides a means of changing low voltage alternating current or low voltage direct current to a condition suitable to provide (with or without additional devices) a spark discharge for ignition purposes.

Fairing - A stationary member or structure whose primary function is to produce a smooth surface. It serves to cover projecting parts that would offer resistance to fluid flow.

Fastener - A device used to secure two parts together and to provide for their rapid attachment and detachment, as snap fasteners and cowl fasteners.

Ferrule - A part fitting over the end of a circular part to assist in attaching or in sealing at a connection.

Flange - An integral portion of a part, or an attached part, having a flat outer face at an angle to the surface from which it projects. Flanges are generally used for attaching or locating the part from which they project.

Fuse - An item designed for protection against the flow of current in a circuit exceeding specified values by utilizing the low melting point of a fusible element to open the circuit.

GASKET - A thin, flat part designed for use as a seal which is made to predetermined dimensions and is used between mating surfaces. See also Seal, Packing.

Grommet - A flanged, self-retaining part, usually nonmetallic used for protection of a part passing through a hole.

Gusset - A structural plate used to strengthen an angle within a part or the angle joint between parts.

Hanger - A device (loop, strap, hook, or the like) used to support or suspend another item.

Hinge - An item consisting of two halves fastened together by means of a pin(s) and knuckles. It is used to connect a movable object such as a door, lid, or the like to an adjoining member which may be movable or stationary, as HINGE, COVER PLATE.

Hose - A hollow, generally cylindrical, flexible part used to convey a fluid.

Igniter - An electrical or other device used to ignite a combustible mixture.

INSERT, SCREW THREAD - An internally threaded item whose outside diameter is threaded, knurled, finned, or otherwise designed for retention. It may be a one-piece precision formed coiled wire, having a tang designed for driving the insert into position.

Insulator - An item of non-conducting material used to separate electrical circuit parts from each other and structural parts. See also INSULATION TAPE, ELECTRICAL. For heat insulation,

Joint - A place where two or more parts are connected together. Use only with a modifying term in a phrase, as COUPLING, UNIVERSAL JOINT and EXPANSION JOINT.

Lever - A rigid part mounted on a pivot and serving to transmit forces or motions which are parallel, or nearly parallel, to each other.

Link - A rigid member flexibly connected only at the ends and used to transmit axial force from one part to another.

Lock - A means or device for securing a part in place. Preferably used as a modifying term, as RING, LOCK and WASHER, LOCK. An exception is LOCK, VALVE SPRING RETAINER.

Nipple - A straight fitting, having both ends externally threaded and of the same type and size, used to connect two internally threaded fittings.

Nut - A part having an internally threaded hole for fitting around an externally threaded part such as a bolt, shaft, screw, or the like, to restrain other parts from axial movement.

Packing - A pliable part or substance used to prevent leakage between parts which compress and confine it in all directions.

Pad - A portion of a casting or forging, or a piece fabricated to a sheet metal surface, which is generally raised and machined flat to provide for the attachment of another part or parts.

Pin - A rod, sometimes tubular and usually short, which encounters principally shearing forces without carrying torque. Some uses will involve only axial compression.

Plug – Fill a hole in a structure, like a boroscope plug.

Rake - A tube or series of tubes extending into the flow and having several spaced holes so arranged as to sense pressure or temperature.

Reducer - A straight fitting having two ends of different size, used for connecting in the same line two tubes or hoses of different size.

Ring - A thin, circular part having an opening of nearly its own diameter.

Rivet - A short, headed pin used as a fastener which is secured by upsetting the plain end.

Rod - A rigid bar. Use with a modifying term in a phrase, as CONNECTING ROD and BEARING, MASTER ROD, or with modifiers, as ROD, STRAIGHT, HEADLESS.

Roller - A conical or cylindrical part which functions by rolling on a surface.

Screw - A cylindrically shaped, externally threaded part having a head designed to be held or turned by a screwdriver or some other tool fitting into it. The head is not normally designed to be held or driven by an external gripping device.

Seal - An item designed to restrict fluid leakage around a part which passes through an opening. A seal differs from a gland in that a seal is not adjustable when assembled. See also Fireseal.

SHIM - A thin, flat, metal item, solid or laminated, designed to maintain a predetermined distance between two surfaces. A shim is too thin to have its spacing dimension altered by machining

Sleeve - A tubular part whose purpose is to protect the outside diameter of a cylindrical part, or to increase the diameter of, or to reinforce the part it surrounds.

Socket - A part whose shape and principal function involves a recess serving to hold another part or device fitting into it.

Spacer - A part designed to maintain a predetermined distance between two surfaces by its length, width, or the thickness.

Splitter - An item designed to fit into a fluid stream, and to divide and redirect the flow of the fluid.

Spring - An elastic mechanical device designed to absorb recoil or shock, to exert tension, or store up energy. It may possess the added characteristics of a supporting, guiding or controlling member; generally manufactured from metal but may be manufactured from a combination of metal or other elastic materials.

Stem - A slender connecting shaft-like device used to transmit torque or axial force (e.g., a winding stem, valve stem, or the like).

Stiffener - A protruding separate portion of a part serving to increase its rigidity.

Stop - A part whose primary function is to limit the travel of another part.

Strainer - A device serving to remove solid particles from a flowing fluid by passing it through a screen.

Strap - A strip designed to partially surround an item and act as a retainer or reinforcement of that item.

Strip - A thin, flat, narrow piece usually used for reinforcement.

Stud - A headless fastener, in the form of a cylindrically shaped rod, not exceeding twelve inches in length, threaded at the stud end for permanent assembly in a tapped hole and threaded at the other end to receive a nut.

Support - A structure that serves to hold in position and to act as a proper foundation by bearing the weight or stress of another part.

Switch - A device which completes, interrupts, or changes the connections in one or more electrical or electronic circuits by manual or mechanical actuation or as a result of changes in ambient temperature.

Tee - A fitting having three connections, the branch of which is fixed at 90 degrees to the run.

Terminal - An electrically conductive item designed to be attached to a circuit or device for convenience in making electrical connections.

TUBE, FLEXIBLE NONMETALLIC, ELECTRICAL - An exception to the concept of a rigid part. A bulk tubular item of nonspecific material so designed and constructed as to afford adequate mechanical protection to an insulated wire or cable to be contained therein.

TUBE AND HOSE - A combination of tube and hose which must be joined together simultaneously with the attachment of their mating fittings.

TURNBUCKLE - A metal loop, sleeve, or solid body with end pulls, having right hand and left hand screw threads on opposite ends; or having one end threaded and the other end designed to accommodate a swivel.

Valve - A device capable of permitting, stopping, and regulating fluid flow in a single passage by moving an obstruction into the flow passage.

Vent - An opening in the wall of a compartment for the primary purpose of relieving or equalizing pressure. See also Breather.

Washer - A usually flat disk having a hole in the center and used primarily to distribute pressure over an area surrounding a hole in another part, or to increase the wear resistance of that area.

Weight - A part whose primary function is to provide a concentrated mass in a desired location.

FLYWEIGHT - A movable weight on a rotating part which serves to produce some desired effect by means of centrifugal forces.

WIRE - For mechanical purposes other than WIRE, SAFETY.

Yoke - A forked member which guides, or is guided by, another part. A yoke differs from a clevis in that a yoke is not attached to its mating member.

August 3, 2012

Ms. Candace M. J. Goforth
Director
Office of Defense Trade Controls Policy
U.S. Department of State
Washington, DC 20520

VIA ELECTRONIC SUBMISSION ON WWW.REGULATIONS.GOV

RE: Specially Designed Definition – RIN 1400-AD22

Dear Ms. Goforth:

These comments are submitted on behalf of the Industrial Fasteners Institute (IFI) to both the Department of State and the Department of Commerce on the proposed definition of "specially designed" for use in the International Traffic in Arms Regulations (ITAR) and the Export Administration Regulations (EAR). IFI is the trade association representing 85 percent of the North American production capacity for mechanical fasteners. These nuts, bolts, screws, rivets and similar fastening devices and systems hold together everything we use in everyday life. They are prevalent in aircraft, vehicles, ships and numerous other items widely used in both military and civilian applications, and therefore, the application of export controls is of particular importance to fastener manufacturers. Most fastener manufacturers are small to medium-sized businesses, and the U.S. fastener industry employs approximately 42,000 workers.

On December 22, 2011, IFI provided comments to both the Departments of State and Commerce on the proposed changes to Category VIII regarding the control of aircraft and related items. In those comments, IFI applauded the Administration's overall efforts to amend the EAR in conjunction with amendments to the ITAR to describe more precisely which articles warrant continued control under ITAR and which are subject to the EAR.

In particular, IFI noted that, if our understanding of the proposed revisions was accurate, we would expect that upon finalization **ONLY** those fasteners "specially designed" for a specific list of U.S.-origin aircraft that have low observable features or characteristics would be subject to continued control under ITAR. Further, we stated our belief that all other fasteners "specially designed" for military aircraft would be subject to the jurisdiction of the EAR, as appropriate. Finally, depending on the final definition of "specially designed", we stated our opinion that most fasteners used in military aircraft would not qualify as "specially designed" and thus would not be subject to either ITAR or EAR controls.

Both the Department of State and the Department of Commerce have now proposed a final definition of "specially designed" (**Federal Register** / Vol. 77, No. 118 / Tuesday, June 19, 2012), and generally IFI believes that both proposed definitions would result in the same outcome as anticipated in our December 2011 comments, and would apply to fasteners contained in all categories of end items potentially subject to either ITAR or EAR. We believe this is the right approach, as it retains the ability to control fasteners that meet the definition of "specially designed" while creating a streamlined "decision tree" process for determining which fasteners no longer warrant controls under ITAR or EAR.

It is our understanding that if these definitions are adopted, the United States Munitions List (USML) will become a "positive list"—that is, any items to be controlled under ITAR will be specifically listed on the USML. All other items will be subject to EAR controls, but only if they meet the definition of "specially designed" including the exclusion paragraphs.

We further understand that Commerce is attempting to create a "yes/no" decision tree process for determining whether an item, part or component is "specially designed" by posing a series of questions, beginning with a general definition and proceeding, if necessary, through several specific exceptions or exclusions. Under the proposal, if the answer is "no" at any point in the questioning, the item is not "specially designed" and no further analysis would be required.

However, we believe additional clarity is necessary in several areas in order to insure that the final definitions accomplish that goal without inadvertently "controlling" parts or components that do not warrant control. Our remaining comments will address those areas.

One of the exclusions (Exclusion paragraph (b) (2)) specifically excludes "any single unassembled "part" that is of a type commonly used in multiple types of commodities not enumerated on the USML or the CCL". Examples of "parts" listed in this exclusion are threaded fasteners (screws, bolts, nuts, nut plates, studs, inserts), other fasteners (clips, rivets, pins), and basic hardware (washers, spacers, insulators, grommets, bushings, springs). We would make two points with regard to this exclusion:

1. While we understand that this list is not intended to be all-inclusive, we believe it should be made clear in the final definition that "fasteners" comprised of multiple sub-components are included. Parts such as nut plates, blind bolts, rivets, latches and panel fasteners may be comprised of numerous sub-components required to complete the final "fastener".

2. It is our understanding that Commerce intends to view "fasteners" broadly when determining whether they are "of a type commonly used in multiple types of commodities not enumerated on the USML or the CCL". Specifically, we understand that to mean that variations in such things as dimension, material, coatings or lubricants are not sufficient to cause a fastener to be "specially designed", unless one or more of those variations contribute to low observable features of an aircraft or some other unique characteristic of an end item warranting control. We suggest that be made clear in the final definition.

Another of the exclusions (Exclusion paragraph (b) (3)) would exclude a part, component, accessory or attachment that: "Has the same form, fit, and performance capabilities as a part, component, accessory, or attachment used in or with a commodity that: (i) Is or was in ''production'' (*i.e.,* not in ''development''); *and* (ii) Is either not enumerated on the CCL or USML, or is enumerated in an ECCN controlled only for Anti-Terrorism (AT) reasons." We believe further discussion and clarity is required regarding the terms "form" and "fit" as stated below:

1. As currently written, it appears that only identical parts used in both civilian and military applications would be considered within the definition, which does not adequately reflect the interchangeability of parts that perform the same function. For example, permanent lockbolts and permanent threaded bolts are two types of fasteners commonly called "pins". While they are intended to be interchangeable, have the same fit and performance characteristics, they have a different form because of different design principals.

2. Similarly, the task of holding a panel closed can be accomplished with either a latch or a panel fastener, and the decision to use one versus the other is essentially a matter of designer preference, not performance. Yet they do not have the same form or fit.

We also suggest that further clarification is necessary to adequately address fastener installation tools, which are often provided to the end user by the fastener manufacturer. IFI believes that such tools should not require control under either the ITAR or EAR, but it is not clear from the current draft how one would determine that using the "decision tree" process. For example:

1. A fastener installation tool would seem to be an “accessory”, because it is not installed on an end item, so it would not fall within exclusion paragraph (b) (2).

2. End users may request that the tool be modified by lengthening or shortening the handle. If that is done at the specific request of a supplier of a defense item, the tool would not fall within exclusion paragraph (b) (3), as it now has a different form.

3. Similarly, it is not clear that exclusion (b) (4) would exempt a modified tool as it would be difficult if not impossible to conclude there is a “reasonable expectation” of use on a civilian article.

With those caveats, IFI supports the overall Administration approach, which would retain ITAR control of critical fasteners that contribute to the properties of key U.S.-origin aircraft having low observable features or characteristics. All other fasteners would be subject to control under EAR, but only if they are “specially designed” for military end items.

IFI appreciates the opportunity to comment on this proposed definition. We would be happy to answer any questions regarding these comments or export controls and their effect on fastener manufacturers. Please contact our Washington Representatives: Laurin Baker at 202-393-8525 or Jennifer Baker Reid at 202-393-8524 if you have any questions.

Sincerely,

Rob Harris
Managing Director

INDUSTRIAL FASTENERS INSTITUTE
6363 Oak Tree Boulevard • Independence, OH 44131
Phone 216/241-1482 • Fax 216/241-5901
Web site: www.indfast.org

INDIUM CORPORATION®

Corporate Headquarters
34 Robinson Road
Clinton, New York 13323 USA

TEL: +1 315 853 4900
FAX: +1 315 853 1000

www.indium.com
askus@indium.com

June 28, 2012

Office of Defense Trade Controls
U.S. Department of State
Washington, D.C.

Re: RIN 1400-AD22
Comments on the Proposed Amendment to the International Traffic and Arms in Arms Regulations: Definition for "Specially Designed"

We appreciate that you have included solder in the proposed amendment to the International Traffic in Arms Regulations' definition of "Specially Designed." The addition of solder brings clarity that these materials are not military articles subject to the USML. Like fasteners, solder enables the joining or bonding function of two parts and is available in a common variety of forms (bar, wire, ribbon, foil, preform, powder and paste). In addition, it has a performance equivalent (defined by form, fit and function) to articles used predominantly in civil applications.

As is illustrated in the attached article published by The Adhesive and Sealant Council Incorporated, a variety of joining methods and materials can be used to fulfill assembly functions, including:

- mechanical fasteners (threaded fasteners, other fasteners, common hardware)
- welding materials
- brazing materials
- soldering and adhesive materials

Again, we fully support the Proposed Amendment to the International Traffic In Arms Regulations: Definition for "Specially Designed" and believe it does provide the "bright Line" between the commodities controlled by the USML and the CCL.

Sincerely,

Employees of Indium Corporation

Attachment

Thomas Velnot

Nick E BRIDENBECKER

MICHAEL MARRÉ

William JENNINGS

PATRICK TOMASELLI

Robert Bryant

Paul A. Socha

(Brook Sandy)

Edward H

MATTHEW SEALOCK

David Fernald

Mike Billings

Sam Bianchi

CHRISTOPHER DAVIS

DANiel Biermann

Yara Dafmata

Bernard E Dore

Jeremy C. Montague

Adam P. Bridenbecker

Samuel Jacobs

David Moessig

JOHN CLARK

Sean Burmaster

Cindy Roberts

Anthony Perdotis

Shane Kehr

Ed Ito

Bernard E Dore

Jeremy C Montague

Adam P Bridenbecker

Samuel Jacobs

Karl Fam
Daniel Boggi
Thomas Newberry
Merill D. Constantine

Orlando Cagüeas
James Collins
William McCartney
CARIS ROSE
[illegible]

Dale Kerr
DOREEN AURILLO
Fallon Thiopane
Karen Bamberger
THOMAS P. DISKIN

Maria J DiBernardo
Jacqueline C. Fish
Adam Lallier
Jacqueline E. Dooley
MARTH W. LEWIS
Jonathan Edwards
LORI BOONE
FIDEL A. SANCHEZ

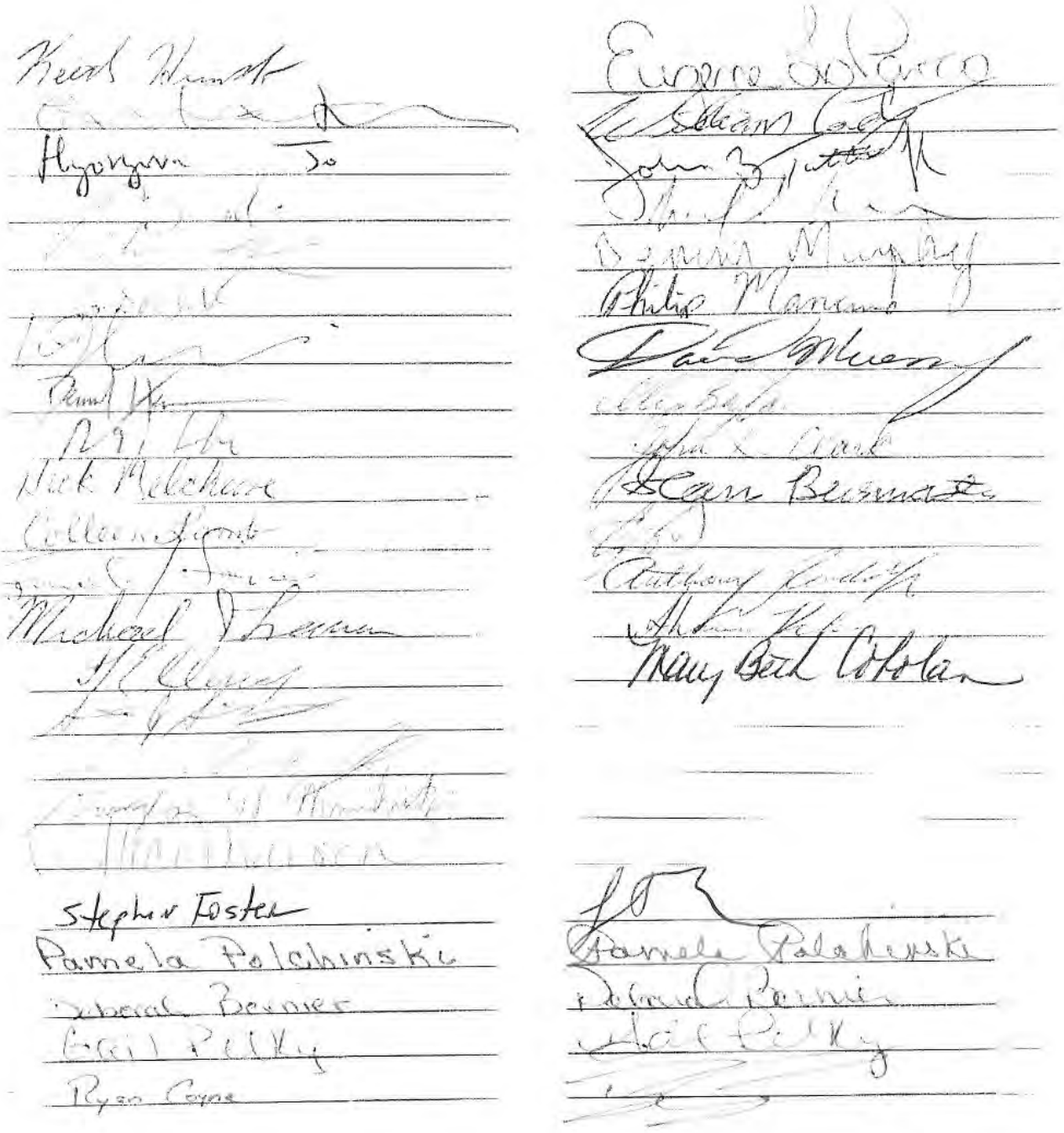
Thomas Newberry
Merill D. Constantine

Orlando Cagüeas
James Collins
William McCartney

Dale Kerr
Doreen Aurillo

Karen Bamberger
Thomas P. Diskin

Maria J DiBernardo
Jacqueline C. Fish
Adam Lallier
Jacqueline E. Dooley
Jonathan Edwards
Lori Boone
Fidel A. Sanchez



CARL G. GOODMINES

DANA EBENSPERGER

Wylie Tinsley

EDUARD GRANT

David Skelly

ROBERT CROUSE

Rick Grey

Robert DeLand

Gordon McCall

David Lynch

Howard DRINKWINE

JOSHUA DYGERT

MARK CLANTON

Frederick G. Lloyd

DONNA WHITE

Tremayne Jackson

Jean Kinstwine

Clarence Lunger

Rodney Frank

Andrew Manoleasa

Clark

Devon Vroman

Howard Robinson

RICHARD WORWA

Jason Brown

Timothy Entwistle

Jeffrey S. VanSlyke

[illegible]

MARK R. ROSEN

Ralph L Young

ERIC SPRUNG

Phillip Torres

[illegible]

BRENT BOEK

RICHARD K. KOWALSKI

Judy Foti

Amy Marquisses

FRITZ CHERY

Kim Stockbridge

Nichole Becker

Nancy Hunter

JESSE KIMBALL

PIOTR KUDLA

[illegible]

Elisabeth Prueter

[illegible]

[illegible]

[illegible]

MARY DEORTE

Robert Cuttler

Richard Worwa

Jason Brown

[illegible]

[illegible]

[illegible]

Ralph L Young

[illegible]

[illegible]

Donald Wood

[illegible]

JUDY FOTI

[illegible]

[illegible]

Kim Stockbridge

Nichole Becker

Nancy Hunter

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

ELISABETH W KRUGER

Chris Festa

CHRIS STEVENS

RICK ROBINSON

ROBERT ANDRESKI

Robert Alberico

STEVEN W. SULLIVAN

MERVIN L. BROADBENT JR

TIMOTHY J. QUINN

JEFFREY J. MOORE

RYAN REYNOLDS

Barbara Ashline

SUSAN BIXON

Melissa Barnhart

Martina Garcia

Megan Lally

ERINN COOK

Vito Knolla

Jim Farrell

THOMAS R. GROSS

Robert Hart

Andy Reynolds

Robert Andreski

Robert Alberico

Steven W. Sullivan

Mervin L Broadbent Jr

Timothy J. Quinn

Jeffrey J. Moore

Ryan Reynolds

Barbara Ashline

Susan Bixon

Melissa Barnhart

Martina Garcia

Megan Lally

Erinn Cook

Vito Knolla

Jim Farrell

Competitive Fasteners

A variety of joining methods can be used to provide the assembly function. A general comparison of these joining processes is provided in Table 1 as to their joint characteristics and their production features.

Table 1: General Comparison of Joining Characteristics

(Source: Harshorn, S. R., "Introduction", Chapter 1, Structural Adhesives: Chemistry and Technology, Plenum Press, New York, 1986)

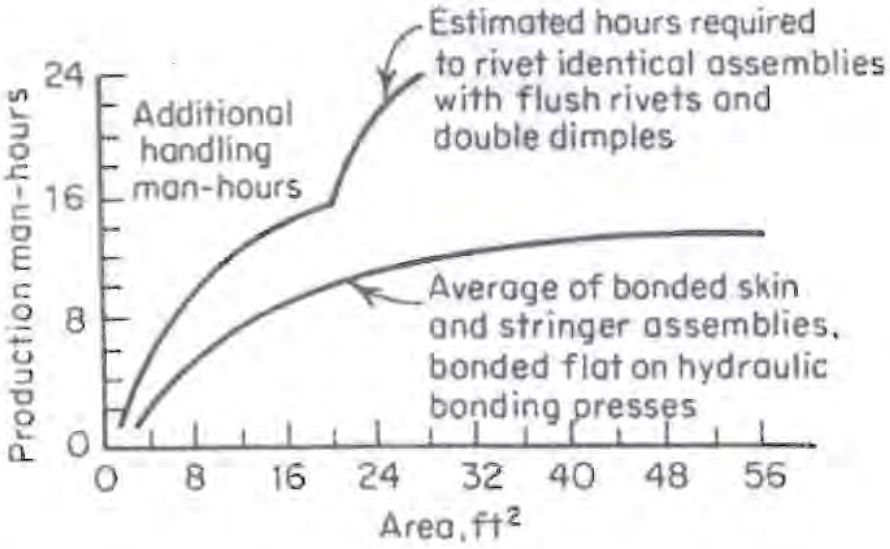
	Welding	***Brazing and Soldering***	***Mechanical Fastening***	***Adhesive Bonding***
Joint Features				
Permanence	Permanent joints	Usually permanent (soldering may be non-permanent)	Threaded fasteners permit disassembly	Permanent joints
Stress distribution	Local stress points in structure	Fairly good stress distribution	Points of high stress at fasteners	Good uniform load distribution over joint area (except in peel)
Appearance	Joint appearance usually acceptable. Some dressing necessary for smooth surfaces	Good appearance joints	Surface discontinuities sometimes unacceptable	No surface marking. Joint almost invisible
Materials joined	Generally limited to similar material groups	Some capability of joining dissimilar metals	Most forms and combinations of materials can be fastened	Ideal for joining most dissimilar materials
Temperature resistance	Very high temperature resistance	Temperature resistance limited by filler metal	High temperature resistance	Poor resistance to elevated temperatures
Mechanical resistance	Special provision often necessary to enhance fatigue resistance	Fairly good resistance to vibration	Special provision for fatigue and resistance to loosening at joints	Excellent fatigue properties. Electrical resistance reduces corrosion
Production Aspects				
Joint preparation	Little or none on thin material. Edge preparation for thick plates	Prefluxing often required (except for special brazing processes)	Hole preparation and often tapping for threaded fasteners	Cleaning often necessary
Post Processing	Heat transfer sometimes necessary	Corrosive fluxes must be cleaned off	Usually no post-processing -- occasionally re-tightening in service	Not often required
Equipment	Relatively expensive, bulky and often required heavy power supply	Manual equipment cheap. Special furnaces and automatic unit expensive	Relatively cheap, portable and "on-site" assembly	Only large multi-feature, multi-component dispensers are expensive
Consumables	Wire, rods, etc., fairly cheap	Some special brazing fillers expensive. Soft solders cheap	Quite expensive	Structural adhesives somewhat expensive
Production rate	Can be very fast	Automatic processes quite fast	Joint preparation and manual tightening slow. Mechanized tightening fairly rapid	Seconds to hours, according to type
Quality assurance	NDT methods applicable to most processes	Inspection difficult, particularly on soldered electrical joints	Reasonable confidence in torque control tightening	NDT methods limited

All fastening and joining systems, including adhesives, fall into one of three general categories: (1) periodic, (2) linear, and (3) area. Periodic joining methods attach two members by occasionally placing through-hole fasteners or other individual mechanisms. This is the most widely used joining technique for structures requiring high mechanical strength and a minimum of sealing or other non-strength functions. Linear processes provide a continuous or occasional edge bead attachment, such as welding. In the area joining process, attachment is achieved by full-face contact and complete union between the two mating surfaces. Soldering, brazing, and adhesive bonding are examples of area attachment.

Although adhesive bonding can be successfully employed in periodic or linear attachment applications, the main benefits and advantages are realized when adhesives are used in the "area" attachment designs. The reasons for this are (1) economic advantage gained in applying a single uniform coating rather than individual components (see Figure 1) and (2) stress distribution over a much larger area. With periodic or linear attachment methods, there is generally significant stress concentration that adversely affects the strength and fatigue properties of the joint.

Figure 1
The Economy of Metal-to-Metal Bonding Compared with Conventional Riveted Structures

(Source: Cagle, C. V., Adhesive Bonding Techniques and Applications, McGraw Hill, New York, 1968)



In evaluating the appropriate joining method for a particular application, a number of factors must be considered. Usually, the decision of which fastening method to use involves several trade-offs. An analysis of requirements, as shown in Table 2, can be useful in identifying potential fastening methods. When this is performed, the possibility of using adhesives over other methods becomes apparent.

Table 2: How Joining Methods Compare

(Source: Nielsen, P. O., "Selecting An Adhesive: Why and How", Chapter 5, Adhesives in Manufacturing, G. L. Schneberger, ed., Marcel Deckker, Inc., New York, 1983)

	Riveting	***Welding***	***Brazing***	***Adhesive Bonding***
Preliminary machining	P	E	P	E
With thin metals	P	P	F	E
Limits on metal combinations	F	P	P	E

Surface preparation	E	G	F	P
Tooling	E	F	F	F
Need for access to joint	P	P	E	E
Heat requirements	E	P	P	F-G
Stress distribution	P	F-G	E	E
Sealing function	P	F	E	G
Rate of strength development	E	E	E	P
Distortion of assembly	F	P	F	E
Final machining	G-E	F	E	E
Final heat treatment	E	F	F	E
Solvent resistance	E	E	E	F
Effect of temperature	E	E	E	P
Ease of repair	G	P	P	F
Level of skill required	E	G	E	E

Notes: E - Excellent, G - Good, F - Fair, P - Poor

In many applications adhesive bonding is the only logical choice. In the aircraft industry, for example, adhesives make the use of thin metal and honeycomb structures feasible because stresses are transmitted more effectively by adhesives than by rivets or welds. Plastics, elastomers, and certain metals (e.g., aluminum and titanium) can be more reliably joined with adhesives than with other methods. Welding is usually at too high a temperature, and mechanical fastening destroys the lightness and aesthetics of the final product.

Adhesive bonding does not have many of the disadvantages of other methods. Welding or brazing, useful on heavy-gauge metal, is expensive and requires great heat. Dissimilar metals usually have different coefficients of thermal expansion or thermal conductivities making them more difficult to weld. Some metals have unstable oxides that also make welding difficult. Many light metals such as aluminum, magnesium, and titanium are difficult to weld and are weakened or distorted by the heat of welding. High temperature metallurgical joining methods can cause thin sheets to distort. Beneficial properties obtained from metallurgical heat-treating processes could be lost because of a high temperature joining process. Adhesives, on the other hand, provide a low temperature, high strength, joint with many of these substrates. They thereby avoid many of the problems commonly encountered with other methods of joining.

ASC
THE ADHESIVE AND SEALANT COUNCIL INC.
SECURING THE FUTURE®

Copyright © 2010 The Adhesive and Sealant Council, Inc. All Rights Reserved.

Source: http://www.adhesives.org/AdhesivesSealants/WhyAdhesivesvsOtherFasteners/CompetitiveFasteners.aspx

Association Connecting Electronics Industries

IPC®

Government Relations
1901 N. Moore Street, Suite 600
Arlington, VA 22209

703-522-0225 tel
703-522-0548 fax
www.ipc.org

August 3, 2012

Directorate of Defense Trade Controls
Office of Defense Trade Controls Policy
Department of State
VIA EMAIL: DDTCResponseTeam@state.gov

Re: Amendment to the International Traffic in Arms Regulations: Definition for "Specially Designed" (Federal Register Docket ID. 2012–14471, RIN 1400–AD22)

IPC - Association Connecting Electronics Industries has a long history of cooperation with, and support of, the agencies that develop and implement national security policy. In this vein, IPC has offered its views to the Department of State regarding U.S. Munitions List (USML) category revisions, and it now welcomes the opportunity to comment on the above referenced proposed definition of "specially designed."

IPC commends the Department of State for its efforts to eliminate from the USML the use of broad catch-all terms that result in the regulation of militarily insignificant items. IPC also acknowledges that limited use of the catch-all term "specially designed" may be unavoidable.

IPC, however, is concerned that "specially designed" will become the primary mechanism for regulating the export of printed boards designs if they are not enumerated on the USML. The proposed definition of "specially designed" will do little to address confusion about the treatment of printed boards and is likely to perpetuate the unlicensed exporting of printed board designs that now undermines U.S. national security. To avoid such confusion, IPC urges the Department of State to explicitly control printed boards and their designs for ITAR items in Category XI (military electronics) or elsewhere in the USML. At a bare minimum, the Department of State, should, in the preamble to the final definition and relevant USML category revisions, clarify that printed boards and their designs for ITAR items are covered by ITAR.

I. About IPC

IPC is a U.S.-headquartered global trade association, representing all facets of the electronic interconnect industry, including design, printed board manufacturing and printed board assembly. IPC has more than 3,300 member companies of which 1,900 members are located in the United States. IPC is the definitive authority on standards used by the global electronics industry and is the leading source for training, market research and public policy advocacy and other programs to meet the needs of an estimated $1.7 trillion global electronics industry.

II. National Security Importance of Printed Boards and Their Designs

Each printed board and printed board assembly is uniquely designed for the specific function of the electronic items in which it is incorporated. Drawing upon very precise specifications for the design and placement of parts which are to be electronically connected, a printed board contains a roadmap for the operation of that item. Manufacture of the printed board requires access to and use of all of the printed board design information. This access exposes a significant portion of the intellectual property for both the printed board and the item for which it is uniquely designed.

As an example of the significant information contained in printed boards, consider the Joint Counter Radio-Controlled Improvised Explosive Device ("RCIED") Electronic Warfare ("JCREW"). JCREW jammer systems are used to prevent remote detonation of improvised explosive devices (IEDs). These systems are high-power, modular, programmable, multiband radio frequency jammers that deny enemy use of selected portions of the radio frequency spectrum. Three printed boards help determine the frequency and range capability of JCREW systems. Access to the design of these printed boards could lead to an understanding of the system architecture and how to circumvent the jammers. Protection of the printed boards and their designs are critical to the functioning of the JCREW and our troops' security.

Releasing sensitive information to adversaries through the sharing of printed board designs exposes defense articles to malicious intrusion that may undermine the reliability of U.S. weaponry and other critical equipment. Moreover, failure to properly secure the information embedded in printed boards that are custom-designed for defense articles could result in a breach of national security and theft of critical defense-related intellectual property.

The unlicensed export of manufactured printed boards carries similar concerns to those regarding printed board designs. IPC's members are frequently asked by the U.S. Department of Defense to reengineer printed boards for legacy defense articles for which the printed board designs are no longer available. The same process of shaving down layers of a printed board to ascertain the printed board's design can be used by adversaries to replicate and/or compromise the operation of a mission critical defense system. For these reasons, printed boards and their designs must be appropriately protected under ITAR.

III. ITAR's Treatment of Printed Boards Elicits Confusion

ITAR rules for printed boards and their designs are not clear to many in the defense and aerospace industry. Although printed boards designed for ITAR controlled items are within the scope of the USML's controls on "components" that are specifically designed for defense articles, understanding this requires understanding that each printed board is specifically designed. In fact, it is widely recognized within the electronics industry that confusion about ITAR has led to the inadvertent sourcing of printed boards for ITAR-controlled items from non-ITAR facilities. The confusion stems from the mistaken assumption by some in the defense industry that printed boards are not specifically designed for their end items, but rather commercial off the shelf components. On this basis, some companies overlook the regulation of specifically designed parts and components and source printed boards for ITAR items from non-ITAR facilities.

IPC regards the unlicensed export of printed board designs to be a serious threat to national security. In order to address concerns regarding potential violations of ITAR and national security, IPC has launched an educational initiative—*Follow the Law, Protect the* Board—to clarify export control rules on printed boards. The six-month initiative will include industry conferences, webinars, distribution of instructional material, and media outreach. While IPC believes this initiative will help raise understanding of the current regulations, a private sector educational campaign is no substitute for clear federal rules. Regulatory clarity for printed boards must be addressed as a part of export control reform.

IV. Export Control Reform: Establishing Clear Controls on Printed Boards

IPC supports the reform of U.S. export control rules, and it has welcomed the opportunity to comment on previous rulemakings related to the reform effort. In comments to proposed revisions of Categories VIII, VII, XIX, VI, XX, X, IX, IPC has urged the Department of State to establish clear controls on printed boards and their designs for ITAR-controlled items. Specifically, the Department of State should specifically list printed boards and printed board designs for ITAR items in the revised USML. In addition, the Department of State should clarify that the design and digital instructions for printed boards specifically designed for ITAR items are within the scope of the definition of "technical data" referenced in multiple USML categories and defined in 22 C.F.R. §120.10. Clear enumeration of printed boards will enhance national security by reducing existing confusion about ITAR regulations for printed boards.

IPC's position is consistent with the Department of State's stated goal of creating a "positive" control list that establishes objective criteria and parameters for clearly identified defense articles. IPC supports the creation of a "positive" list that enumerates printed boards designed for USML items. Such an approach is the most effective means to addressing confusion within the defense industry about ITAR's treatment of printed boards which has resulted in the unlicensed export of printed board designs for ITAR items to support sourcing from non-ITAR facilities.

V. Proposed Definition of "Specially Designed"

IPC's review of the proposed definition of "specially designed" reaffirms the need to explicitly enumerate printed boards and their designs on the USML. While the proposed definition of "specially designed" is an improvement over the currently used term "specifically designed," it will fail to adequately control printed boards because it relies upon an understanding on the part of exporters that each printed board is specially designed for each USML application. IPC does not believe the proposed definition of "specially designed" can be modified to ensure clear understanding of the regulation of printed boards under ITAR.

IPC is concerned that, absent specific enumeration of printed boards on the USML, "specially designed" will be used as the principal mechanism for controlling printed boards, much as "specifically designed" is today. More specifically, IPC fears that the defense community may rightly conclude that while printed boards fall within, or are "captured" under paragraph (a) of

the definition, they may also wrongly conclude that they are then “released” from regulation under paragraph (b).

It is clear by the definition that printed boards are “captured," at least initially under paragraph (a) because printed boards are “necessary for an enumerated defense article to function as designed” as described in paragraph (a)(2) of the proposed rule:

> “(a) Except for commodities described in (b) of this section, a commodity is ‘‘specially designed’’ if, as a result of development, it: (1) Has properties peculiarly responsible for achieving or exceeding the controlled performance levels, characteristics, or functions described in the relevant U.S. Munitions List paragraph;
> (2) Is a part (*see* § 121.8(d) of this subchapter) or component (*see* § 121.8(b) of this subchapter) necessary for an enumerated defense article to function as designed; or
> (3) Is an accessory or attachment (*see* § 121.8(c) of this subchapter) used with an enumerated defense article to enhance its usefulness or effectiveness.”

However, IPC is concerned that defense community may wrongly believe that printed boards are not regulated under ITAR because they are “released” from regulation by the provisions in paragraphs (b)(2) and (b)(3):

> “(b) A part, component, accessory, or attachment is not controlled by a U.S. Munitions List ‘‘catch-all’’ paragraph if it:
> (1) Is enumerated in a U.S. Munitions List paragraph;
> (2) Is a single unassembled part that is of a type commonly used in multiple types of commodities not enumerated on the U.S. Munitions List or the Commerce Control List, such as threaded fasteners (e.g., screws, bolts, nuts, nut plates, studs, inserts), other fasteners (e.g., clips, rivets, pins), basic hardware (e.g., washers, spacers, insulators, grommets, bushings, springs), wire, and solder;
> (3) Has the same form, fit, and performance capabilities as a part, component, accessory, or attachment used in or with a commodity that:
> (i) Is or was in production (i.e., not in development); and
> (ii) Is not enumerated on the U.S. Munitions List”

In particular, IPC is concerned that defense manufacturers may incorrectly claim releases by considering printed boards to be a “single unassembled part” under paragraph (b)(2) or as having the same “form, fit, and performance capabilities as a part, component, accessory, or attachment” used in an item not enumerated on ITAR under paragraph (b)(3).

With regards to paragraph (b)(2), while a printed board is certainly not a “single unassembled part,” IPC is concerned that it could be seen as such by some in the defense community. A printed board, of course, is a component produced through an elaborate manufacturing process incorporating a variety of materials and metals. The resulting printed board is a highly complex product with electrical pathways connecting disparate components. To this end, a printed board is wholly unlike the examples of a “single unassembled part” (e.g. washer, screw, bolt, etc) provided under paragraph (b)(2), and in fact, the Commerce Department in its rulemaking specifically noted that it did not seek to provide a release for minor components, much less major components. Given the intent to harmonize the use of this definition in the USML and the Commerce Control List, IPC understands that the Department of State likewise does not intend to release components under (b)(2). Yet, to an individual with little technical expertise, a bare printed board lacking components may be perceived to be a single unassembled part. IPC’s experience with the current ITAR suggests that such a mistake could easily occur.

Equally concerning, individuals who believe that printed boards are commercially available off the shelf components may conclude by extension that all printed boards share the same basic "form, fit and performance capabilities" under paragraph (b)(3). No two boards, in fact, are alike because each is specially designed for its end item.

In the event that printed boards are not enumerated on the USML, they should certainly be regarded and regulated as "specially designed" components, but with recognition by the Department of State that this somewhat ambiguous regulation would perpetuate the confusion about ITAR's current treatment of printed boards that currently exists. Controlling printed boards through "specially designed" will require greater vigilance on the part of federal enforcement officials to ensure that printed boards are being controlled as intended. Should the Department of State decide to address the control of printed boards for USML items in this manner, IPC urges to the Department of State to clarify its application to printed boards in the preamble to the final rule.

The publication of additional category revisions may address IPC's concerns. As IPC has asserted in these comments as well as in comments to previously released category revisions, printed boards and their designs should be explicitly enumerated within Category XI. If the Department of State chooses to follow this recommendation, printed boards and their designs would be clearly regulated.

VI. Conclusion

IPC supports the Department of State's goal of reforming the USML to clearly describe covered items in objective terms. In order to prevent the unintentional release of detailed design information about covered items, the Department of State should clarify that printed boards and their designs remain under the jurisdiction of ITAR when the end item for which the printed board is designed is a USML item. Control of printed boards through a "specially designed" catchall neither clarifies the status of printed boards, nor clearly places them on one side of a bright line between what is and is not controlled. Instead, the Department of State should enumerate printed boards in Category XI or elsewhere on the USML. The Department of State should additionally clarify that the design and digital instructions for printed boards specifically designed for ITAR items are within the scope of the definition of "technical data" employed in multiple USML categories and defined in 22 C.F.R. §120.10.

Thank you again for the opportunity to comment on the proposed definition of "specially designed." If IPC can offer additional information or assistance, please contact me at FernAbrams@ipc.org or 703-522-0225.

Sincerely,

Fern Abrams
Director, Government Relations

Holland & Knight

2099 Pennsylvania Avenue, N.W., Suite 100 | Washington, DC 20006 | T 202.955.3000 | F 202.955.5564
Holland & Knight LLP | www.hklaw.com

Jonathan M. Epstein
(202) 828-1870
jonathan.epstein@hklaw.com

August 3, 2012

RIN: 0694-AF66

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

RIN: 1400-AD22

Office of Defense Trade Controls Policy
Directorate of Defense Trade Controls
U.S. Department of State
Washington, D.C. 20522-0112

Re: Comments of KEMET Electronics Corporation on Proposed Definition of "Specially Designed"
Proposed Rules – (BIS) RIN 0694-AF66; (State) RIN 1400-AD22

Dear Sir/Madam:

On behalf of KEMET Electronics Corporation ("KEMET"), we submit these comments on the Bureau of Industry and Security ("BIS") and State Department proposed definitions of "specially designed" under the Export Administration Regulations ("EAR") and the International Traffic in Arms Regulations ("ITAR").[1] Because of the parallel nature of the proposals, KEMET is submitting consolidated comments to both rulemakings.

KEMET, headquartered in Simpsonville, South Carolina, is one of the world's largest producers of capacitors, with origins dating back to 1919. KEMET sells over 30 billion capacitors each year. KEMET manufactures several hundred different types of capacitors, with thousands of specific part numbers and configurations. Capacitors are basic building block components used in virtually all electrical and electronic applications. For example, there are typically two hundred capacitors in a modern cell phone, six hundred capacitors in a modern laptop computer, and tens of thousands in a modern commercial aircraft.

[1] BIS Proposed Rule, "Specially Designed" Definition, 77 *Fed. Reg.* 36409 (June 19, 2012) ("BIS Proposal"); Department of State, Amendment to the International Traffic in Arms Regulations: Definition of "Specially Designed," 77 Fed Reg. 36428 (June 19, 2012) ("State Proposal").

KEMET generally supports the proposed definitions of "specially designed." However, as drafted, KEMET is concerned that the definitions would be difficult to apply on a day-to-day basis to KEMET's products (and to other basic building block electrical components).

As part of the export control reform process, it appears BIS and the Department of State Directorate of Defense Trade Controls ("DDTC") (collectively the "Agencies) have singled out nuts and bolts and other hardware as the "low hanging fruit" that can be largely carved out of licensing requirements under the ITAR and EAR 600 series in part through these rulemakings, thus allowing the Agencies to focus resources on end-items and components that are of military strategic significance. We believe that multi-purpose basic building block electrical/electronic components are another broad swath of items, where the benefit of carving out as many of these items as possible from the ITAR and EAR 600 series outweighs the minimal national security interests in restricting export of these items.

SPECIFIC COMMENTS AND JUSTIFICATION

A. MODIFY THE NOTE TO PARAGRAPH (b)(4) and (b)(5) IN BOTH THE ITAR AND EAR PROPOSED DEFINTIONS

1. Justification.

As written, this note largely eviscerate the utility of (b)(4) and (b)(5) and is inconsistent with the objectives of the rule and other discussions in the preamble of the BIS Proposal. KEMET has many capacitors lines that date back decades. Determining the original design intent of a capacitor developed in the 1950s or 1960s is often a futile exercise. Further, like many other electrical/electronic minor component manufacturers, KEMET has catalogues of off-the-shelf capacitors that it manufactures to meet certain high reliability MILSPEC (or "MIL-PRF") requirements.[2]

MILSPECs for capacitors do not provide specific designs, but rather create a "smart" part number naming convention that is cross-referenced to physical and electrical parameters, as well as the test criteria. For example, under MIL-PRF 49470, the convention is as follows:

M49470	P	01	473	K	B	N
Military Specification Number	Characteristic	Slash Sheet Number	Capacitance	Capacitance Tolerance	Rated Voltage	Lead Configuration

[2] There are a number of MILSPECs applicable to capacitors. *See, e.g.*: http://www.interfacebus.com/Design_Capacitors_MIL.html. (MIL-PRF capacitors are in general more robust in design than non-high reliability applications. However, in terms of technological advancement, these capacitors meeting MIL-PRF requirements are, particularly in the case of ceramic capacitors, generations behind modern commercial capacitors in terms of performance and size).

KEMET generally has a corresponding catalogue part number for any combination within a particular MIL-PRF.

While some MIL-PRF standards give a general list of applications, the origins or intended uses of any particular MIL-PRF standard are often difficult to discern. Moreover, for any particular part number, this historical research would be virtually impossible. But for the note, the regulatory language in (b)(5) would appear to exclude any such part from the definition of "specially designed."

This note directly contradicts one objective of the rule: that the rule does not require a need to "*investigate or divine the intentions of the original designer of a part . . . .*"[3] It is also directly inconsistent with the example given regarding the intent of this paragraph, as follows: "*many catalogue electronic components are designed as basic building blocks for other equipment, regardless of whether the equipment is military or civilian, controlled or uncontrolled.*"[4]

2. Proposed Change. KEMET proposes the Note to paragraph (b)(4) and (b)(5) be revised in both the ITAR and EAR proposed definitions to state:

Note to paragraph (b)(4) and (b)(5): *Applicability of (b)(4) and (b)(5) to a commodity may be established by:*

(i) Documents contemporaneous with a commodity's "development," which in their totality, establish the elements of paragraphs (b)(4) or (b)(5). Such documents may include concept design information, marketing plans, declarations in patent applications, or contracts.

(ii) Documents, such as generic MIL-PRF specifications for minor components for basic building block electronic components that do not specify a particular end-item.

B. CLARIFY THE TERMS "FORM, FIT, AND PERFORMANCE" AS USED IN THE DEFINITION OF "SPECIALLY DESIGNED"

1. Justification.

The export community has long struggled with the application of the "form, fit, and function" test in the commodity jurisdiction context. And the subjective application of the Agencies has changed over time to focus more on function/performance rather than on minor changes in form or fit that do not affect the performance of the item. For example, KEMET is routinely asked to modify the type of lead on a standard part, or to change lead spacing for a particular customer. Notwithstanding that there is no change in performance, these capacitors are, and under the new rules would continue to be, classified as specially designed based on the component or end-item into which the capacitor will be used. With the advent of the 600 series, and .x and .y subsections within the 600 series, sub-component suppliers like KEMET will now need to know not only what the end-item is, but what the specific major component the capacitor will be used in, to properly classify such minor components. Major component and end-item

---

[3] *BIS Proposal* at 36410.
[4] *Id.* at 36415.

manufacturers, for good reason, are often reluctant to share this information with sub-contractors like KEMET that provide basic building block items like capacitors.

Since "Form, Fit, and Function" are defined in a note in 120.4(d) of the ITAR, we suggest that this ITAR note be incorporated into the note to Paragraph (b)(3) of the EAR definition of "specially designed" and modified to exclude non-significant changes in form or fit as set forth below:

2. Proposed Changes:

- Add to the proposed Note to Paragraph (b)(3) in the EAR definition of "specially designed" the following text:

The form of the item is its defined configuration, including the geometrically measured configuration, density, and weight or other visual parameters which uniquely characterize the item, component or assembly. For software, form denotes language, language level and media. The fit of the item is its ability to physically interface or interconnect with or become an integral part of another item. Performance capabilities of the item are objective electrical/physical standards the component is designed to meet or actions it is designed to perform. Minor changes in form or fit that do not materially affect performance do not make an item Specially Designed. For example, changing lead spacing or changing location of fastener holes would be minor. Decreasing the footprint of an item by 25% to fit in a particular application would not be minor.[5]

- Revise the note defining "form, fit, and function" in ITAR 120.4(d)(ii) to the above language.

C. ADDRESS ISSUES RELATING TO COMMON ISSUES IN THE RULEMAKING

Many parts and components manufacturers struggle with the issue of whether an item is "specially designed" because such components are subject to specific MIL-SPECs, meet certain "space qualified" standards and face issues of when and whether test and quality assurance affect classification. Yet none of these questions was specifically addressed in the rulemakings. We believe that, to the extent the Agencies can make clear "bright line" statements, this will help a great deal to clarify the definition of "specially designed." While KEMET is not suggesting any specific language, it suggests that these issues be discussed in a note to the definition, in the preamble, and/or in secondary guidance as suggested in Section D below.

- *MIL-SPEC/MIL-PRF* – Agencies officials and export professionals know that the fact that an item meets a particular MIL-SPEC does not, in and of itself, make an item ITAR controlled or make that item "specially designed" for a particular end-use. (*See* discussion in Section A above). However, it is unclear whether this is understood more generally among law enforcement officers and non-export professionals. Addressing the role that MIL-SPEC does and does not play in export classification and in applying the definition of "specially designed" would be very useful.

[5] Note: The non-underlined language was extracted from the Note to ITAR § 120.4.

- *Testing/Quality Assurance* - In many cases with basic building block electrical/electronic components, a buyer will order a standard catalog component but require that the component meet certain additional testing requirements, such as shock or thermal testing, or that a higher percentage of a batch be subject to quality assurance (QA) inspections. When the manufacturer has to make changes to the design to meet such requirements, the result is a new product that is almost certainly specially designed for that particular application. However, more typically, the same exact component is manufactured the exact same way as the catalog component and merely subject to the additional testing. The general understanding is that, absent a change to the manufacturing process that alters the component (*e.g.*, by changing the thickness or materials) in order to meet the requirement, such additional testing/QA would not alone change the classification of the component. However, it is unclear whether this is consistently the interpretation given by the Agencies.

- *Space Qualified* - Another major issue is whether, when, and how the term "space qualified" is implicated in applying the definition of "specially designed" in the classification analysis and commodity jurisdiction determination. The EAR has a definition in Part 772 of "space qualified" applicable to Cat. 3 and Cat. 6, where specific reference to "space qualified" is used as performance criteria for certain export classification control numbers ("ECCNs"). The ITAR Cat. XV currently covers generically all "specially designed" parts and components for enumerated spacecraft and launch vehicles, and generically certain radiation-hardened microelectronic circuits meeting specific performance criteria.[6] Further, different procuring entities or agencies have differing performance requirements for components that are intended for use in space applications. In the case of MIL-PRF standards, there is often a more stringent testing requirement for parts or components intended for use in space applications. The issue of a common definition of "space qualified" should be addressed as part of export control reform efforts generally. However, there should be some discussion with respect to the effect of Space Qualified in the discussion of this "specially designed" rulemaking.

D. WAYS TO CAPITALIZE ON THE EXPORT CONTROL REFORM PROCESS

There is really no way in a regulatory definition to address all the possible permutations and considerations that go into deciding whether a part or component is "specially designed," and therefore should be controlled under a particular ECCN or as ITAR versus EAR. However, we believe that during the export reform process there has been an extraordinary if not unique dialogue between the U.S. Government agencies involved in export controls, and between the Agencies and industry in working groups, conferences, etc. The Agencies should consider capitalizing on these discussions. In particular, the Agencies should consider publishing explanatory notes, or guidance documents explaining in more detail the rationale and discussions that underlie the decisions.

---

[6] This performance specification has no particular relevance or equivalent for capacitors and other passive electrical devices that are not affected by radiation in the same way as active micro electric circuits.

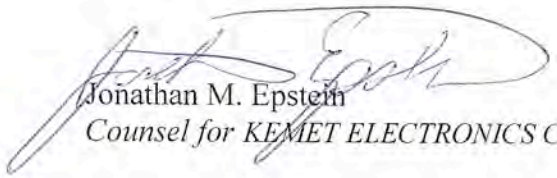
Official or unofficial commentary or guidance on laws is not uncommon. The U.S. Customs and Border Protection has a series of "Informed Compliance" publications that give detailed guidance on how to classify specific categories of goods, ranging from gas turbine engines to diodes.[7] The importer can also refer to the multi-volume Harmonized Tariff Code Explanatory Notes issued by the World Customs Organization.[8]

Having a body of published guidance documents would be an enormous aid to the industry in self-classification, and benefit the Agencies by reducing the volume of classification/commodity jurisdiction requests and informal requests for guidance. Further, it would give the Agencies a body of interpretive guidance on which to refer.

Thank you for your consideration of these comments. If you have any questions, please contact the undersigned at (202) 828-1870 or jonathan.epstein@hklaw.com.

Sincerely,

HOLLAND & KNIGHT LLP



Jonathan M. Epstein
Counsel for KEMET ELECTRONICS CORPORATION

#11428564_v1

[7] http://www.cbp.gov/xp/cgov/trade/legal/informed_compliance_pubs/
[8] https://help.cbp.gov/app/answers/detail/a_id/885/~/explanatory-notes-to-the-harmonized-tariff-schedule

Lowell Defense Trade, LLC
http://ldt.us.com

William J. Lowell
Managing Director

August 2, 2012

Via E-mail DDTCResponseTeam@state.gov

Candace M. J. Goforth, Director
Office of Defense Trade Controls Policy
Directorate of Defense Trade Controls
SA-1, 12th Floor
Bureau of Political Military Affairs
U.S. Department of State
Washington, DC 20522–0112.

Re: Specially Designed Definition

Dear Ms. Goforth:

Thank you for inviting public comments on the proposed definition of "specially designed" for the International Traffic in Arms Regulations. The proposed rule would be published concurrently with the Department of Commerce's proposed revision to the definition of "specially designed" in the Export Administration Regulations (EAR), a revision which dovetails with State's proposal.

My comments deal with the totality of the proposal, which has two main parts: (1) The term "specially designed" would replace "specifically designed" throughout the U.S. Munitions List, with particular application to military components and parts; and (2) the replacement terminology would be defined for all intents and purposes to mean "exclusive use."[1] The Commerce regulations would be amended to mirror this approach,

[1] While the current proposal (unlike the earlier State proposal) does not expressly use the phrase "exclusive use", it nevertheless is constructed to accomplish the same purpose using the terminology of the Missile Technology Control Regime at section 3, viz., "Specially designed" describes equipment, parts, components or "software" which, as a result of "development", have unique properties that distinguish them for certain predetermined purposes." The chief difference between the MTCR definition and the proposed rule is the substitution of the word "peculiar" for "unique." Whatever distinction may be made between the meaning of these two words is obliterated by the second part of the proposed definition wherein an "exclusive use" requirement is made abundantly clear even for those articles having properties "peculiarly responsible for achieving or exceeding the performance levels." Under the proposal such an article is not "specially designed" if it was or is being developed with a "reasonable expectation" of use relating to commodities on the Commerce Control List and those that are not on the CCL or USML, or "reasonable expectation" of use relating to commodities not enumerated on the CCL or

including with respect to defense articles removed from the Munitions List for transfer to the EAR regime for dual use goods and technology.

For the reasons set out in detail in this submission, the proposed definition for the EAR is plainly inconsistent with United States law as the First Circuit Court of Appeals determined in United States v. Lachman because it would permit "easy evasion" of the Export Administration Act (EAA) and defeat its central purposes. It is axiomatic that if the proposed definition is not legally available to implement the EAA, it cannot form the basis for a regulatory approach under the more stringent Arms Export Control Act.

Further, there is little, if any, evidence available to support various assertions (described below) the Department has made concerning the benefits said to accrue by adoption of the proposed definition. Even a cursory analysis of these assertions suggest opposite outcomes are more likely, -- outcomes that would harm enforcement of the Arms Export Control Act and the security and foreign policy interests of the United States.

(a) The Proposed Rule is Inconsistent with United States Law.

The proposal is plainly grounded both in its philosophy and its language formulations in arguments advanced by the defendants and thoroughly rejected by the First Circuit Court of Appeals in United States v. Lachman.[2] The Department, however,

---

the USML, or were developed with no reasonable expectation of use for a particular application. In any order, these add up to "exclusive use."

[2] Defendants, acting through Fiber Materials, Inc.'s United Kingdom subsidiary, contracted in 1985 with the Indian government's Defense Research and Development Laboratory ("DRDL") to supply a hot isostatic press (HIP) with an 18-inch diameter cavity, along with a control panel. However, they could not obtain a license to export such a large HIP under UK regulations, which (like US regulations) required a license to export HIPs with a cavity of five inches or larger. The larger HIP can produce densified material useful for ballistic missiles. So, in January 1987, the parties amended their contract to provide for the export, from the United States, of a smaller 4.9-inch HIP, just under the limit required for a license, and a control panel. On the same day, one of the defendants signed a letter to the Indian government stating that the control panel to be exported with the 4.9-inch HIP would have "added capacity . . . to provide for future expansion . . . to larger vessel size." In March 1988 defendants contracted with the Indian government to provide a larger HIP and then arranged to have the components of that HIP manufactured by third parties in Switzerland and England and shipped directly to India. Both plans were carried out. The control panel shipped to India in April 1988 with the 4.9-inch diameter HIP could be used with that HIP but was designed so that it could also control a HIP with a diameter larger than five inches. In particular, the control panel had "controllers" not just for the two "heating zones" contained in the 4.9-inch HIP but also for an additional three heating zones that would be employed for a much larger HIP, and it also had a switch that permitted the disabling of the three additional zones. In April 1991 after the components of the larger HIP had been delivered to India, defendants' engineers traveled to India, assembled the larger HIP and connected to the larger HIP the control panel that had been shipped with the 4.9-inch HIP. After warning the Indians of the impracticality of trying to operate both the larger HIP and the smaller HIP with the originally provided control panel, the defendants contracted with India to provide a smaller two-zone control panel for use with the smaller HIP. In July 1993, the defendants were indicted for

now apparently rejects (without explanation) the position of the United States prosecuted by both the Clinton and Bush 43 administrations, and adopts the position of the defendants. The very arguments State and Commerce now embrace were those rejected by the Lachman Court. An "about-face" of this magnitude and on such a foundational matter as the premise for which arms exports are controlled under law surely deserves at least a passing explanation. Yet, none has been forthcoming in the proposals published to date.

In Lachman various current and former officials serving in the Administration testified and/or filed amicus curiae briefs on behalf of the defendants who claimed an "exclusive use" meaning of the term "specially designed."[3] But, the Court found defendants' claims and those briefs to be meritless, ruling hat such a meaning was clearly not available under the Export Administration Act because it would permit "easy evasion of the regulation through the deliberate design of items that implicate U.S. national security concerns so that they have both permitted and prohibited uses":

> *Thus, statutory and regulatory concerns with national security cannot be achieved if the regulation is construed to allow the exportation of controls designed to be used with embargoed commodities so long as they had other potential uses. See Holloway, 526 U.S. at 9 (rejecting the defendant's construction because it "would exclude from the coverage of the statute most of the conduct that Congress obviously intended to prohibit").*
>
> *Given the depth of concern for national security in the EAA, it would hardly serve this statutory purpose to adopt a definition of "specially designed" that excludes any item designed for use with embargoed commodities but capable of use with commodities that were not embargoed. An item "specially designed" . . . can "make a significant contribution to the military potential" of another country and threaten "the national security of the United States,". . . .*[4]

In this context, only last August, President Obama again directed that the Commerce Department and all agencies continue to follow the dictates of the EAA. 76 FR 50661, 2011 WL 3570498 (Pres.). That directive incorporated and adopted Executive Order 13222 which stated: "Section 1. To the extent permitted by law, the provisions of

---

exporting the five-zone control panel without a license and for conspiring to do so. The government's position was that the control panel fell within the category of "components, accessories and controls" that had been "specially designed" for the larger HIP and that, while the larger HIP had been made outside the United States, the control panel was in fact intended for use with the larger HIP and therefore covered by the statute and the regulations. See United States v. Walter Lachman, Fiber Materials, Inc. & Materials International, Inc., U.S. Court of Appeals for the First Circuit. 521 F.3d 12; 2008 U.S. App. Lexis 6193. March 26, 2008 Decided.

[3] For example, see amicus brief on behalf of defendants submitted by Eric L. Hirschhorn for the members of the Industry Coalition on Technology Transfer (i.e., the Semiconductor Industry Association, Semiconductor Equipment and Materials International and American Association of Exporters and Importers).

[4] Lachman.

the Export Administration Act of 1979, as amended, and the provisions for administration of the Export Administration Act of 1979, as amended, shall be carried out under this order so as to continue in full force and effect and amend, as necessary, the export control system heretofore maintained by the Export Administration Regulations issued under the Export Administration Act of 1979, as amended."

The only thing that has changed since Lachman is that the Administration now embraces the position of the defendants in that case and rejects the position prosecuted by the administrations of President Clinton and President Bush (43). Most importantly, the law has not changed.

It is axiomatic that if an exclusive use definition is not even legally available under the EAA, it would not be appropriate to apply it in the implementing regulations for the Arms Export Control Act. Or, if the Department believes this is not the case, it would appear to have a very heavy burden in explaining why that is so.

(b) The proposed rule will not result in any of the purported benefits to enforcement or to international security asserted by the Department.

Common sense tells us the opposite of what the Department asserts is more likely to occur for multiple reasons described below. Common sense also tells us the Department's public affairs strategy in support of the export control reform agenda is now running far ahead of the facts. For example, among the claims which appear highly doubtful are that items "specially designed" for military application will:

- Be consistent with definitions used by multilateral regimes;
- Be easily understood by prosecutors and juries; and
- Have the same export restrictions to proscribed destinations, including China, as under ITAR, when transferred from the USML to the CCL…resulting in a tightening of U.S. arms embargoes.

(1) Definitions used by multilateral regimes.

In fact, there is no definition of "specially designed" in the Wassenaar Arrangement for Conventional Arms and Dual Use Goods and Technology, which maintains the international Munitions List and is the primary regime in this discussion. Only the Missile Technology Control Regime defines the term "specially designed" and does so in "exclusive use" terms.[5]

[5] The Australia Group, while not defining the term "specially designed" illustrates its meaning in a Statement of Understanding for Manufacturing Facilities & Equipment in non-exclusive use terms: "These controls do not apply to equipment which is specially designed for use in civil applications (for example food processing, pulp and paper processing, or water purification, etc) and is, by the nature of its design, inappropriate for use in storing, processing, producing or conducting and controlling the flow of chemical warfare agents or any of the AG-controlled precursor chemicals."

It was precisely because of concern about potential confusion with the MTCR terminology requiring "exclusive use" and variable use of the term in the EAR that the Department decided during the administrations of President Bush (41) to use the terminology currently found in the ITAR: "specifically designed, developed, configured, adapted, or modified for a military application." This decision was reviewed and endorsed by the administration of President Clinton before the revised ITAR was published in 1993 and continued thereafter under the administration of President Bush (43).

(2) Helping prosecutors and juries.

The Department and other administration officials describe the "specially designed" definition proposed for adoption as establishment of a "catch and release" regulatory scheme which will help prosecutors and juries. The moniker seems to fit well. The phrase, "catch and release" vividly describes the principal enforcement activity that will be taking place at federal courthouses and jails across the country as charges are dismissed against arms smugglers having "reasonable expectations" that differ from prosecutors (discussed more fully below), as prosecutors grow weary of attempting to try these cases, and as law enforcement agencies turn their attention to other cases where scarce investigative resources will not be wasted.

If the Lachman Court was justifiably concerned with how an "exclusive use" definition of "specially designed" would permit easy evasion of the regulations, it could not have foreseen how easy that evasion might be if regulations were constructed in such a way – as is now proposed -- that even exclusive use would be nullified if only there "was or is a reasonable expectation" of use with a product not on the US Munitions List or "was or is being developed" with no particular use in mind (whatever that means).

In other words, there does not have to be any actual non-military use. A mere expectation of non-military use (or no particular use at all) is enough to nullify Munitions List control – no matter how ephemeral or theoretical such use may be or at what point in time it may be realized, if ever.

The regulation's purported check on such evasion (contemporaneous marketing plans, contracts, etc.) is feeble, at best, and will prove to be more of an inducement to criminal conduct – or at least conduct formerly considered criminal -- than a deterrent.[6]

With respect to the role of juries and the judiciary generally, the Arms Export Control Act has long provided in § 2778(h) that the designation under subsection (a) of items as defense articles or defense services shall not be subject to judicial review. Why

[6] For example, a person intent on aiding a missile program of concern will welcome, not fear, a requirement for a contract specifying that the missile technology is being transferred for peaceful space exploration and not for use as a long range missile. In fact, this is already standard fare in illegal arms deals. Regulatory recognition means simply that the contract will serve not only as a ruse but as an inoculation against U.S. prosecution.

the Department would now appear to be inviting such review through this rule is not clear.

Contrary to the theory advanced by the Department that federal courts struggle with the absence of a "positive" Munitions List (an argument which is integral to your proposal for replacing "specifically designed" with "specially designed" and restricting controls to exclusive use), nothing could be farther from the truth. This has been made clear across the United States in one federal circuit after another and, once again, in recent weeks by the Ninth Circuit Court of Appeals in United States v. Chi Mak:

> *Mak's argument is unpersuasive because he assumes that technical data is not included on the USML until it is certified. This is incorrect. The USML consists of a wide array of categories of defense articles and technology that are not certified in subcategories, nor need they be. The USML does not list particular documents because so many qualifying documents exist. Indeed, it would likely be impossible for the USML to be continuously updated with every new technology and every permutation of existing technology. The Government's certification in this case served only to confirm that the documents were covered by the USML at the time of the offense. The QED and Solid State documents were clearly covered by the USML at the time of Mak's arrest and conviction because they directly related to "[w]arships, amphibious warfare vessels, landing craft, mine warfare vessels, patrol vessels and any vessels specifically designed or modified for military purposes." 22 C.F.R. § 121.1(VI)(a). Accordingly, because the documents fell within a category included by the USML at the time of the offense, his prosecution and conviction does not violate the Ex Post Facto Clause.*[7]

The understanding reflected by the Mak Court of the impossibility of continuously updating the Munitions List is the understanding which has guided the development of munitions control lists in the United States and internationally since the end of World War I. Fundamentally, the Department's approach appears not to reflect any special insights which have eluded every other administration for the past 90 years, but merely an assertion that a "positive list" is needed as an end in itself, in part to rationalize the sweeping decontrol of the US Munitions List now planned. In this context, assertions about enhancing prosecutions and enforcement of the law seem to serve the role of simple eyewash.

(3) Same export restrictions at Commerce as under State to proscribed destinations, including China, resulting in a tightening of U.S. arms embargoes.

Surely, this is the queen bee of erroneous statements in support of export control reform. As a general matter there is very little U.S. technology on the CCL that is not routinely transferred to China and/or produced in China. There simply is little, if any,

---

[7] United States of America, Plaintiff-Appellee, v. Chi Mak, aka Seal A; Jack Mak; Taichi Mak; Daichi Mak; Dazhi Mai, Defendant-Appellant. No. 08-50148. United States Court of Appeals for the Ninth Circuit. April 12, 2012, Argued and Submitted, Pasadena, California. June 21, 2012, Filed.

history to support the proposition that items on the CCL are safeguarded from export to China or that, once exported, the United States has any credible means to restrict such technology transfer to the civilian economy (and walled-off from the military-industrial establishment).[8]

While the details of all the defense articles the Department proposes to remove from the USML have yet to be spelled-out, it is reasonably clear that they will fall into one or another of two categories:

- Minor parts and components for military platforms and weapons systems, which will not be covered by the CCL, but instead will be re-designated as EAR 99 merchandise (i.e., complete decontrol), whereupon they will be eligible for export and/or re-export to China and numerous other ITAR proscribed countries, as well as for production in China and other proscribed countries without U.S. Government approval or even knowledge; and

- Other articles and systems which will be placed on the CCL in a new ECCN, where they will be subject to EAR rules, which do not include a statutory ban on exports of controlled items to China, but do include rules for normal commercial trade (e.g., *de minimis*) which are impermissible for trade in armaments.

Regarding the first category, though minor parts and components to be completely decontrolled have been deemed (summarily) by the Department to be "militarily insignificant" such that they will no longer warrant control on the US Munitions List, many such parts – which have near zero use in normal commercial trade – may nonetheless prove problematic when (as is often the case) –

1. They figure prominently in the operational readiness of foreign forces deployed in certain regions of the world which have become subject to a U.S. or a UNSC arms embargo. In the event, the needed parts will flow freely;
2. The production of such parts for DOD systems, including critical parts, moves offshore, including to China and other countries, resulting in the loss of U.S. jobs and productive capability; and

[8] According to Commerce's annual report for fiscal year 2011, less than one percent of US exports to controlled destinations require a license. China accounts for 86 percent of all exports to controlled destinations. http://www.bis.doc.gov/news/2012/bis_annual_report_2011.pdf. Similarly, an extensive study by GAO in 2006 found that sensitive dual-use goods and technologies on the Commerce Control List (CCL) only rarely require a license before being exported: 98.5% of such goods and technology totaling more than $69 billion were exported in 2005 without any U.S. Government review or license. This includes 98% of all "controlled" dual-use goods and technologies that were exported to China without a license in 2005 (some $6.2 billion) which was up from 93% in 2004. See "Analysis of Data for Exports Regulated by the Department of Commerce" available at www.gao.gov

3. The number of foreign manufactured counterfeit parts introduced into DOD supply chains grows by leaps and bounds, raising security of supply issues, as well as foreign intelligence concerns.

With respect to the second category, CCL control of former Munitions Lists items, far from producing the same results as U.S. munitions control with China, has been touted by Administration officials as the answer to European policies to design-out U.S. Munitions List content. That is because sales of European satellites to China with U.S. space technology, as well as European sales to Venezuela of maritime patrol aircraft with U.S. content (the causes célèbre for Europe's design-out policies) will now go forward under *de minmi*s rules (currently proposed at 10% content for former USML items).

In the final analysis, exports to China which previous administrations were not prepared to approve on their merits will now proceed without any requirement for U.S. Government approval through a sleight of hand involving changes in control list jurisdiction and the application of *de minimis*. This does not seem the best model for the development of sound national security policy.

If the Department believes such sales do not present national security or foreign policy concerns and/or can meet the "national interest" determinations often required by statute, it would certainly seem to be less expensive and more efficient to approve them on their merits. Of course, such a course of action would require explanation and justification to Congress on a case-by-case basis under applicable law, -- a further requirement that is eliminated under the proposed approach.

(c) The Exclusion of Control for Post-Development Defense Articles Under the Specially Designed Rubric is Misguided and Dangerous

The proposed rule would bar control of any defense article that has the same form, fit, and performance capabilities as a part, component, accessory, or attachment used in or with a commodity that: '(i) Is or was in production (*i.e.*, not in development); and (ii) Is not enumerated on the U.S. Munitions List."

The average layperson does not grasp that, in the Department's ITAR lexicon, the airframe of a military aircraft is merely a major component (not an end item). The airframes for the A-10, F-16, SR-17, AH-64 and numerous other military aircraft, as well as current generation UAVs (MQ-1 Predator, RQ-4 Global Hawk, MQ-9 Reaper, etc.) are major components (not end items) no longer in development, not enumerated on the new U.S. Munitions List and, it appears, presumptively removed from the Munitions List for transfer to Commerce when the new rules come into effect. Only when these aircraft are fully operational as end items will they be controlled in the future on the Munitions List. Moreover, once these airframes are under Commerce control they will be subject to the "specially designed" tests at Commerce and may evade control altogether.

In order to fully understand the scale of munitions decontrol now planned by the Department, it is necessary to appreciate that relatively few finished military products are licensed each year under the ITAR; rather, it is primarily a regime that regulates the

international supply and production of components and parts, as depicted in Table 1, below, providing a snapshot of military aircraft regulated under ITAR in FY 2006.

Table 1 – Select U.S. Munitions Licenses for Military Aircraft v. Military Aircraft Parts and Components in Fiscal Year 2006*

Recipient	Complete Aircraft	Military Aircraft Parts	Percent Military Aircraft Parts
Saudi Arabia	0	22,756,279	100 percent
Singapore	120,450,000**	123,441,126	51 percent
Slovakia	0	7,683	100 percent
Slovenia	0	15,000	100 percent
South Africa	0	80,594,761	100 percent
South Korea	0	299,607,998	100 percent
Spain	0	63,127,438	100 percent
Sri Lanka	0	794,222	100 percent
Sweden	0	52,529,864	100 percent
Switzerland	0	13,092,036	100 percent
Total :	120,450,000	655,966,407	84 percent

*The last fiscal year in which reports to Congress under sec. 655 of Foreign Assistance Act distinguish between aircraft and component parts.
**The relevant entry designates the aircraft as "unclassifiable" and reflects no quantity, suggesting the entry may be incorrect and actually refer to spare parts.

For those components remaining on the USML, such as in the new Category VIII (i.e., essentially limited to specially designed components only for the B-1B, B-2, F-15SE, F/A-18E, F and G, F-22, F-35 and F-117) they too will become subject to the "specially designed" exclusive use and reasonable expectations tests and, should they not meet the new criteria, would also transfer by default to Commerce.

Similarly, Virginia class SSN-774 fast attack nuclear submarines are no longer in development. The future U.S. Munitions List will control Virginia class submarines as end items (when Naval nuclear propulsion plant is installed) but will only control "those parts, components, accessories, and attachments that are specifically designed for a defense article controlled in the relevant category. All other parts, components, accessories, and attachments will become subject to the new 600 series controls in Category 8 of the CCL to be published separately by the Department of Commerce. Because the hull and superstructure for a Virginia-class submarine are not enumerated, they will only be eligible for control on the future U.S. Munitions List if they can meet the specially designed "exclusive use" and "reasonable expectations" tests. A reasonable expectation of another non-military (e.g., scientific research) use may trigger control under the 600 series of the CCL, whereupon such components would be further subject to an additional "exclusive use" and "reasonable expectations" use which, in turn, could trigger complete decontrol and designation as EAR 99 merchandise. In fact, there is little, if any, requirement to make components and parts for Virginia class submarines (or Los Angeles or other classes of US submarines) available to U.S. allies since they do not have these systems. What, then, is the rationale for orchestrating worldwide decontrol of major components and parts for fast attack submarines (or a dizzying array of other weapons systems affected by these proposals)?

In this respect, the proposed rule seems to imply that the Department is indifferent to the offshore production and use by other countries – in a manner that will completely escape U.S. Government review and oversight -- of a staggering assortment of major weapons systems currently in the U.S. arsenal (or recently removed) because they have moved beyond the "development" stage, a factor which inexplicably triggers their removal, unless they are individually identified on the revised Munitions List. Few will be.

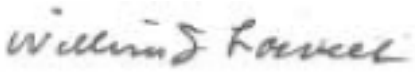
If true, this seems to reflect a most misguided view -- one that is certainly contrary to the Export Administration Act and the Arms Export Control Act -- that it is perfectly reasonable to transfer US defense articles and defense technology no longer in development (and even those still in production) in an indiscriminate manner, -- without regard to whether they may make a significant contribution to the military potential of individual countries or combinations of countries, or how they may adversely affect the security and foreign policy interests of the United States. This is exceptionally risky.

CONCLUSION.

The Department has already set out a plan to remove, under one guise or another, the vast majority of defense articles and weapons systems historically controlled on the U.S. Munitions List on an annual basis. Some of the articles removed will be decontrolled; others will be subject to reduced control at Commerce.

Having now ventured into these unchartered waters, the Department, unless completely blinded by its own rhetoric, must surely recognize privately it cannot foresee the vast implications for the future security and foreign policy interests of the United States which these moves portend. This recognition should now induce a more cautious approach which places the protection of those systems and technology remaining on the U.S. Munitions List at the forefront of U.S. interests. Adoption of the "specially designed" definition now proposed is fundamentally incompatible with safeguarding those interests.

Respectfully submitted,



William J. Lowell

Lauren Airey
Director, Trade Facilitation Policy

August 3, 2012

Ms. Candace M. J. Goforth
Acting Director, Office of Defense Trade Controls Policy
Department of State
Washington, DC 20520

Re: Amendment to the International Traffic in Arms Regulations, Definition of "Specially Designed" (RIN1400-AD22)

Via email: DDTCResponseTeam@state.gov

Dear Ms. Goforth:

The National Association of Manufacturers (NAM) welcomes the opportunity to comment on amendments to the International Traffic in Arms Regulations (ITAR) and the proposed definition of "specially designed."

The NAM is the nation's largest industrial trade association, representing small and large manufacturers in every industrial sector and in all 50 states. Our members play a critical role in protecting the security of the United States. Some are directly engaged in providing the technology and equipment that keep the U.S. military the best in the world. Others play a key support role, developing the advanced industrial technology, machinery and information systems necessary for our manufacturing, high tech and services industries. The NAM has long been a staunch advocate of rational export control policies that address evolving national security concerns and modern business practices.

We commend the State Department for undertaking the development of a clear definition for the key phrase "specially designed." We appreciate the proposed structure to determine if an article is "specially designed" on the U.S. Munitions List (USML) if it is not separately identified by description or technical parameters on the USML. Additionally, harmonizing the ITAR definition with the Commerce Department's proposed revision to the definition in the Export Administration Regulations (EAR) will help exporters interpret U.S. export controls consistently.

With this proposed definition, commodity classification self-determination is facilitated through a decision tree that allows for a broad catch and then a more specific release. While this definition works well in theory, manufacturers' implementation will likely be complicated. Specifically, the proposed definition will require a manufacturer to determine if the item has "properties that were peculiarly responsible for achieving or exceeding" performance levels; was an accessory or attachment that will "enhance the usefulness and effectiveness"; is a "single unassembled part" used in "multiple types of commodities"; "has the same form, fit, and performance capabilities" of an item that "is or was in production"; and "was or is being used with a reasonable expectation of use in or with defense articles."

This extensive analytical requirement has the potential to result in various exporters classifying parts and components differently. It also has the potential to significantly increase the

number of commodity jurisdiction requests. Therefore, we encourage the State Department to consider adding clarifying language to ensure the proposed definition for "specially designed" does not inadvertently undermine the potential benefits of a positive USML and over-burden the U.S. government with requests for clarification to avoid compliance ambiguity. We recommend the Department publish or post publically, on an ongoing basis, additional examples regarding parts and components that meet or do not meet the various standards within the definition for "specially designed."

We recommend that the language and definitions regarding "development" be correlated to the Department of Defense acquisition milestones, as it relates to the technology development phase, to further harmonize terminology commonly understood by defense manufacturers and exporters.

Additionally, the NAM submits the following more detailed comments and recommendations:

- The proposed definition uses the term "commodity" to mean any article, material or supply, except technology/technical data or software. The Commerce Department proposed definition uses the term "item" in its equivalent paragraph (a)(1). The term should also apply to technology/technical data and software as well as hardware, in parallel to the Commerce Department's proposed definition.

- Proposed 120.41(b)(3) may be unduly restrictive in using form, fit and function to determine whether to release an item from control. For a part, the salient criteria for control should be the form and fit. For a component, the salient criteria should be solely its function. Accessories and attachments should be completely removed, as they are outside the article itself. Additionally, the proposal could result in capturing items that are insignificant or have performance characteristics that are equivalent to items that are not controlled on the ITAR. The Department should consider language that would allow a part or component to fall within the (b)(3) release if differences are limited to dimensional variations.

- Proposed 120.41(b)(3) should also include a new sub-item (iii) to allow for commodities that have been formally determined by DDTC as Commerce Control List (CCL) items under the EAR in a commodity jurisdiction (CJ), to avoid reverting any item back to ITAR controls that should not be. Additionally, paragraph (b)(3)(iii) could also require CJ documentation recordkeeping as proposed in (b)(4)-(5).

- The Commerce Department's proposed specially designed definition includes a Note to paragraph (a)(1) (77 Fed. Reg. 36,419) that illustrates the intended meaning of "peculiarly responsible" in (a)(1). We recommend expanding the proposed Note to paragraph 120.41(a)(1) to add parallel language.

- It seems unclear how tooling, test and support equipment are intended to be covered by the definition. The Department should clarify whether it intends tooling, test and support equipment to be caught in any of the "catch all" paragraphs. We recommend that tooling, test and support equipment should not be enumerated or otherwise captured by the "specially designed" definition; such items are currently regulated if they reveal controlled data, and the positive USML should follow that precedent.

- The Note to paragraph (b) defines the "catch all" paragraphs. The phrases used to define the "catch all" were not utilized in the previously proposed USML categories (e.g., proposed Category XIX). As the Department moves toward finalizing the USML categories, any paragraphs intended to be "catch alls" should match the language in this definition.

- In Note 1 and Note 2 to paragraph (b)(3), the terms "production" and "development" are both used throughout the ITAR and are currently not defined. The provided definitions in Note 1 and Note 2 apply only to the definition of "specially designed." We recommend applying these definitions wherever those terms are used in the ITAR. Note 1 to paragraph (b)(3) should be clarified by striking the reference to "serial production." That term is no longer utilized expressly in (b)(3) and could complicate interpretations of "production," the term that is utilized.

- In Note 3 to paragraph (b)(3), the difference between "feature enhancements" allowing a commodity to remain in production versus a "change [to] the basic performance or capability" placing a commodity back into development seems unclear. We urge the Department to clarify the differences and provide a definition or examples.

We encourage the Department, along with its partner agencies in the U.S. government, to actively reach out to exporters and foreign customers to educate and train them on USML revisions. This outreach will be particularly important for small and medium manufacturers. We recommend the Administration publish or post publically, on an ongoing basis, additional examples regarding parts and components that meet or do not meet the various standards within the definition for "specially designed."

The NAM appreciates this opportunity to provide comments on the proposed rule regarding a definition for "specially designed." Please feel free to contact us if you have any questions about these comments.

Thank you,

Lauren Airey

NORTHROP GRUMMAN

Northrop Grumman Corporation
Export / Import Shared Services
2980 Fairview Park Drive
Falls Church, VA

August 3, 2012

U.S. Department of State
Bureau of Political Military Affairs
Department of Defense Trade Controls Policy
2401 E Street, N.W., SA-1
Washington, D.C. 20522

ATTN: Ms. Candace Goforth
Director, DTC Policy

SUBJECT: RIN1400-AD22 Amendment to the International Traffic in Arms Regulations
Definition of "Specially Designed"

Dear Ms. Goforth:

Northrop Grumman agrees with the objective of the proposed rule referenced above, to clarify the term "specially designed" and to develop a consistent standard for application of term for articles covered by the United States Munitions List (USML) or the Commerce Control List (CCL).

We appreciate the overall structural approach (decision tree methodology) in terms of our ability to implement the definition in practice. In a few test analyses conducted at our businesses, using proposed USML Category VIII "catch all" category for parts and components and the definition of "specially designed," those individuals involved in self determination of jurisdiction and export classification were able to understand and apply the methodology. We were unable to conduct this exercise over multiple categories, however, as many of our product/technology sets are in Categories XI and XII, and the proposed rules have not been issued.

We do, however, have a concern that issuance of the proposed §120.41 definition of Specially Designed, without addressing an update of the definition of §120.3 "Policy on Designating and Determining Defense Articles and Services" would lead to confusion in practice. For example, even experienced personnel are not certain if the term "specifically designed" used throughout §120.3 equates to the definition of Specially Designed in 120.41. If both terms will remain, we recommend that a definition for "specifically designed" be included in the regulations, and a note be added to clarify the relationship between "specifically designed" in §120.3 and "specially designed" in §120.41.

We also recommend that the language and definitions regarding "development" be correlated to the Department of Defense (DoD) acquisition milestones in terms of technology development phases. This will improve the clarity for defense contractors already familiar with the DoD terminology.

In addition, we have the following specific comments on the proposed definition:

1) The proposed definition uses the term "commodity" and applies only to articles, material, or supply. The Department of Commerce proposed rule on the same topic uses the term "item" in paragraph (a)(1). We recommend that you use the term "defense article" or "article," and the definition should also apply to technology/technical data and software not strictly to tangible articles.

2) The proposed language in §120.41(b)(2) may be too restrictive to meet the Administration's enunciated goal of removing low level items from the USML. There are many simple components, "of a type commonly used in multiple types of commodities." The language limiting the "release" to single, unassembled parts will result in continued ITAR licensing of these minor components, as they will not meet the requirements for release in (b)(2). We recommend that additional language be added to encompass "small assemblies and components of a type commonly used in multiple types of commodities" in §120.41(b)(2). These small assemblies and components would include those which are not "peculiarly responsible" for the military functionality/features of the higher level assembly for any overall end item into which they are incorporated.

3) Proposed paragraph (b)(3) may also be unduly restrictive. We appreciate that the Department cannot rely on function alone to "release" an article from the USML, and consider form/fit a valid criteria, but we believe that requiring an identical form/fit for "release" will result in control of items the Department itself uses as examples to illustrate insignificant differences in those items used in a military versus commercial application. We recommend the Department consider language that releases items under (b)(3) that are identical in function, with only dimensional variations in form/fit.

4) We also recommend that the term "serial production" in the Note 1 to paragraph (b)(3) be revised to "production," as it is inconsistent with "production" as used within the paragraph itself.

5) The Department of Commerce's proposed specially designed definition includes a Note to paragraph (a)(1) that clarifies the meaning of "peculiarly responsible". We recommend the Department add analogous language in the ITAR.

6) We recommend prior to final rule publication of any USML category, any paragraph intended to be a catch-all should be synchronized and reference to §120.41 to determine if the article is subject to the ITAR.

7) Both State and Commerce Department implementing guidance should contain decision tree diagrams, as it may be unclear, for example, if an article "caught" as specially designed in sub-paragraph (a) of §120.41 and "released" by one or more of the sub-paragraphs in (b), is then determined to be subject to the Commerce Department Commerce Munitions List (CML). We request clarification on the order of review for USML jurisdiction determination using existing criteria combined with the §120.41 definition, and believe the decision trees will enable exporters to implement processes that mirror the Department's intent. We will be providing the same input to the Commerce Department on their proposed rule for the definition of specially designed

If you have any questions or desire further discussion, please contact me at 703-280-4056 or beth.mersch@ngc.com to engage the appropriate individuals.

Sincerely,

Mary Elizabeth (Beth) Mersch

Mary Elizabeth (Beth) Mersch
Director, Export Operations

August 3, 2012

To: publiccomments@bis.doc.gov
ddtcresponseteam@state.gov

From: Alan J. Ramsbotham, Jr. ramsboth@oei-tech.com 540-775-2033

Subject: "Specially designed"

References: (a) Specially Designed Definition - ITAR RIN 1400-AD22
(b) Specially Designed Definition - EAR RIN 0694-AF66

I. Background on the Commenter:

My training was in electrical engineering, where I have a master's degree. The first 17 years of my professional life I was employed by the Navy. My work for the Navy as a laboratory researcher, branch head, and acquisition manager afforded me direct experience in the development of some of the most significant military capabilities extant: nuclear weapon fuzing and electronic warfare systems. This work was predominately done prior to the sweeping changes in acquisition effected in the mid 1970's.[1] Thus, I had the benefit of being directly involved in developments from conception through design-for-production, limited rate production, and testing.

Changes in acquisition policies dramatically eroded the roles and responsibilities of the DoD laboratories and technical program and project managers. Since 1979—first as civil servant for the Naval Materiel Command, and subsequently as President of Orion Enterprises, Inc.—I have worked continuously in areas of technology security and export control. As a DoD contractor/subcontractor I served on, and as chair of a number of the Technology Working Groups (TWG) responsible for formulating the Militarily Critical Technologies List. In that capacity, I was also directly involved in the development of the initial product and technology annex for the Missile Technology Control Regime. I have served as a member of the US team at numerous Expert Group meetings of the Wassenaar Arrangement, and its predecessor, the COCom.

I have attended and participated in Department of Commerce Technical Advisory Committees as a DoD observer for more than two decades. I recently accepted an invitation to serve on the Information Systems Technical Advisory Committee (ISTAC) as an industry consultant. All told, I have over 45 years of experience directly pertinent to the issues being addressed. These experiences form the basis for my comments, which I hope be accepted and understood in that context.

[1] These changes were documented primarily in OMB Circular A-76, Performance of Commercial Activities, and OMB Circular A-109 Major System Acquisitions. I believe the latter has since been rescinded because its provisions largely duplicate those of later revisions to Circular A-11, which provides guidance for preparation, submission and execution of the budget.

II. General Discussion:

1. Those developing the proposed language have made Herculean efforts to attack the issues constructively. Critical comments notwithstanding, significant progress in understanding and attacking the scope of the task has been made. The problems are many and complex, and are not amenable to simple solutions. The problem is complicated by the need to conform to the existing federal legislation and to the terms and conditions of international agreements. The efforts of the government are sincerely appreciated, as is the opportunity to offer comments.

2. We are attempting to reform export controls based on a world view and model of technology and how it is used to develop and produce militarily significant goods and services that are--for the vast majority of products and service on the current lists--categorically outdated. The changes are multi-faceted and pervasive. With respect to "specially designed," the most important of these can be summarized simply: Until a certain point in time (precisely when is not critical to the discussion) the requirements of vast majority of components and assemblies used by the military exceeded what the civil sector could provide from stock. They had to be specially-designed and produced. The US also dominated in production of hardware—including as a critical subset, high-strength to weight mechanical structures whose design and manufacture required special know-how and technology. Today, Commercial-off-the-shelf technology readily meets or exceeds the basic requirements for the vast majority of components and assemblies required by the military.

3. Two specific examples:

Digital Electronics. The Very High Speed Integrated Circuits project was launched in 1980. Microprocessors had just emerged as commodity products. Prior to that systems employed large numbers of discrete components. Military combat systems are exposed to extreme environments. In the case of electronics, those of us who designed them learned early on that, in such environments, every part and every connection was a failure in waiting. The design challenge was to achieve a mean time between failure (MTBF) that exceeded the expected length of the mission. As advances in integrated circuit technology reduced the number of external interconnections MTBFs at the systems level went from hours, to days, and ultimately to months or years. At the same time, functional capabilities increased and costs plummeted dramatically.

Mechanics and Structures. In the case of mechanical structures, increases in fuel cost drove manufacturers to adopt lighter materials. During the same time frame, the emphasis on safety increased, driving the manufacturers to better structural performance. As economies of scale kicked in, technologies—like carbon-fiber reinforced composites, once used almost exclusively in high performance military aircraft—became commonplace in production world-wide.

4. These global environmental changes do not, per se, eliminate the need for specially designed systems and components for military use. Nor do they change, fundamentally, the design process and what it means to say that something is "specially-designed." What has changed is

the administrative landscape—the scope and number of goods and technologies for which export control can be effective. This has dramatically affected the utility of “specially designed” as a discriminating term.

5. Because of the separate legislative authorities, extensive cross-referencing between the ITAR and EAR draft language has been necessary. Further, as the language is currently formulated, whether items are "specially-designed" and whether they fall under the CCL or the ITAR is a function of if (and where) they are "enumerated" in the ITAR or the EAR--either by specification or as "specially-designed."

It is not clear that the legal effects of the proposed definition of “specially designed” be effectively assessed without consideration of the complex interactions among the different parts. This includes the details of the specific items on the USML and CCL.

The de facto use of USML Category VII (Ground Vehicles) as the initial model and baseline for the process is unfortunate. Ground vehicles arguably involve the simplest and most mature technologies. It is not at clear how well the final construct will work even for this simple case. It is recommended that the practical effect of applying the definition to other types of products and technologies with more complex and varied applications be evaluated prior to promulgation of a final rule. Specifically, the effect needs to be considered for families of commodities whose performance commonly comprises both controlled and uncontrolled items.

III. Comments on proposed definitions for “Specially Designed.”

The discussion and analysis of the proposed definition and the rationale for the “catch and release” approach represents a significant progress has been made in clarifying the critical distinction between products that are specially designed and those that are simply capable of being used in a given application.

The following notes suggest a line of thought to further the initial goals of eliminating “specially-designed” and simplify the list. While the problem is approached from a different perspective, it does not, per se, contradict or reduce the value of the work done to date.

1. Because of the changes discussed in II.3 and 4 above, intent and end application have become ineffective as a basis of export control determinations. As a practical matter, from a design development and production engineering standpoint, the form, fit, and functional performance specifications are what determines the suitability of an item for any particular application or end use.

2. The unique significance of component is determined (whether in military or dual-use application) not by the fact of its use in a given application, but by the extent to which the application “requires” the specific form, fit, and function of the design in question.

3. In simple terms, if the only requirement for a given component is in military application, that

product is uniquely military. If the item has a legitimate market for other civil uses, it is, by definition, dual-use, regardless of the original intent of the designer.

4. The distinction is not as difficult as it appears. In the case of military systems, if a part requires distinctive features and characteristics not available from commercial stock, it will be specifically documented.

5. The demarcation between the two is not a hard line. Nor is it immutable. As an example, VHSIC digital signal processing products were originally listed on the ITAR, and subsequently migrated to the EAR as commercial markets and general-purpose processors capable of meeting the same essential form, fit and function requirement developed.

6. This line of thought suggests that, for national security purposes, priority should be placed on those items that are "required" to implement significant military functions—in the sense that the item MUST meet defined form, fit, and function specs for the system to work. The military significance is independent of whether the product has any other uses.

7. "Required for" while a necessary condition for control, is not sufficient. The underlying presumption in the enabling legislation for the EAR is that export controls will be imposed for national security purposes only if they can be practically effective.

8. Export controls are practically effective under two broad conditions. The first is when the requirement for the item is uniquely military. In this case, the main use of USML restrictions has been to prevent an adversary from maintaining critical capabilities in a timely manner. The second is when a "required" dual-use item is not available from unrestricted sources in sufficient quantity and quality to support effective military application.

9. The vast majority of dual-use items will fail the definition of being uniquely "required." Of those that meet that definition, a significant number will be commodities, for which export controls will be ineffective.

IV. Suggestions/Recommendations:

If, as has been suggested in the Federal Register, multinational arrangements preclude the elimination of "specially designed," its use should be restricted to the context of specially designed to achieve defined specifications required for the development, production, or effective employment of significant military capabilities.

Consideration should be given to the use of an alternative qualifier, "required for" for uniquely military items. This will facilitate the tailoring of language that effects the intent of the proposed reform, unhindered by association with past problems with "specially designed." All other cases should be addressed with reference to technical specifications in the list.

V. Specific issues with respect to the language of the definition, as related to a number of stated objectives.

At this point, the definitions of "specially designed" proposed in references (a) and (b) appear to fall short of the stated objectives in a number of key respects as outlined in the detailed comments below. If the basic approach to the definition of "specially-designed" is retained, it is recommended that the following concerns be considered, and addressed as appropriate. Again, I appreciate the complexity of the task. A comprehensive solution to all issues may be mutually exclusive and compromises be will be required.

Objective 1: The proposed approach does not preclude multiple or overlapping controls of similar items within and across the two control lists.

Conclusive assessment of this requires consideration of the specific language of the two lists. However, a general comment is that generation of explicit positive lists will inherently expand the number of items that the exporter will have to consider in determining whether an item is "specially designed."

Objective 2: Be easily understood and applied by exporters, prosecutors, juries, and the U.S. Government, *e.g.*, by using objective, knowable, and clear requirements that do not rely upon a need to investigate and divine the intentions of the original designer of a part or the predominant market applications for such items.

The "catch and release" approach, in some respects, does the best job to date of getting at the philosophical essence of what is needed. The relatively long list of qualifications for being not "specially-designed," being "or"ed, appears to offer considerable relief. However, the implementation is fraught with peril for the exporter, who must ensure that their application of the rules is correct and defensible in a court of law.

Specifically, to invoke and defend (b)(3) of the release criteria, the exporter must exhaustively review both the USML and the CCL and determine that the form, fit, and function of whatever they are exporting does not correspond to anything on either list. Having tried to do it for a single simple case, I have concluded that the exporters' burdens will be multiplied by an order of magnitude.

In terms of defense in a court of law, (b)(4) is even more problematic. To invoke it an exporter must be prepared, no only to testify to what the original developer's market expectations were at the time of development, but also make the case that those expectations were reasonable at the time. The problem: the exporter is not necessarily the manufacturer, and the manufacturer may not be the original developer, who may or may not still be in business.

Objective 3: Be consistent with definitions used by the multilateral export control regimes**.**

The MTCR definition includes a requirement for that they have unique properties that suit them

for predetermined purposes. The concept of uniqueness (see Para III for related discussion) is a crucial distinction that must be addressed to meet this objective.

Objective 4: Not include any item specifically enumerated on either the USML or the CCL and, in order to avoid a definitional loop, do not use "specially designed" as a control criterion.

The second part of this objective does not appear to be attainable if the terms "specially-designed" continue to appear in the list items specifying controlled products and technologies.

Objective 5: Be capable of excluding from control simple or multi-use parts such as springs, bolts, and rivets, and other types of items the U.S. Government determines do not warrant significant export controls.

The current language overreaches with respect to this objective and poses significant national security risks. Specifically the use of the construct "of a type commonly used in multiple types of commodities" is ambiguous. The term "type," by definition indicates a class of things having properties in common. It does not require that all properties be common. Thus, as a hypothetical example, a titanium bolt designed to meet requirements unique to a deep-ocean submersible might still be construed to belong to a class of threaded fasteners, (i.e., bolts, comprising an identifiable type) used to assemble a type of commodity not enumerated on any list (e.g., swing sets.)

Objective 6. Apply to both descriptions of end items that are "specially designed" to have particular characteristics and to parts and components that were "specially designed" for particular end items.

Objective 7. Apply to materials and software because they are "specially designed" to have a particular characteristic or for a particular type of end item.

These two objectives are cannot be harmonized with Objective 2 with the present language. As noted in the discussion under III., above, whether a product was designed to have particular characteristics can be discerned from its technical specifications. The extent to which component subsystems, assemblies, and parts are designed for a particular type of end-item is a function of the intent of the designer.

Objective 8. Not increase the current control level to "600 series" control or other higher end controls of items (*i.e.*, not move items currently subject to a lower control status to a higher level control status) particularly current EAR99 items, which are now controlled at lower levels

9. Not, merely as a result of the definition, cause historically EAR-controlled items to become ITAR controlled

The extent to which the definition of "specially designed" achieves these last two objectives will be a function of the specific language of the revised USML "positive list" and the corresponding

"600 series items." Again, discussion of the individual lists is outside the scope of these comments. However, considering the proposed rules for USML Categories to date indicates substantial additional analysis and work on the proposed language of the controls will be required to meet these objectives.

Rolls-Royce North America Holdings Inc.
Rolls-Royce North America Inc.
450 South Meridian Street, MC-N1-08
Indianapolis, IN 46225-1103 USA

August 3, 2012

Director Candace M. J. Goforth
Office of Defense Trade Controls Policy
Department of State
12th Floor, SA-1
2401 E. Street NW
Washington DC 20037

Submittal via Regulations.gov Portal

Reference: RIN 1400-AD22 [Public Notice 7921]
Proposed Rule

Subject: Amendment to International Traffic in Arms Regulations: Definition for "Specially Designed"

Dear Ms. Goforth,

Rolls-Royce North America Holdings Inc. (Rolls-Royce) is pleased to respond to the June 19, 2012 Federal Register Notice requesting comments on the proposed Amendment to the International Traffic in Arms Regulations: Definition for "Specially Designed".

Rolls-Royce appreciates the difficulty and the time involved in working through this definition. We realize this is no simple task. Rolls-Royce has reviewed the proposed changes, and has the following observations.

Rolls-Royce is constantly diversifying its supply base in order to retain U.S. small businesses, to lower costs and to increase quality. Unfortunately, the proposed definition potentially could create a significant compliance burden as businesses struggle through the proposal's "catch and release" analysis. The proposed language is subject to numerous interpretations within the supply chain, leaving companies like Rolls-Royce liable for increased compliance and potentially accountable for other companies' products and technology. Rolls-Royce encourages additional clarification to ensure the benefits envisioned with the new definition are realized. The misclassification of products and technology would have grave effects on the supply chain and the ability to deliver to the customer.

The updated definition as captured in §120.41 will also undoubtedly affect §120.3 (Policy on Designating and Determining Defense Articles and Services). Rolls-Royce recommends deleting §120.3 in its entirety or revising to ensure compatibility with the new definition. The full intent of having a "positive" list hinges on these two definitions and they must be considered in tandem in order to have the best possible process for determination.

Further, Rolls-Royce would prefer some of the wording in the definition proposed in the December 2010 ANPRM (75 FR 76935). Language such as "distinguish it for certain predetermined purposes" and "directly related to the functioning of a defense article" as well as "used exclusively or predominantly in or with a defense article" gave a clearer view. We do agree the clarifiers in §120.41(b) are necessary.

In addition, Rolls-Royce offers the following more detailed comments on details of the proposed definition:

- Proposed 120.41(a)(3) may need clarification. The terms "enhance its usefulness or effectiveness" are broad and could potentially include items controlled under the EAR. Technologies evolve and we offer these updates to customers. We include the updated technologies in our civil products and the parts and technologies are captured in the EAR. For example: the Rolls-Royce T56 engine is approximately 60 years old and is utilized in the C-130 transport aircraft. The T56 engine shares a common core with the civil 501D engines. We institute the civil technologies in updated parts and components that now will be captured under the ITAR.
- Proposed 120.41(b)(1) is redundant and will lead to confusion. If an item is enumerated in a USML paragraph than it is should be ITAR controlled. Including this language in the "release" portion of the definition would cause misclassifications or additional burden on exporters and the Department with additional Commodity Jurisdictions. This portion would be better served in §120.3.
- Proposed 120.41(b)(3) may need clarification. The reliance on form and fit is not necessarily the best determination. We understand performance capabilities and function cannot be the sole determining factor but form and fit do not necessarily mean an item was specially designed for a USML item. For example and anti-ice valve performs the same function but has the exact same design process and manufacturing process whether civil or military.
- The proposed language does not separate the base technology, tooling, test and support equipment. Many of these items have general technology which is utilized in civil and military platforms.

Rolls-Royce appreciates the opportunity to comment on this proposed rule. Feel free to contact me if you have any questions about these comments.

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

July 27, 2012

To: publiccomments@bis.doc.gov
ddtcresponseteam@state.gov

From: Bill Root waroot23@gmail.com; tel. 301 987 6418

Subject: Specially Designed Definition - ITAR RIN 1400-AD22
Specially Designed Definition - EAR RIN 0694-AF66

The June 19, 2012 proposed definition of "specially designed" would defeat the objective of the Export Control Reform to reduce incentives for foreign manufacturers to design out U.S.-origin content. It would vastly increase the scope of controls on specially designed components currently on the CCL. This would constitute an incentive for foreign manufacturers to design out EAR as well as ITAR components. This result could be avoided by not using "specially designed" in the "600 series." The term would then not have to be defined as part of the Export Control Reform and there would be no adverse impact on components in the existing CCL.

The Commerce June 19 "specially designed" definition proposed rule states at the bottom of page 36409 and the top of page 36410 that all references to "specially designed" cannot immediately be removed from the CCL for two reasons:

1. Replacing the term with specific items that warrant control would take many years; and
2. The new "600 series" must use a catch-all "specially designed" term to avoid decontrolling items now ITAR-controlled.

With respect to the first reason, while replacing "specially designed" with specific technically defined items is the optimal solution, that is not the only means to remove that term from control lists. It took only a few weeks to prepare the attached ~~line-out~~ line-in revisions to the existing CCL and so-far published proposals for "600 series" and USML Categories V, VI, VII, VIII, IX, X, XIII, XIX, and XX. These indicate how "specially designed," and many other similarly ambiguous phrases, could be completely eliminated from both the CCL and the USML without making any technical changes.

With respect to the second reason, construing "specially designed" to be catch-all is inconsistent with the only export control purpose of "specially designed." That is to distinguish between what is controlled and what is not controlled. Catch-all means there is nothing modified by "specially designed" which would not be controlled. Therefore, the catch-all interpretation removes "specially designed" from relevance to the problem of how to avoid decontrolling items now ITAR-controlled.

Before adopting the June 19 definition, or any alternative, something like the attached detail must be set forth in another proposed rule to show exactly what the effects would be. Most of the suggestions in the attached detail, including hundreds of deletions, would be non-controversial.

Before adopting any increase in National Security controls beyond Wassenaar agreements, such as numerous existing CCL component controls, a proposal to that effect would have to be at least submitted to Wassenaar to comply with EAA Section 5(c)(6). Preferably, U.S. adoption should await successful completion of negotiations in Wassenaar.

Delays associated with Wassenaar proposals or negotiations could be avoided by simply removing "specially designed" from "600 series" descriptions. But construing everything transferred as catch-all is inconsistent with the end-item portion of the proposed "specially designed" definition and with the carve-outs in the components portion.

It is suggested that the proposed (a)(1) definition of "specially designed" for end-items be revised by using "required" rather than "specially designed" and revising the definition of "required" to include commodities as well as technology. The EAR definition of "required" already differs from the Wassenaar definition by including software. So adding commodities to the EAR definition would simply expand the U.S. unilateral element. At this time, the commodities element would be applied only to "600 series" end-items. It is also suggested that ", as a result of development," be removed from proposed (a) introductory wording. The word "design" appears several times in the definition of "development." Therefore, as a result of development would bring into play designer intent. The Administration has made clear that it wishes to avoid a designer intent criterion. Moreover, the development limitation would exclude end-items as well as components with specified characteristics as a result of "production." Such an exclusion is broader than the (b)(3)(ii) portion of the carve-out for components in "production" (*i.e.*, not in "development"). It is probably also broader than intended for end-items.

The carve-outs could be transformed into "600 series" Technical Notes. Such Notes should not use the words "specially designed." This is because the carve-outs are not dependent upon the special intentions of the designer. This approach would leave for another day whether, and if so how, to define "specially designed" as those words are used in the existing CCL. This would avoid expanding controls on components now on the CCL.

Attachments:

1. Analysis of nine objectives of the proposed definition of "specially designed."
2. "Specially designed" history
3. Criteria for deciding whether to delete "specially designed" or to replace it with other non-technical wording
4. Statistical Summary of 2,112 ~~line-out~~ line-in changes in existing CCL and so-far published "600 series" and USML revisions
5. ~~Line-out~~ line-in changes in each of the ten CCL categories (including so-far published proposed "600 series") and in so-far published proposed USML revisions (in separate documents)

Attachment 1

Analysis of Nine Objectives for a Definition of "Specially Designed"

1. **Preclude multiple or overlapping controls of similar items within and across the two control lists**

The distinction between end-items and components in the June 19 proposed definition of "specially designed" makes it impossible to achieve this objective. There are many examples of controlled items which are both end-items and components. A major example is aero gas turbine engines. They are components of aircraft but also end-items with respect to their own components. They thus constitute "overlapping controls of similar items within and across the two control lists." It may, in theory, be possible to have two sets of "specially designed" controls for aero gas turbine engines, one for end-items and one for components. However, this would be confusing and would still not achieve objective #1.

In addition, proposed 9A619.a military gas turbine engines specially designed for a military use not controlled by XIX.a, b, or d overlaps proposed XIX.c engines specially designed for military UAVs. Proposed XIX.a, b, and .c cover various types of engines whether in development, production or inventory. Part (a) of the new proposed definition of "specially designed" is limited to "as a result of development," thus excluding "production" or inventory. Therefore, in these instances, the definition of "specially designed" appears to have caused the overlap, rather than precluding it.

To overcome the XIX.a, b, c overlap problem, it would be necessary to delete "as a result of development" from the introductory paragraph in part (a) of the definition of "specially designed." Also see comment re objective #2 for other reasons to delete "as a result of development."

2. **Be easily understood and applied by exporters, prosecutors, juries, and the U.S. Government, *e.g.*, by using objective, knowable, and clear requirements that do not rely upon a need to investigate and divine the intentions of the original designer of a part or the predominant market applications for such items.**

The introduction to part (a) of the proposed definition of "specially designed" includes:
as a result of "development."
The definition of "development" includes the word "design" eight times. To determine whether the characteristics in a.1, a.2, or a.3 are a result of "development," an exporter would have to "investigate and divine the intentions of the original designer" in these many respects.

The remedy for this problem would be to delete as a result of "development" from part (a).

This would also close an unintended loophole. The "as a result of development" limitation in (a) means that all USML and all CCL items having a.1, a.2, or a.3 characteristics as a result of

production, rather than as a result of development, are uncontrolled. The clear intent of the b.3 carve-out is to remove from control for this reason only components of EAR99 and AT-only items which might also be used in other controlled items.

Based on dictionary definitions, the prosecutors, the main witness for the prosecution, the jury, and the Appeals Court in the FMI case interpreted "specially designed" to mean designer intent. The State Department repeatedly does so in proposed rules. The one dated June 19, 2012, states:

> Although one of the goals of the ECR initiative is to describe USML controls without using design intent criteria, a few of the controls in the proposed revision nonetheless use the term "specially designed."

A more logical conclusion would be to determine that it is necessary to delete "specially designed" and, where applicable, replace it either with a list of specific items or with another general term not susceptible to a designer intent interpretation.

The Commerce June 19 "specially designed" definition proposed rule states at the bottom of page 36409 and the top of page 36410 that all references to "specially designed" cannot immediately be removed from the CCL for two reasons:

1. Replacing the term with specific items that warrant control would take many years; and
2. The new "600 series" must use a catch-all "specially designed" term to avoid decontrolling items now ITAR-controlled.

With respect to the first reason, the Commerce June 19 Advanced Notice of Proposed Rule Making on the Feasibility of Enumerating "Specially Designed" Components makes a commendable start in doing precisely this. Moreover, for some end items, there may be no components warranting control. For items requiring years of deliberation to determine which components warrant control, "required" could replace "specially designed."

With respect to the second reason, interpretations that ITAR controls on components "specifically designed or modified" for end-items described in that Category are "catch all" mean that the ITAR equivalent of "specially designed" when describing controlled components has no meaning whatever. The only export control purpose of "specially designed" is to distinguish between what is controlled and what is not controlled. Catch-all means there are no components not controlled. Therefore, "specially designed" is in no way related to the problem of how to avoid inadvertent decontrol of components moved from the USML to the CCL.

It might be argued that State Department concurrence in the June 19 proposed definition of "specially designed" indicates that it does not, now, interpret the ITAR equivalent of "specially designed" components to be a catch-all because of the part (b) carve-outs. However, parts a.2 and a.3 literally catch-all; b.1 and b.3 carve-outs exclude what is enumerated on the USML; the b.2 carve-out addresses parts and not components; and documentary and other limitations on b.4 and b.5 carve-outs might effectively remove their applicability to the USML.

There are at least three means of avoiding decontrolling components now ITAR-controlled without using the irrelevant term "specially designed":

1. Simply remove “specially designed” from ECCNs YA6zz.x;
2. Same as 1 plus the carve-outs in Technical Notes rather than in a “specially designed” definition; or
3. Substitute “required” in those ECCNs for applicability to individual components but impose a new control on all components when accompanied by technology to assemble them into the controlled USML or “600 series” end-item.

At a recent TransTAC meeting, State and Commerce representatives agreed that existing ITAR Category VIII(b) covers all gas turbine engines used in aircraft controlled by VIII(a). This catch-all interpretation makes the words “specifically designed or modified” in VIII(b) meaningless. However, part a.1 of the “specially designed” definition is not a catch-all formulation. Therefore, if these engines are construed to be end-items, as in proposed new Category XIX, the June 19 definition of “specially designed” would not accomplish the second Commerce reason for not removing “specially designed” from the CCL, namely:

> The new “600 series” must use a catch-all “specially designed” term to avoid decontrolling items now ITAR-controlled.

The December 6, 2011, proposed 9A619.a reads:

> “Military gas turbine engines” “specially designed” for a military use that are not controlled in USML Category XIX, paragraphs (a), (b), or (d).

The Note to 9A619.a defines “military gas turbine engines” to be “specially designed” for “end-items” enumerated elsewhere. Therefore, the a.2 catch-all is incorporated in that expression. However, “specially designed” in “specially designed for a military use” limits 9A619.a coverage to the a.1 portion of the definition, which is not a catch-all.

The aircraft engine portion of the remedy for this failure for the 600 series to control items now ITAR-controlled would be to change “specially designed for a military use” to “for aircraft controlled by Category VIII.a or ECCN 9A610.a.” This would require changing “Aero-engines specially designed or modified for military use” in Wassenaar Munitions List 10.d to “, not certified by the civil aviation authority in a Wassenaar member country, used in aircraft controlled by 10.a.”

Both the State and Commerce proposed rules include:

> Paragraph (b) codifies the principle in ITAR 120.3 that, in general, a commodity should not be ITAR controlled if it has a predominant civil application ...

It is not apparent how paragraph (b) would do this. But this interpretation of paragraph (b) is inconsistent with objective #2.

The catch-all plus carve-outs construct of the definition is not “easily understood and applied.” In the 1960s, Commerce controlled all industrial equipment and all chemicals with listed carve-out exceptions. It proved impossible to include all equipment and chemicals on these negative lists for which there was no basis for control.

3. **Be consistent with definitions used by the multilateral export control regimes.**

The MTCR definition and the similar unique interpretation of “specially designed” which the

United States Delegate formally presented to COCOM in 1975 are much narrower than all parts of the June 19 proposed definition. Objective #3 cannot be achieved without successfully completing negotiations in multilateral regimes, including MTCR as well as Wassenaar, NSG, and Australia Group. This would be more difficult to accomplish if a more restrictive definition became effective in U.S. regulations prior to commencement of multilateral negotiations.

The exclusion of MT items from the ANPRM request for feasibility of enumerating "specially designed" components implies a stark deviation from the overall goal of a common definition of "specially designed" for use in the EAR and ITAR.

4. **Not include any item specifically enumerated on either the USML or the CCL and, in order to avoid a definitional loop, do not use "specially designed" as a control criterion.**

Using "specially designed" as a catch-all control criterion is the ultimate of a definitional loop. The sole purpose of "specially designed" as a means to distinguish what is controlled from what is not controlled is antithetical to any catch-all concept.

5. **Be capable of excluding from control simple or multi-use parts such as springs, bolts, and rivets, and other types of items the U.S. Government determines do not warrant significant export controls**

Proposed rules so far published have not excluded from control items which the U.S. Government determines do not warrant significant export controls.

6. **Apply to both descriptions of end items that are "specially designed" to have particular characteristics and to parts and components that were "specially designed" for particular end items.**

The proposed definition does not apply to "both" such end-items and such parts and components. On the contrary the application to end-items differs markedly from the application to parts and components.

7. **Apply to materials and software because they are "specially designed" to have a particular characteristic or for a particular type of end item**

Generally, controlled materials may be adequately defined technically, without using "specially designed" or any similar modifier. When a material is fabricated to the extent of being identified as a component, it should be controlled as a component rather than as a material.

The words "specially designed" are seldom used to describe software . Instead, the USML uses "directly related" and the CCL and Wassenaar use "specially designed or modified." These are among the expressions similar to "specially designed" which should be deleted and, where applicable, be replaced with "required."

8. **Not increase the current control level to "600 series" control or other higher end controls of items (*i.e.*, not move items currently subject to a lower control status to a higher level control status) particularly current EAR99 items, which are now controlled at lower levels**

Replacing 60 years of the unique interpretation of "specially designed" for CCL components with
catch-all less modest carve-outs would move countless thousands of current EAR99 items to a higher level control status.

9. **Not, merely as a result of the definition, cause historically EAR-controlled items to become ITAR controlled**

Some aero gas turbine engines and components thereof incorporating 9E003.a, h, or i technologies, which are now literally controlled by 9A001 or 9A003, would be controlled by Category XIX. The clearest example is XIX.f.2 hot section components "specially designed" for gas turbine engines controlled by this category. The catch-all feature of the June 19 "specially designed" definition for components is a major contributor to this movement of "historically EAR-controlled items to become ITAR controlled."

CCL ECCNs 1A101, 1C001, 1C101, 6B008, and 6B108 now cover all MTCR Item 17 equipment and materials and 1D103, 1E001, 1E101, 6E001, 6E002, and 6E101 now cover all MTCR Item 17 software and technology items. Proposed USML XIII.g and XIII.i, using different parameters, including multiple uses of "specially designed," are marked "MT" to indicate that they cover MTCR Item 17.

Attachment 2

Specially Designed History

1951 Administrative Principle 4 (AP4): COCOM agreement not to defeat the purpose of the embargo of end-items by permitting uncontrolled export of specialized components. Shortly thereafter, "specialized" was changed to "specially designed"

1950-1965 EAR "unique" definition of "specially fabricated"

1965 EAR substitution of "specially designed" for "specially fabricated" in a rule stating that the changed terminology makes no substantive change.

1975 US Delegate to COCOM records in a COCOM document a "unique" interpretation of "specially designed".

1979 EAA amended to restrict unilateral National Security controls

1981 COCOM adopts definition of "required" for controlled technology on a finding that the "unique" interpretation of "specially designed" is insufficiently restrictive
COCOM adopts International Munitions List control on technology for assembly of components into production installations for items on Munitions List even if the components of such production installations are not controlled. See WML22.b.1.
Shortly thereafter UK Government survives a no-confidence motion by one vote in connection with Matrix Churchill case involving export of a munitions production plant to Iraq without a license because none of the components required a license.

c. 1990 MTCR adopts "unique" definition of "specially designed"

1995 FMI and Lachman were found guilty in District Court based on jury instructions that "specially designed" meant designer intent plus capable of.

1999 UK Wassenaar proposal: "Specially designed" originally developed exclusively for the purpose specified in the relevant entry regardless of other uses found subsequently. If original purpose not known, current use exclusively or predominantly for that purpose."Specially designed for military use" originally developed exclusively for military use, regardless of any subsequent non-military use or intended use after export. Lengthy special rules for non-lethal goods, products from a commercial production line to meet military standards, or incorporating items specially designed for military use.

2000 Commerce (Tanya Mottley) formally requests industry views on meaning of "specially designed." Unanimous industry response was "unique." MPETAC determined that, in many instances, "specially designed" could simply be deleted.

2001 Russian proposal: as a result of development, suitable exclusively or predominantly for

achieving definite purpose specified in the relevant entry. Not have any other function or application, or the achievement of this purpose is its predominant function or use.

2003 District Court judge reverses FMI/Lachman guilty verdict, because "specially designed" was void for vagueness.
2005 Appeals Court reimposes guilty verdict in FMI/Lachman case.
Commerce issues a ten year denial order, even though Commerce had still not determined that a license was required.

Attachment 3

Criteria re What, if Any, Words to Replace "Specially Designed" and Related Expressions

Commodities

End-items:

"Specially designed" may simply be deleted (or, optionally, be replaced by "rated") if the end-item is otherwise adequately technically described. If not, "required" should be used, consistent with paragraph (a)(1) of the June 19, 2012 proposed definition of "specially designed." If the end-item is limited only by "specially designed for military use," substitution of "required" for "specially designed" does not solve the problem. Almost anything may be used by or for the military. In those cases, DDTC should try again to come up with better definitions.

Information security commodities and software as described in USML XIII(b) are now covered by ECCNs 5A002 and 5D002.

Parts

What follows assumes that the June 19 (b)(2) carve-out removes all "parts" from control. The proposed rule includes an example of a part which would be excluded from control even though modified for a controlled item. No example of a controlled part is given.

Components

Simple deletion of "specially designed" when modifying USML or "600 series" CCL ECCNs components (or other expressions equivalent to components) assumes a continued control of all such components.

However, components on the current CCL would be limited by "required." The stated reasons for not eliminating "specially designed" are:
1. Replacing the term with specific items that warrant control would take many years; and
2. The new "600 series" must use a catch-all "specially designed" term to avoid decontrolling items now ITAR-controlled.

Neither of these reasons apply to substituting "required" for "specially designed" for components

on the current CCL. The definition of "required" tracks closely the COCOM Administrative Principle 4 basis for the first use of "specially designed" in control lists. AP4 provided that only those components should be controlled which would defeat the purpose of the embargo of the equipment containing them.

Accessories and Attachments

The 121.8.c definition of "accessories and attachments" includes "not necessary for (end-item or system) operation" and gives examples which are separately controlled (riflescopes and special paints). Therefore, the following deletes from the USML "accessories and attachments" not further identified; but includes in "600 series" ECCNs accessories and attachments not controlled by the USML, with no "specially designed" or other qualifier.

However, the "enhance their ... effectiveness" portion of the definition of "accessories and attachments" makes the AP4 reason for using the modifier "required" applicable for current CCL ECCNs.

Technical Data, Technology, and Software

Each USML Category controls technical data directly related to the defense articles enumerated in that Category. "Technical data" is defined to include software as well as technology. "Directly related to" is not defined.

What follows assumes that:

1. Directly related in the USML should be replaced with "required."

   This is for consistency with the Wassenaar use of "required" for technology, the EAR inclusion of software in its definition of "required", and part (a)(1) of the June 19, 2012, definition of "specially designed." Part (a)(1) uses terminology from the definition of "required." Software and technology must fall under (a)(1), because they are not (a)(2) or (a)(3) (not being parts, components, accessories, or attachments).

2. For current CCL software ECCNs, "specially designed or modified," or similar expressions, should be replaced with "required."

   This is for consistency with the EAR inclusion of software in its definition of "required", and part (a)(1) of the June 19, 2012, definition of "specially designed." Part (a)(1) uses terminology from the definition of "required." Software must fall under (a)(1), because it is not (a)(2) or (a)(3) (not being parts, components, accessories, or attachments)

3. Jurisdiction for development and production software and technology accompanies jurisdiction for equipment for development or production of USML-controlled items.

   With the puzzling exception of Category XX, in the proposed rules so far published, such equipment is Commerce jurisdiction in ECCNs YB6zz.

4. Software and technology for operation, installation, maintenance, repair, overhaul, or refurbishing of USML-controlled items should be on the USML.

5. Wassenaar Munitions List technology item 22.b.1 re production installations with no controlled components should be included in each ECCN YE6zz.
6. WML 22.b.2 technology to produce reproductions of antique small arms should be included in ECCN 0E601.
7. Jurisdiction for WML 22.b.3 and 4 technology for development, production, or use of WML 7 controlled items would be covered by points 2 and 3 above. Jurisdiction for WML 22.b.5 technology for incorporation of biocatalysts into military carrier substances should be the same agency which controls the biocatalysts. Hopefully that will be clarified when the Category XIV proposed rule is published.
8. WML 21.b.1,2,3 software for simulating weapon systems, simulating military operational scenarios, or determining the effects of weapons should be controlled in USML Category XIII.
9. WML 21.b.4 software for C^3I military use should be controlled in 5D611.
10. WML 21.c software to enable uncontrolled equipment to perform the functions of WML-controlled equipment should be in ECCNs YD6zz.for functions of USML or "600 series" equipment.

Classified Regulations controlling classified information are more restrictive and more effective than export controls can be.

DOD Contract DOD contractual terms, which may be more or less restrictive than export controls, should govern

.

`

Attachment 4

July 18, 2012

Recapitulation of Recommended Specially Designed Revisions for All CCL ECCNs

The most significant recommendation in these comments is to delete all use of "specially designed" in both the EAR/CCL and ITAR/USML. This is because the substantially catch-all proposed definition for components cannot reasonably apply to components on the existing CCL. The hundreds of thousands of new CCL controlled components would expand the "ITAR free" mentality of foreign manufacturers to an "ITAR + EAR free" mentality.

There are 702 uses of "specially designed" in the existing CCL plus "600 series" ECCNs and USML revisions so far publicly proposed. Each one of these (plus more in "600 series" and USML proposals not yet published) must be analyzed to determine what, if anything, should replace "specially designed." There are also 1,410 similar expressions raising similar issues.

The attached documents ~~line-out~~ each of the 2,112 uses of "specially designed" and similar expressions and substitute the meaningful discriminating term of "required" for only 741 (35% of the total). Of the remainder, 483 recommend the optional catch-all term "rated," 244 recommend "other" non-definitive expressions, such as "as defined in the USML," and 644

recommend simple deletion. These deletions would apply to current catch-all usage in the USML. Deletions also include CCL items with sufficient technical descriptions which appear to permit omission of inherently ambiguous nexus terminology, such as “specially designed” or “required.” Of the 702 uses of “specially designed,” only half (358) would be replaced with “required.” Ideally, uses of “required” would eventually disappear as adequate technical descriptions were developed. However, that would take many years to accomplish. By contrast, the recommendations in these documents would not be unduly time-consuming. “Required” is already an accepted term for technology. It would be much easier to negotiate in multilateral regimes than the component portion of the June 19 proposed definition of “specially designed.”

This would involve revising the definition of “required” in the EAR, as follows:

> “Required” (General Technology Note) (Cat 0, 1, 2, 3, 4, 5, 6, 7, 8, and 9) As applied to “technology” or “software” or commodity, refers to only that portion of “technology” or “software” or commodity which is peculiarly responsible for achieving or exceeding the controlled performance levels, characteristics, or functions. ...

The 24 recommended “required” substitutions on the USML are for proposed items not yet adequately defined technically, such as “specially designed” for military use. Hopefully, these proposals will be further revised technically to permit no use of “required” on the USML.

There follows a statistical summary categorizing the 2,112 recommended changes. The + sign refers to instances where “specially designed” is coupled with another term, such as “specially designed or modified” or “specially designed or prepared.” “Other components” means items not referred to as “components” but which are stated to be contained in other items.

Statistical Summary of Suggested ~~Line-Out~~ Line-In Changes

	Specially Designed		Specially Designed +		Other		Totals		
	CCL	ML	CCL	ML	CCL	ML	CCL	ML	Grand
Controlled Item									
Changed to "required"	235	1	87		210	13	532	24	556
Changed to rated	24		15		333	9	372	9	381
Changed to other	15		49		143	3	207	3	210
Deleted	132	7	14		196	11	342	18	360
"Components"									
Changed to "required"	97		10		26		133		133
Changed to rated					2		2		2
Changed to other			4		7		11		11
Deleted	60	26	1		16	1	77	27	104
Other components									
Changed to "required"	12				33		45		45
Changed to rated					6		6		6
Changed to other	4		4		7		15		15
Deleted	5	20	2		65	46	72	66	138
Decontrolled items									
Changed to "required"	3				4		7		7
Changed to rated	45		2		47		94		94
Changed to other					8		8		8
Deleted	6		2		34		42		42
Totals									
Changed to "required"	347	11	97		273	13	717	24	741
Changed to rated	69		17		388	9	474	9	483
Changed to other	19		57		165	3	241	3	244
Deleted	203	53	19		311	58	533	111	644
Grand Total	638	64	190		1,137	83	1,965	147	2,112

July 17, 2012

USML Proposed Rules and Specially Designed

Entries for Categories I, II. III. IV. XI. XII, XIV, XV, XVI, XVIII await publication in the Federal Register of proposed rules.

V.h	~~... classified ...~~ [Reserved]
V.j	~~Technical data (as defined in 120.10 of this subchapter) directly related to~~ "Software" and "technology" "required" for the operation, installation, maintenance, repair, overhaul, or refurbishing of the defense articles enumerated in paragraphs (a) through (i) of this category
VI.c	~~Developmental vessels and "specially designed" parts, components, accessories, and attachments therefor, developed under a contract with the U.S. Department of Defense.~~ [Reserved]
VI.e	Naval nuclear propulsion plants for surface vessels of war, their land prototypes, and ~~special~~ facilities for their construction, support, and maintenance ...
VI.f.4	Propulsion ... systems ... and ~~parts and~~ components ~~"specially designed"~~ therefor
VI.f.5	... CBRN compartmentalization, over-pressurization, and filtration systems, and ~~parts and~~ components ~~"specially designed"~~ therefor
VI.f.7	Any machinery, device, component, or equipment ~~specifically developed, designed, or modified~~ for use in plant or facilities controlled in paragraph (e) of this section ...
VI.f.8	Components~~, parts, accessories, attachments,~~ and equipment ~~"specially designed"~~ for integration of articles controlled by categories II, IV, or XVIII or catapults for launching aircraft or arresting gear for recovering aircraft
VI.f.9	Shipborne active protection systems ... and ~~parts and~~ components ~~"specially designed"~~ therefor
VI.f.10	Minesweeping ... and ~~parts and~~ components ~~"specially designed"~~ therefor
~~VI.f.11~~	~~Any component, part, accessory, attachment, equipment, or system that:~~ ~~(i) is classfied;~~ ~~(ii) contains classified software;~~ ~~(iii) is manufactured using classified production data; or~~ ~~(iv) is being developed using classified information.~~ ~~"Classified" means ...~~ [Reserved]
VI.f	Note 1 ~~Parts,~~ components, accessories, and attachments ~~"specially designed"~~ for vessels enumerated in this category but not listed in Category VI.f are subject to the EAR under ECCN 8A609.
VI.g	~~Technical data (as defined in 120.10 of this subchapter) directly related to~~ "Software" and "technology" "required" for the operation, installation, maintenance, repair, overhaul, or refurbishing of the defense articles enumerated in paragraphs (a) through (f) of this category
Sec. 121.15	Surface vessels of war and ~~special~~ naval equipment (a)(2) are foreign-origin vessels ~~"specially designed"~~ "required" to provide

		functions equivalent to those of the vessels listed in (a)(1)
+	(a)(5)	are armed or are ~~"specially designed" to be used as~~ a platform to deliver munitions ...
	(a)(6)	... "Mission systems" are defined as "systems" ... that perform ~~specific military functions such as by providing~~ military communication, electronic warfare, target designation, surveillance, target detection, or sensor ~~capabilities~~ functions.
	(b)	~~Vessels~~ Surface vessels of war ~~"specially designed"~~ "required" for military use that are not identified in (a) of this section are subject to the EAR under ECCN 8A609
VII.b		Ground vehicles ... that are armed or are ~~"specially designed" to serve as~~ a reinforced firing or launch platform (see Sec. 121.4(a)(1) of this subchapter)
VII.g		Ground vehicle components~~, parts, accessories, attachments, and associated equipment~~ as follows:
VII.g.3		composite armor ~~parts and~~ components ~~"specially designed"~~ for the vehicles in this category
VII.g.4		spaced armor components ~~and parts~~, including slat armor components ~~and parts "specially designed"~~ for the vehicles in this category
VII.g.5		reactive armor ~~parts and~~ components
VII.g.6		electromagnetic armor ~~parts and~~ components, including pulsed power ~~parts and~~ components ~~"specially designed"~~ therefor
VII.g.8		gun mount ... and ~~parts and~~ components ~~"specially designed"~~ therefor
VII.g.10.i		rotary shock absorbers ~~"specially designed"~~ for the vehicles weighing more than 50 tons in this category
VII.g.10.ii		torsion bars ~~"specially designed"~~ for the vehicles weighing more than 50 tons in this category
VII.g.14		~~... classified ...~~ [Reserved]
VII.g Note		~~Parts,~~ components, accessories, and attachments for vehicles enumerated in this category but not listed in category VII.g are subject to the EAR under ECCN 0A606 .
VII.h		~~Technical data (as defined in 120.10 of this subchapter) directly and defense services ... related to~~ "Software" and "technology" "required" for the operation, installation, maintenance, repair, overhaul, or refurbishing of the defense articles enumerated in paragraphs (a) through (g) of this category ...
121.4(a)(1)		are armed or are ~~"specially designed" to be used as~~ a reinforced platform to deliver munitions
121.4(a)(2)		are armored support ~~vehicles capable of~~ off-road or amphibious ~~use "specially designed"~~ vehicles to transport ...
121.4(a)(3)		... "Mission systems" are defined as "systems" ... that perform ~~specific military functions such as by providing~~ military communication, electronic warfare, target designation, surveillance, target detection, or sensor ~~capabilities~~ functions.
121.4(b)		The following Ground vehicles ~~"specially designed" for military applications~~ that are not identified in (a) of this section are subject to the EAR under ECCN 0A606~~, including:~~ ..

VIII.d	Launching and recovery equipment ~~"specially designed"~~ for defense articles described in paragraph (a) of this category
VIII.f	~~Developmental aircraft and "specially designed" parts, components, accessories, and attachments therefor developed under a contract with the Department of Defense.~~ [Reserved]
VIII.h	Aircraft components, ~~parts, accessories, attachments, and associated equipment,~~ as follows:
VIII,h.1	Components~~, parts, accessories, attachments, and equipment~~ ~~"specially designed"~~ for the following U.S.-origin aircraft ... Components~~, parts, accessories, attachments~~ and equipment of the F-15SE ...
VIII.h.2	Face gear gearboxes ,,,and ~~parts and~~ components ~~"specially designed"~~ therefor
VIII.h.3	Tail boom ,,,and ~~parts and~~ components ~~"specially designed"~~ therefor
VIII.h.4	Aircraft wing folding systems and ~~parts and~~ components ~~"specially designed"~~ therefor
VIII.h.5	Tail hooks ... and ~~parts and~~ components ~~"specially designed"~~ therefor
VIII.h.6	Bomb racks ,,, and ~~parts and~~ components ~~"specially designed"~~ therefor
VIII.h.9	Non-surface-based flight control ... ~~"specially designed"~~ for aircraft
VIII.h.11	Air-to-air refueling ... and ~~parts and~~ components ~~"specially designed"~~ therefor
VIII.h.14	Lift fans ... for short take-off, vertical landing aircraft and ~~parts and~~ components ~~"specially designed"~~ therefor
VIII.h.16	Fire control computers ... ~~"specially designed"~~ for aircraft
VIII.h.17	Radomes ~~"specially designed"~~ ~~for operation in~~ multiple or nonadjacent radar bands or ~~designed to withstand~~ withstanding a combined thermal shock greater than ...
VIII.h.18	Drive systems and flight control systems ~~"specially designed" to function~~ functioning after impact of ...
VIII.h.19	~~... classified ...~~ [Reserved]
VIII.i	~~Technical data (as defined in 120.10 of this subchapter) and defense services ... directly related to~~ "Software" and "technology" "required" for the operation, installation, maintenance, repair, overhaul, or refurbishing of the defense articles enumerated in paragraphs (a) through (h) of this category ...
121.3(a)(2)	Are foreign-origin aircraft ~~"specially designed"~~ "required" to provide functions equivalent to those of the aircraft listed in (a)(1) of this section;
121.3(a)(3)	Are armored or are ~~"specially designed" to be used as~~ a platform to deliver munitions ...
121.3(a)(4)	Are strategic airlift aircraft ~~capable of~~ rated for airlifting payloads over ...
121.3(a)(5)	Are ~~capable of~~ rated for being refueled in-flight;
121.3(a)(6)	... "Mission systems" are defined as "systems" ... that perform ~~specific~~ military ~~functions beyond airworthiness, such as by providing military~~ activities of communication, radar, active missile counter measures, target designation, surveillance, or sensor ~~capabilities~~ functions
121.3(b)	The following Aircraft ~~"specially designed"~~ "required" for military applications that are not identified in (a) of this section are subject to the EAR under ~~an~~ ECCN

~~to be determined~~ 9A608~~, including~~ :

IX.a.5 Radar trainers ~~"specially designed"~~ "required" for training on radars controlled by Category XI

IX.a.6 Training devices ~~"specially designed" to be~~ attached to a crew station, mission system, or weapon ...

IX.a.9 ~~... classified ...~~ [Reserved]

IX.b.5 ~~... classified ...~~ [Reserved]

IX.e.1. ~~Technical data (as defined in 120.10 of this subchapter) and defense services ... directly related to~~ "Software" and "technology" "required" for the operation, installation, maintenance, repair, overhaul, or refurbishing of the defense articles enumerated in paragraphs (a) through (b) of this category

IX.e.2 Specific "software", as follows:

IX.e.2.i "Software" "required" for modeling or simulating or evaluating military weapon systems.

IX.e.2.ii "Software" "required" for modeling or simulating military operational scenarios.

IX.e.2.iii "Software" for determining the effects of conventional, nuclear, chemical or biological weapons

X.a.2 Personal protective clothing, equipment, or face paints ~~"specially designed"~~ to protect against or reduce detection by radar, IR, or other sensors of wavelengths greater than 900 nanometers.

X.a.8 ~~Developmental personal protective equipment and shelters and "specially designed" parts, components, accessories, and attachments therefor, developed under a contract with the U.S. Department of Defense.~~ [Reserved]

Note to ~~(a)(8)~~ (a)(2): ~~Developmental~~ personnel protective clothing, equipment and shelters, and ~~"specially designed" parts,~~ components, accessories, and attachments therefor, determined to be subject to the EAR via a commodity jurisdiction determination (see 120.4 of this subchapter) are not controlled by this paragraph:

X.d.3 ~~... classified ...~~ [Reserved]

X.e ~~Technical data (as defined in 120.10 of this subchapter) and defense services ... directly related to~~ "Software" and "technology" "required" for the operation, installation, maintenance, repair, overhaul, or refurbishing of the defense articles enumerated in paragraphs (a) through (d) of this category

XIII.b ~~Information security ... equipment, cryptographic devices, software and components "specially designed" for military applications ... as follows:~~ [Reserved]

~~XIII.b.1 ... capable of ...~~

~~XIII.b.2 ... capable of ...~~

~~XIII.b.5 Ancillary equipment "specially designed" ...~~

XIII.f ~~... classified ...~~ [Reserved]

XIII.g Concealment and detection materials and equipment, not controlled by CCL ECCNs 1A101, 1C001, 1C101, 6B008, and 6B108, as follows ~~(MT)~~
Stealth MTCR Item 17 equipment and materials are completely covered by these CCL ECCNs.

XIII.g.2 Multi-layer camouflage systems ~~"specially designed"~~ "required" to reduce detection

XIII.g.3 High temperature ... radar absorbing material ~~"specially designed"~~ "required" for ~~use on~~ defense articles or military items subject to the EAR

XIII.g.4 Broadband (greater than ...) light weight (less than ...) magnetic radar absorbing materials ... ~~"specially designed"~~ "required" for ~~use on~~ defense articles or military items subject to the EAR

XIII.h.1 Fuel cells ~~"specially designed"~~ "required" for platforms or soldier systems specified in this subchapter.

XIII.h.2 Thermal engines ~~"specially designed"~~ "required" for platforms or soldier systems specified in this subchapter.

XIII.i Signature reduction software, technical data, and services, not controlled by CCL ECCNs 1D103, 1E001, 1E101, 6E001, 6E002, or 6E101, as follows ~~(MT)~~:
Stealth MTCR Item 17 software and technology are completely covered by these CCL ECCNs.

XIII.i.1 Software ~~associated with~~ "required" for the measurement or modification of system signatures.

XIII.i.2 Software "required" for ~~design~~ "development" of low-observable platforms

XIII.i.3 Software for ~~design, analysis,~~ "development," production, or optimization of signature management solutions.

XIII.i.6 Signature control ~~design~~ "development" methodology

XIII.j.1 Laser eye-safe media ... ~~"specially designed"~~ for goggles ...

XIII.j.2 ~~Specially~~ treated or formulated dyes, coatings, and fabrics ~~used in the design, manufacture,~~ for "development" or production of personnel protective clothing, equipment, or face paints ~~designed to~~ that protect against or reduce detection by ...

XIII.k.1 Tooling and equipment ~~"specially designed"~~ "required" for production of low observable ...

XIII.l.1 ~~Technical data (as defined in 120.10 of this subchapter) and defense services ... directly related to~~ "Software" and "technology" "required" for the operation, installation, maintenance, repair, overhaul, or refurbishing of the defense articles enumerated in paragraphs (a) through (h), (j), and (k) of this category, except "software" for XIII.h.3. ~~(See also 123.20 of this subchapter.)~~ (MT for technical data and defense services related to articles designated as such)

XIII.l.2 "Software" and "technology" for "development" or "production" of low observable (LO) components or portable platform signature field repair validation equipment

XIX..a Turbofan and Turbojet engines~~, whether in development, production, or inventory (including technology demonstrators), capable of~~ rated for ... thrust or greater that have any of the following:

XIX.a.1 ... ~~capable of~~ rated for ...

XIX.a.4 ... ~~capable of~~ rated for ...

XIX.a.5 ... ~~capable of~~ rated for ...

XIX.a.6 ... ~~capable of~~ rated for ...

XIX..b Turboshaft and Turboprop engines~~, whether in development, production, or inventory (including technology demonstrators), capable of~~ rated for ... shp ... or greater that have any of the following"

XIX.b.3 ... ~~capable of~~ rated for ...

XIX..c Engines~~, whether in development, production, or inventory (including technology demonstrators), "specially designed"~~ "required" for armed or military unmanned aerial vehicle systems, cruise missiles, or target drones.

XIX.e Digital engine controls ... ~~"specially designed"~~ for gas turbine engines controlled in this category.

XIX.f Components, ~~parts, accessories, attachments, or associated equipment~~ as follows

XIX.f.1 Components~~, parts, accessories, attachments, and~~ or equipment ~~"specially designed"~~ for the following U.S.-origin engines ...

Note: Digital engine controls ... ~~"specially designed"~~ for the engines identified in (f)(1) of this category are controlled by (e) of this category

XIX.f.2 ~~Hot section components ..., "specially designed" for gas turbine engines controlled this category and related cooled components ..."specially designed" for gas turbine engines controlled in this category. ...~~

These are now controlled by CCL ECCN 9A003.

XIX.f.3 Engine monitoring systems ...~~"specially designed"~~ for gas turbine engines and components controlled in this category

XIX.f.4 ~~... classified ...~~ [Reserved]

XIX.g ~~Technical data and defense services directly related to~~ "Software" and "technology" "required" for the operation, installation, maintenance, repair, overhaul, or refurbishing of the defense articles enumerated in paragraphs (a) through (f) of this category

XX.a.5 swimmer delivery vehicles ~~"specially designed"~~ "required" for the deployment, recovery, or support of swimmers or divers from submarines.

XX.b Naval nuclear propulsion plants for submersible vessels, their land prototypes, and ~~special~~ facilities for their construction, support, and maintenance ...

XX.c Components~~, parts, accessories, attachments, and associated equipment "specially designed"~~ for any of the articles in paragraphs (a) and (b) of this category

XX.d ~~Technical data (as defined in 120.10 of this subchapter) and defense services ... directly related to~~ "Software" and "technology" "required" for the operation, installation, maintenance, repair, overhaul, or refurbishing of the defense articles enumerated in paragraphs (a) through (c) of this category.

123.20.a The provisions of this subchapter do not apply to ~~equipment, technical data or services~~ "commodities," "software," or "technology" in Category VI, Category XX, and Category XVI ... to the extent such ~~equipment, technical data or services~~

"commodities," "software," or "technology" are under the export control of the Department of Energy or the Nuclear Regulatory Commission or the Department of Commerce

123.20.c A license for the export of any ~~machinery, device, component, equipment, or technical data~~ "commodity," "software," or "technology" ...

Recapitulation

A. Specially designed

1. Limit controlled item to its controlled parameters (excluding components)
   - Change specially designed to "required" 121.15.a.2, b, 121.3.b, IX.a.5, XIII.g.2,3,4, h.1, h.2, k.1, XIX.c, XX.a.5
   - Delete specially designed 121.15.a.5, VII.b, 121.4.a.1, a.2, b, 121.3.a.2, a.3
2. Limit controlled components referred to as components
   - Delete specially designed VI.c, f.4,5,8,9,10, f Note 1, g.2,3,5,8, VIII.f, h.1,2,3,4,5,6,11,14, X. a.2 Note, a.8, XIX.f.2 (2x), f.3, XX.c
3. Limit controlled contained items not using the word components
   - Delete specially designed VII.g.10.i, g.10.ii, VIII.d, h.9, 16, 17, 18, .IX.a.6, X.a.2, XIII.b, b.5, j.1, XIX.e, f, f.1, f.1 Note, f.2 (2x), f.3

G. Other terms

1. Limit controlled item to its controlled parameters (excluding components)
   - Change directly related to "required" V,j, VI.g, VII.h, VIII.i, IX.e.1, X.e, XIII.l.1, XIX.f, XX.d
   - Change associated with to "required" for XIII.i.1
   - Add "required" IX.e.2.i, e.2.ii, XIII.i.2
   - Change capable of to rated 121.3.a.4, a.5, XIX.a, a.1,4,5,6, b, b.3
   - Change design to development XIII.i2, i.3, i.6
   - Delete special VI.e, 121.15
   - Delete specific 121.15.a.6, 121.4.a.3, 121.3a.6
   - Delete capabilities 121.15.a.6, 121.4.a.3, 121.3.a.6
   - Delete capable of XIII.b.1, b.2
   - Delete specially XIII.j.2
2. Limit controlled components referred to as components
   - Delete specifically designed or modified VI.f.7
3. Limit controlled contained items not using the word components
   - Delete parts VI.c, f.4, f.5, VII.f.8, f.9, VII.g, g.3, g.4 (2x), g.5, g.6, g.8, g Note, VIII.f, h, h.1 (2x), h.2,3,4,5,6,11,14, X.a.2 Note, a.8, XIX.f, f.1, XX.c
   - Delete accessories and attachments VI.c, f.8, VII.g, VIII.f, h, h.1 (2x), X.a.8, XIX.f, f.1, XX.c
   - Delete associated equipment VII.g, VIII.h, XIX.f, XX.c
   - Delete ancillary equipment XIII.b.5

August 3, 2012

Ms. Candace M.J. Goforth
Director
Compliance & Registration Division
Directorate of Defense Trade Controls
U.S. Department of State
2401 E Street, NW, SA-1, Room H1200
Washington, DC 20522-0112

Re: "Specially Designed" Definition (*Federal Register* Notice of June 19, 2012; RIN 1400-AD22)

Dear Ms. Goforth:

The Semiconductor Industry Association ("SIA") is the premier trade association representing the U.S. semiconductor industry. Founded in 1977 by five microelectronics pioneers, SIA unites over 60 companies that account for nearly 90 percent of the semiconductor production of this country.

SIA is pleased to submit the following public comments in response to the request for public comments issued by the State Department's Directorate of Defense Trade Controls ("DDTC") on a revised proposed definition of "specially designed" ("Proposed Definition").[1]

I. Executive Summary

The proposed definition of "specially designed" set forth in the State Department's rulemaking, and in an almost identical form in the rulemaking of the Bureau of Industry and Security ("BIS") constitutes a major improvement from the earlier BIS definition. While it can surely be improved, the proposed definition has most of the ingredients needed to distinguish those components that are "specially designed" so as to qualify for control under the International Traffic and Arms Regulations ("ITAR") and those components that do not merit such control.

SIA urges the State Department to adopt a definition of "specially designed" as outlined in its previous filings to the State Department and its simultaneous filing with BIS. The SIA approach represents a simple, common sense definition that

[1] Amendment to the International Traffic in Arms Regulations: Definition for "Specially Designed," 77 Fed. Reg. 36,428 (June 19, 2012) ("Proposed Definition").

would (i) be easier to understand and apply, (ii) provides a clear distinction between ASICs that would qualify as "specially designed" and other integrated circuits ("ICs"), and (iii) limits controlled components to those that have direct responsibility for the parameters or character that trigger control of an end item.

Although more complicated and subject to manipulation, the BIS "catch-and-release" approach is not far off the mark. With some amendments and appropriate limitations, the "catch-and-release" definition can provide a workable basis to distinguish components that are "specially designed" and hence are worthy of control. A revised definition of "specialty designed" should also be made to replace the term "specifically designed" where it is used in the ITAR

One critical implication of obtaining a workable definition of "specially designed" is that there would be no need to enumerate any components such as ICs as defense articles or end items on the USML. Indeed, an appropriate definition of "specially designed" provides an opportunity to resolve the impending collision between civilian ICs that are not radiation hardened by design and are purely civilian in nature and those that are specially designed for military end items or applications.

With an effective definition of "specially designed," USML Category XV(d) becomes unnecessary and can be eliminated. There is no reason to believe eliminating USML Category XV(d) and relying on an effective definition of "specially designed" would result in any lessening of controls on ICs currently subject to the ITAR. Every IC currently captured by USML Category XV(d) is likely to be captured elsewhere on the USML where catch-all categories encompass "specially designed" components for defense articles, including radiation hardened ICs. Similarly, purely civilian ICs are not currently captured under USML Category XV(d) and thus elimination of USML Category XV(d) would not result in any decontrol of ICs.

To be sure, in the very near future, civilian ICs will become subject to USML Category XV(d), but the capture of such devices would be inadvertent and without purpose because, among other things, the ICs would not qualify under most definitions of "specially designed."

In short, a workable definition of "specially designed" provides the avenue to once and for all resolve the unwanted capture of major civilian ICs by the USML. SIA urges the State Department to eliminate USML Category XV(d) coincident with promulgation of an improved definition of "specially designed."

II. Introduction

The commercial semiconductor industry is at the leading edge of technological developments within the United States and many commercial technologies developed by the semiconductor industry are subsequently adopted by

the defense industry. Furthermore, the health of the commercial semiconductor industry is dependent on exports and a global supply chain. Maintaining a vibrant semiconductor industry that is not encumbered by unnecessary export restrictions, therefore, is of great importance to both the health of the U.S. economy and, ultimately, the national security of the United States. Implementing a straightforward and principled definition of "specially designed" is critical for U.S. economic and security interests, as "specially designed" is central to the export control of integrated circuits.

In addressing export controls applicable to ICs, DDTC should keep mind that the underlying technology associated with such devices and the most advanced applications to which ICs are put are now driven overwhelmingly by consumer products. While utilizing semiconductor technology, the defense sector accounts for only a small fraction of U.S. semiconductor output, and military items rarely utilize the most advanced semiconductor technology.

A healthy and vibrant consumer led semiconductor industry generates exports, productivity and highly skilled jobs, all ingredients of a strong economy that can support national security. By being able to maintain a global leadership position, the U.S. semiconductor industry helps to assure that the United States will not fall behind other nations in information technology that supports national security. ICs have been among the largest export categories of the United Sates over the past five years, so lowering unnecessary barriers to the export of such devices is very much in the national interest. When national defense requires a truly specialized, specifically designed IC, it is the groundwork established in a healthy civilian industry that will allow defense development in a timely manner.

SIA's comments naturally concentrate on the appropriate treatment of components, and, more specifically, integrated circuits ("ICs"), on the U.S. Munitions List ("USML"). The adoption of common principles for the classification and treatment of semiconductor components is essential to a positive listing of ICs based on objective criteria.

SIA understands the difficulty of developing a unified "specially designed" definition and appreciates the U.S. government's efforts to do so. Indeed, past practice has generated problems in the application of "specially designed" to ICs. There has been a misplaced concern about the weight ascribed to design intent, just one of many elements that define a design. Even more troublingly, the meaning of "specially designed" has in the past been mistakenly made equivalent to "capable of." The result has been an inconsistent and overreaching meaning attributed to "specially designed" and its equivalent "specifically designed."

The Proposed Definition, while certainly an improvement over the previous definition put forward by the Commerce Department,[2] continues to complicate and burden what should be a straightforward and easily-understood definition. The term "specially designed" as used within the semiconductor industry is well defined by its natural meaning and industry practice and hence is widely understood in its application.

Specially designed" is used as a control criterion throughout the USML.[3] The definition of "specially designed" should reflect its natural meaning but should also take account of the control implications. Accordingly, in the context of the CCL and the USML, "specially designed" should mean designed and/or developed in a particular and distinguishable manner for a specific end use or end item. And because it has been used to differentiate what is controlled from what is not controlled in a particular category of the CCL or USML, "specially designed" as applied to a component should encompass a "peculiar responsibility" for the controlled functionality or features of the related end use or end item.

SIA urges DDTC to simplify and clarify the "specially designed" definition such that the definition captures the natural meaning of that term along with its control implications without the need for an overly broad scope (the "catch") and major exclusions or exceptions (the "release").[4]

In sum, an appropriate definition of "specially designed" would have ICs limited to application-specific integrated circuits ("ASICs") that are peculiarly responsible for the specific controlled parameters of the end items into they are incorporated. See SIA comments filed with the Bureau of Industry and Security ("BIS") set forth in Attachment 1 for an elaboration of (i) the principles for an appropriate definition of "specially designed," (ii) the shortcomings of the terms and rationale of the Proposed Definition , and (iii) recommended amendments to the Proposed Definition.

[2] Proposed Revisions to the Export Administration Regulations: Control of Items the President Determined No Longer Warrant Control Under the United States Munitions List, 76 Fed. Reg. 41,958 (July 15, 2011) ("July 2011 Proposal").
[3] BIS states that an objective of the Proposed Definition is to not use "specially designed" as a control criterion. Proposed Definition at 36,410. However, that objective is not achieved. "Specially designed" is used as a control criterion in every instance where it appears in a catch-all provision of the USML.
[4] In conjunction with its proposed revisions to USML Category VIII of the USML, DDTC in November 2011 advanced a proposed "specially designed" definition that was taken from the agency's Advanced Notice of Proposed Rulemaking ("ANPRM").[4] That definition came closer to the natural meaning of the term "specially designed;" it was straightforward and relatively easy to apply.

III. DDTC Should Replace "Specifically Designed" With "Specially Designed" Throughout The USML

One of the stated goals of the Proposed Definition is to provide a "bright line" between commodities controlled on the USML and commodities controlled on the CCL.[5] Even if the Proposed Definition were a model of clarify, that goal could not be achieved as long as two separate terms — "specially designed" and "specifically designed" — for roughly the same concept continue to exist on the USML. There simply is no need for two separate terms for the same concept.

Accordingly, DDTC should replace "specifically designed" with "specially designed" throughout the USML. Doing so would clarify USML controls even if no other change were made. In contrast, if "specifically designed" continues to exist on the USML alongside "specially designed" and the latter term is defined while the former term is not, then USML controls will become even more confusing — thereby undercutting the overall emphasis of the President's ECR Initiative.

IV. The Proposed "Specially Designed" Definition Would Permit DDTC To Implement An Effective Solution To The Persistent Rad Hard Device Problem

A. The Rad Hard Device Problem

Category XV(d) of the USML captures ICs that meet five technical criteria set forth in that category. At present, the ICs captured by that USML category generally are space-qualified devices specially designed for incorporation in the defense articles covered by USML Categories XV(a), XV(b) and XV(c). However, given the rapid advance of commercial semiconductor technologies, it is likely that in the near future a host of commercial ICs designed for and employed in exclusively civil applications will meet each of the five technical criteria set forth in USML Category XV(d) and so will be captured by that USML category.

Subjecting a sizeable portion of commercial ICs to ITAR control would be very damaging to the US semiconductor industry and would almost certainly overwhelm DDTC's licensing capabilities.

B. An Effective Solution to the Rad Hard Problem: Adoption of the Proposed "Specially Designed" Definition (as Modified), and Elimination of USML Category XV(d)

The process discussed below would allow DDTC to continue to appropriately control all devices currently subject to USML control, while also preventing commercial ICs with civil applications from being subjected to USML control. Such a process would

[5] Proposed Definition at 36,431.

solve the rad hard problem without resulting in any lessening of USML controls. Accordingly, it would be a "win-win" result.

1. Adoption of the Proposed Definition of "Specially Designed" (as Modified)

The Proposed Definition of "specially designed" requires several modifications, as discussed above and in the SIA comments filed with BIS. However, even if those modifications are not made to the Proposed Definition, the definition is useful and should be implemented by DDTC throughout the USML. Doing so would narrow the expansive and inconsistent meaning that government officials have attributed to "specially designed" and "specifically designed."

2. Elimination of USML Category XV(d) Due to the Redundancy of that Provision

When the Proposed Definition of "specially designed" (as modified above) is adopted, all ICs "specially designed" for use in or with end items described in USML Categories XV(a), XV(b) and XV(c) will be captured by USML Category XV(e). Likewise, all ICs "specially designed" for use in or with defense articles enumerated in other categories of the USML will be captured by other USML catch-all categories. In this way, every IC currently captured by USML Category XV(d) is likely to be captured elsewhere on the USML. Producers of ICs currently captured by USML Category XV(d) believe that their devices are "specially designed" for particular defense articles and therefore are worthy of a significant price mark-up over commercial ICs. Accordingly, USML Category XV(d) will not be needed to capture ICs specially designed for defense articles, as those ICs should be captured by USML Category XV(e) or some other catch-all provision of the USML after the modifications discussed above are made.

To the extent that ICs currently captured by USML Category XV(d) would be captured by other USML categories, USML Category XV(d) would be redundant and extraneous and could be eliminated without any impact on USML controls. At the same time, the elimination of USML Category XV(d) would solve the rad hard problem discussed above because there would no longer be a possibility of commercial ICs with predominantly civil applications but that meet all five of the technical criteria contained within USML Category XV(d) being inadvertently and inappropriately captured by that provision.

If the changes discussed above were made, only ICs "specially designed" for end items enumerated on the USML would be subject to USML control. ICs that meet certain technical criteria but that are employed in a variety of civil applications would not be subject to USML control. Such results would be entirely appropriate and in keeping with the President's MCR Initiative to lessen controls on items that are not worthy of control while retaining controls on items sensitive to national security.

Importantly, there is every reason to believe that there would be little or no lessening of controls on ICs currently subject to USML control as a result of the changes proposed here. The impact on controls would be largely, if not entirely, in the future: ICs that are "capable of" being incorporated into defense articles, but that are not ASICs "peculiarly responsible" for achieving or meeting the control characteristics of any defense article would not be subject to USML controls moving forward as the advance of commercial semiconductor technologies permits such devices to meet all of the criteria currently laid out in USML Category XV(d).

The proposed definition of "specially designed" would offer another benefit. If a component is capable of being incorporated into a defense article but is also capable of being incorporated into a variety of civil end items, the IC is by all accounts not specially designed for a defense article and is necessarily, and, by definition, dual use. Such an IC should not be subject to USML control and certainly should not be enumerated as a defense article on the USML.

Furthermore, and importantly, the elimination of USML Category XV(d) would rectify the current illogic of having components controlled in a non-catch-all provision of the USML. As correctly defined by BIS, components are useless until and unless they are incorporated into end items.[6] Accordingly, the control status of components should be determined exclusively by the control status of the end items into which the components are incorporated. It is illogical and counterproductive to control components as end items and enumerate them in a non-catch-all provision of the USML. Instead, all components should be listed only in catch-all provisions of the USML. There should not be any overlap between the definition of an "defense article" (or "end item") and the definition of a "component."[7]

If the U.S. Government is seeking a solution to the rad hard problem outlined above, as it should be, then the process described here provides such a solution. What's more, the solution proposed here is relatively straightforward and easy to implement, and would have little or no impact on the current scope of USML controls. SIA strongly urges the U.S. Government to implement such a solution.

[6] Proposed Revisions to the Export Administration Regulations: Control of Items the President Determined No Longer Warrant Control Under the United States Munitions List, 76 Fed. Reg. 41,958, 41,980 (July 15, 2011) ("July 2011 Proposal").

[7] Properly defined, a "component" should have three distinguishing characteristics: (1) it is an assembled item; (2) it is used in another item; and (3) it has no functionality or performance capability on a stand-alone basis, but only when incorporated into another item. The definition of "component" put forward by BIS captures the first two distinguishing characteristics, but fails to capture the third distinguishing characteristic. This problem may be resolved by distinguishing "components" from "assemblies," with an "assembly" defined as an item sharing the first two distinguishing characteristics of a "component," but, unlike a "component," having functionality or performance capability on a stand-alone basis.

C. The Solution Is Viable only if all the Elements of the Solution Are Implemented

The solution to the rad hard problem proposed above is viable only if all the elements of the solution — replacements of "specifically designed" with "specially designed" throughout the USML, adoption of the Proposed Definition of "specially designed", and elimination of USML Category XV(d) — are implemented. Implementation of only the first two elements of the solution would not result in an actual solution, but instead would result in confusion and a continuation, if not an exacerbation, of the problem.

If USML Category XV(d) were retained, then, as discussed above, the controls imposed by that provision would continue to be duplicative of the controls imposed by other USML provisions. Moreover, DDTC would create an illogical aberration in which ICs that are non-ASICS and are used in a variety of civil applications would not be "specially designed" and so would not be captured by USML Category XV(e) or any other catch-all provision of the USML, but could, and in the future increasingly would , be captured by USML Category XV(d). DDTC should not create such a situation. Instead, DDTC should implement all three of the elements of the solution discussed above.

V. Conclusion

While the Proposed Definition of "specially designed" could be enhanced, it is a significant improvement over the prior version of that definition. Moreover, the implementation of that definition (after appropriate modification) would permit DDTC to effectively solve the so-called "rad hard problem" — *i.e.*, the imminent USML capture of many commercial ICs — and do so with virtually no impact on the current scope of USML controls. All that is required is for DDTC to make the "specially designed" definition widely applicable throughout the USML and then eliminate USML Category XV(d).

SIA urges DDTC to implement this solution to the "rad hard problem" as soon as possible.

* * * * *

SIA appreciates the opportunity to comment on the proposed "specially designed" definition and looks forward to continuing its cooperation with the U.S. Government on this subject. Please feel free to contact the undersigned or SIA's counsel, Clark McFadden of Orrick, Herrington & Sutcliffe LLP, if you have questions regarding these comments.

Cynthia Johnson
Co-Chair, SIA Trade Compliance Committee

David Rose
Co-Chair, SIA Trade Compliance Committee

Enclosure

ATTACHMENT 1

August 3, 2012

Mr. Timothy Mooney
Regulatory Policy Division
Room 2099B
Bureau of Industry and Security
U.S. Department of Commerce
14th Street & Pennsylvania Ave., N.W.
Washington, D.C. 20230

Re: "Specially Designed" Definition (*Federal Register* Notice of June 19, 2012; RIN 0694-AF66)

Dear Mr. Mooney:

The Semiconductor Industry Association ("SIA") is the premier trade association representing the U.S. semiconductor industry. Founded in 1977 by five microelectronics pioneers, SIA unites over 60 companies that account for nearly 90 percent of the semiconductor production of this country. The semiconductor industry accounts for a sizeable portion of U.S. exports.

SIA is pleased to submit the following public comments in response to the request for public comments issued by the Commerce Department's Bureau of Industry and Security ("BIS") on a revised proposed definition of "specially designed" ("Proposed Definition").[1]

I. Executive Summary

The commercial semiconductor industry is at the leading edge of technological developments within the United States and while the vast majority of integrated circuits ("ICs") are deployed in civilian applications, many commercial technologies developed by the U.S. semiconductor industry are subsequently adopted by the defense industry. Furthermore, the health of the commercial semiconductor industry is dependent on exports and a global supply chain. Maintaining a vibrant semiconductor industry that is not encumbered by unnecessary export restrictions, therefore, is of great importance to both the health of the U.S. economy and, ultimately, the national security of the United States. Implementing a straightforward and principled definition of "specially designed" is critical for U.S. economic and security interests, as "specially designed" is central to the export control of integrated circuits.

[1] "Specially Designed" Definition, 77 Fed. Reg. 36,409 (June 19, 2012) ("Proposed Definition").

SIA applauds BIS for significantly improving the "specially designed" definition from its original proposal. In particular, SIA believes the following are especially valuable improvements:

- Emphasizing that a "particular application" is an essential element of "specially designed" as it pertains to components. For ICs, application-specific integrated circuits ("ASICs"), a term that is well defined within the semiconductor industry, most effectively captures this element;

- Recognizing that in certain circumstances a component is not "specially designed" if it has equivalent functionality to a component that is contained or reasonably expected to be contained in a "non-controlled" end item; and

- Renouncing unequivocally that "capable of" is an appropriate interpretation of "specially designed."

Properly applied and as a practical matter, these improvements can bring the definition of "specially designed" quite close to where it should be.

Despite these improvements, however, the Proposed Definition has serious shortcomings. The Proposed Definition is unnecessarily complex and convoluted, leaves too much room for overreach and distortion and does not ensure that the appropriate industry definition of ASICs will apply.

SIA maintains that a simple, common-sense approach to the definition would (i) be much easier to understand and apply, (ii) provide a clear distinction between ASICs that would qualify as "specially designed" and other ICs that would not, and (iii) limit the control of components to those having a direct responsibility for the parameters or character that trigger control of the related end item.

In short, SIA recommends the Proposed Definition of "specially designed" be modified to treat end items and components in a similar fashion under the proposed subsection (a) and include a Note to set forth an appropriate definition of ASICs.

If BIS is unwilling to proceed with such a straight-forward definition of "specially designed" rather than its "catch-and-release," decision-tree approach, SIA recommends the following changes to the Proposed Definition:

- Include in subsection (a)(1) application specific components of end items for which the control parameters or character can be ascertained from its listing.

- Replace the "necessary to function as designed" standard for components set forth in subsection (a)(2) with "required to function as a defense article under the U.S. Munitions List or a national security-controlled end item under the Commerce Control List." This standard would be limited to components for which no controlled parameters of the related end item are listed.

- Eliminate the enumeration of components as defense articles or end items on the U.S. Munitions List ("USML") or Commerce Control List ("CCL") so as to make subsection (b)(2) superfluous.

- Eliminate the reference in subsection (b)(3) to "form and fit" for components of equivalent performance.

- Narrow the scope in paragraph (b)(5) of "particular application" and create a note that provides an appropriate industry definition of ASICs.

These changes, along with other definitional changes, would properly reduce the scope of the "catch" in the Proposed Definition. They would also sharpen the exceptions in a more systematic way that is consistent with the derivative nature of components and reliant on widespread industry practice and understanding.

II. Introduction

In addressing export controls applicable to ICs, the Department should keep mind that the underlying technology associated with such devices and the most advanced applications to which ICs are put are now driven overwhelmingly by consumer products. While utilizing semiconductor technology, the defense sector accounts for only a small fraction of U.S. semiconductor output, and military items rarely utilize the most advanced semiconductor technology.

A healthy and vibrant consumer led semiconductor industry generates exports, productivity and highly skilled jobs, all ingredients of a strong economy that can support national security. By being able to maintain a global leadership position, the U.S. semiconductor industry helps to assure that the United States will not fall behind other nations in information technology that supports national security. ICs have been among the largest exports of the United Sates over the past five years, so lowering unnecessary barriers to the export of such devices is very much in the national interest. When national defense requires a truly specialized, specifically designed IC, it is the groundwork established in a healthy civilian industry that will allow defense development in a timely manner.

SIA's comments naturally concentrate on the appropriate treatment of components, and, more specifically, ICs, on the CCL and the USML. The adoption of common principles for the classification and treatment of semiconductor components is essential to a positive listing of ICs based on objective criteria.

As it implements a new, unified definition of "specially designed," BIS must recognize that for the Proposed Definition to be successful, it is imperative that no part or component be subject to increased control merely as a result of those revisions. Any implementation of the Proposed Revisions that results in re-control or new control would constitute a step backwards.

III. SIA Has Long Advocated Principles That Should Apply To The Control Status Of ICs

SIA understands the difficulty of developing a unified "specially designed" definition and appreciates the U.S. government's efforts to do so. Indeed, past practice has generated problems in the application of "specially designed" to ICs. There has been a misplaced emphasis on the mere use of a component in a controlled end item as a definitive indicator of the original design intent, when any such use is just one of many elements that define a design. Even more troublingly, the meaning of "specially designed" has in the past been mistakenly made equivalent to "capable of."

Nevertheless, the Proposed Definition, while certainly an improvement over the previous definition put forward by BIS,[2] continues to complicate and burden what should be a straightforward and easily-understood definition. The term "specially designed" as used within the semiconductor industry is well defined by its natural meaning and industry practice and hence is well understood in its application.

"Specially designed" is used as a control criterion throughout the CCL and USML.[3] The definition given that term should take account of that fact. Therefore, in the context of the CCL and the USML "specially designed" means designed and/or developed in a peculiar and particular manner for a specific end use or end item and contributing directly and significantly to that end use or end item. And because "specially designed" has been used to differentiate what is controlled from what is not controlled in a particular category of the CCL or USML, the direct and significant contribution to an end use or end item should be particularly responsible for the controlled feature of that end use or end item.

A. Components Such as ICs Should Have Their Control Status Determined By The End Items Into Which They Are Incorporated

BIS has defined "component" to be, among other things, "an item that is useful only when used in conjunction with an "end item."[4] Every IC fits squarely within this definition.

---

[2] Proposed Revisions to the Export Administration Regulations: Control of Items the President Determined No Longer Warrant Control Under the United States Munitions List, 76 Fed. Reg. 41,958 (July 15, 2011) ("July 2011 Proposal").

[3] BIS states that an objective of the Proposed Definition is to not use "specially designed" as a control criterion. Proposed Definition at 36,410. However, that objective is not achieved. "Specially designed" is used as a control criterion in every instance where it appears in a catch-all provision of the CCL or USML.

[4] July 2011 Proposal at 41,980.

Indeed, ICs are quintessential components. ICs have no utility or impact standing alone and are purposeful only when incorporated into an end item.

Components such as ICs are inherently distinct from end items and their capabilities are achieved only when incorporated into end items. Accordingly, components' derivative nature means that they should not be set forth on a control list as enumerated or controlled end items themselves. Instead, the export control status of all components — and particularly of ICs not already enumerated as components in Category 3 of the CCL — should be determined entirely by the control status of the end items into which the components are incorporated. That is, all ICs that are not already enumerated as components in Category 3 of the CCL should be placed in catch-all categories on the CCL and USML, such that the export control status of such items is determined exclusively by the uses to which the components are put. Insofar as a component, by definition, is useless until it is employed in conjunction with an end item, it is only logical and appropriate that the control status of components that are not already enumerated as components in Category 3 of the CCL be determined in a derivative fashion.

No component should be positively listed on the USML or CCL as an end item, and no component that is not "specially designed" for a controlled end item or is not already enumerated as a component in Category 3 of the CCL should be subject to export controls beyond EAR99.

B. The Proposed Definition As Applied to ICs Should Be Limited To ASICs That Are Peculiarly Responsible For the Specific Controlled Parameters of the End Items Into Which They Are Incorporated

The only components worthy of export control as specially designed components are those that are application-specific. Components that are employed for a variety of purposes and/or in multiple end products should not be controlled as specially designed components. In the case of ICs, this means that only application-specific ICs — or ASICs[5] — should be subject to export controls beyond EAR99. An ASIC or custom IC by definition has a customized, special and compelling connection to the end item into which it is incorporated.

In contrast, general purpose ICs have no customized, special or compelling connection to the end items into which they are incorporated or to the applications of the controlled end item. General purpose ICs should not be controlled, for the simple reason that they are not specifically designed (in any natural sense of that term) for a controlled end item. BIS has recognized this, stating that "specially designed" does not mean merely "capable of use in" or "capable of use

[5] ASIC is a well understood and clearly defined term within the semiconductor industry. The longstanding definition of the JEDEC Solid State Technology Association for an ASIC is relevant and appropriate: "An integrated circuit developed and produced for a specific application or function and for a single customer." This definition captures a custom IC designed particularly to conform to a single customer's unique requirements. A prime example of ASICs is the ICs designed and developed by Intersil Corporation exclusively for the Trident missile system. Those ICs were unambiguously application-specific and end item-specific and so were quintessential ASICs. Many other ICs designed and developed by Intersil Corporation and other SIA member companies are not customized for a specific use in a specific end item and so do not qualify as ASICs. By utilizing existing industry terminology, exporters will have a clear basis upon which to classify an IC.

with," and that, in particular, non-ASIC, general purpose ICs "that are not designed for a particular application would not be "specially designed" items, even if they are used in controlled items."[6]

In addition, "specially designed" should apply only to ASICs (and other application-specific components) that are peculiarly responsible for achieving or exceeding the controlled parameters of end items into which they are incorporated. An IC is worthy of control as being specially designed only if it contributes significantly to the achievement of military advantage or national security sensitivity of an end item as described in and through the objective criteria of a control list. ASICs that provide benign functions that are separate from or contribute only indirectly to the national security features of an end item, such as routine communications or memory capabilities, should not be captured as specially designed controlled components.

IV. The Proposed Definition Constitutes A Major Improvement From The Previous Proposal And Is Much Closer To The SIA Principles, But Nonetheless Requires Further Improvement

A. BIS Has Adopted Several Positive Elements Into Its New Proposed Definition

SIA commends BIS for significantly improving the "specially designed" definition and moving that definition much closer to where it needs to be.

First, in paragraphs (b)(3) and (b)(4) of the Proposed Definition BIS has correctly stipulated that if a components is employed in several different end items with differing control status, then the component is not "specially designed." These exclusions should appropriately remove from control those devices that are general purpose or multi-purpose.

Second, in paragraph (b)(5) of the Proposed Definition BIS has correctly stipulated that non-application specific components — in the case of ICs, non-ASICs — are not "specially designed." This appropriate exclusion should remove from control those components that are not inextricably tied to the controlled parameters of an enumerated end item. As BIS itself notes, non-ASIC, general purpose ICs "that are not designed for a particular application would not be "specially designed" items, even if they are used in controlled items."[7]

Finally, in its discussion of the Proposed Definition BIS has explicitly rejected "capable of" as a possible meaning of "specially designed." This is a long-overdue and extremely important clarification. Moreover, the BIS discussion of this point in conjunction with explaining paragraph (a)(1) of the Proposed Definition is worth highlighting:

[6] Proposed Definition at 36,410.
[7] Proposed Definition at 36,410.

> even if something is capable of being used with a controlled item, it is not captured by this part of paragraph (a) unless someone did something during the item's development so that it would achieve or exceed the performance levels, characteristics, or functions described in a referenced ECCN or USML paragraph.[8]

This stipulation is in harmony with the export control principles laid out in the previous section and SIA strongly supports BIS in this regard.[9]

B. Notwithstanding These Improvements, The Proposed Definition Has Several Short-Comings and Requires Further Improvement

1. A "Catch-and-Release" Methodology Is Unorthodox, Unnecessary and Unduly Complex

BIS's reliance on a "catch-and-release" methodology for determining which items are "specially designed" is unnecessary and significantly complicates the "specially designed" definition. This is particularly true for ICs. Paragraph (a)(2) of the Proposed Definition captures almost all components, as almost all components are "necessary" for the functioning of the end items into which they are incorporated. It is counterintuitive and convoluted to determine that virtually every IC is "specially designed" before excluding certain types of ICs from that definition.

The plain meaning of the term "specially designed" is limiting and narrow in its scope. That natural meaning cannot be squared with the concept of capturing all (or virtually all) components and accessories, only to "release" certain of those items after further analysis. Given the central role that "specially designed" plays in determining the control status of components, the meaning given that term should be clear and intuitive, not complex and uncommon.

For end items (*i.e.*, all items other than parts, components, accessories and attachments that can operate independently), BIS employs a straightforward positive definition of "specially designed" that adheres closely to the natural and commonly-understood meaning of that term: a "specially designed" end item is one that

> has properties peculiarly responsible for achieving or exceeding the performance levels, characteristics, or functions in the relevant ECCN or U.S. Munitions List (USML) paragraph.[10]

[8] Proposed Definition at 36,412.
[9] However, BIS has inexplicably and wrongly limited this principle only to end items, excluding components and accessories. It should not do so, but, as explained in the following subsection, instead should apply this principle to all items, including components.
[10] Proposed Definition at 36,418.

This definition captures all end items that should qualify for "specially designed" without any need to "release" items based on exclusions. It is easy to understand, straightforward to administer and in conformance with the natural meaning or the term "specially designed." There is no apparent reason why this same definition could not be applied to all items — components, accessories, attachments and end items alike.

2. The Proposed Definition Does Not Increase Certainty or Objectivity

Setting aside its needless complexity, the Proposed Definition does not increase certainty or objectivity — at least vis-à-vis components and accessories. First, certainty is not increased with complexity, and the "catch-and-release" nature of the Proposed Definition is necessarily more complex than a straightforward positive definition of "specially designed" (such as paragraph (a)(1) of the Proposed Definition). Second, as discussed in further detail in the next section, several of the terms employed in the Proposed Definition are undefined and so are inherently subjective. In particular, the term "reasonable expectation" contains a subjective element just as does the term "specially designed" itself.

3. The Proposed Definition Renders The Term "Specially Designed" Meaningless When Employed Outside of a Catch-All Category

Paragraph (b)(1) of the Proposed Definition makes the term "specially designed" entirely devoid of meaning when employed outside of a catch-all category. It is awkward in the extreme to have a term at once with and without a meaning in the CCL or USML. It is especially problematic to have such an important term — explicitly used to differentiate items subject to control from those not subject to control — meaningless in several instances within the CCL and USML. As discussed in more detail below, paragraph (b)(1) should either be eliminated or modified such that "specially designed" has a discernible meaning when applied to components throughout the CCL and USML, not just when used in catch-all categories.

C. A Positive Definition of "Specially Designed" For All Items Would Be Simpler, Easier to Understand, and in Keeping With Normal Statutory and Regulatory Interpretation

As it has done with respect to end items, BIS should implement a positive definition of "specially designed" for components, accessories and attachments. Such a definition — a modified version of paragraph (a)(1) of the Proposed Definition — would be far simpler, easier to understand and in keeping with normal statutory and regulatory interpretation. Moreover, such a positive definition would comport with the natural meaning of the term "specially designed," and would implement the principle that only a particular subset of items are "specially designed."

There is no credible reason why paragraph (a)(1) of the Proposed Definition should not apply to parts and components. As BIS notes, an item should not be deemed "specially designed" simply because it is capable of being used with a controlled item; instead, an item should not be deemed "specially designed"

> unless someone did something during the item's development so that it would achieve or exceed the performance levels, characteristics, or functions described in a referenced ECCN or USML paragraph.[11]

That logic applies with equal force to parts, components and end items. Indeed, it is noteworthy that among the examples discussed by BIS in its Note to paragraph (a)(1) is a component for a robot covered by ECCN 2B007.a.[12] That discussion clearly evidences the applicability of this paragraph to components. BIS should explicitly codify the applicability of paragraph (a)(1) to components in the manner indicated below.

It is true that in certain instances "specially designed" components of end items appear within ECCNs or USML paragraphs that do not contain any specified performance levels, characteristics or functions; however, as noted above, those limited instances should not be permitted to control the treatment of all components, especially given the derivative nature of components and their proper inclusion only within catch-all provisions of the USML and CCL.

Even for items with no stated performance levels, characteristics or functions, it is surely possible to distinguish what features make the item inherently military or sensitive to national security. For example, tanks covered by USML Category VII(b) are inherently military items and are controlled due to their ability on a mobile basis to both withstand attack from most firearms and inflict damage via the firing of ordinance. These military capabilities of a tank can be readily distinguished from such capabilities as its air conditioning system. Similarly, an ASIC used in a targeting system in a jet fighter would be "particularly responsible for achieving the control parameters" of the jet fighter, while an ASIC used in a weather navigation system in the same jet fighter would not be "particularly responsible for achieving the control parameters" of the jet fighter.

There is no reason why a "catch-and-release" methodology is required, and such an approach should be replaced with a single-stage, positive definition that only "catches" or "captures" items worthy of control. The following revised version of paragraph (a) of the Proposed Definition is all that is required and should be implemented by BIS:

> *An "item" is "specially designed" if, as a result of "development," it:*
>
> > *(a) is an end item having properties peculiarly responsible for achieving or exceeding the performance levels, characteristics, or functions in the relevant ECCN or U.S. Munitions List (USML) paragraph , or*
> >
> > *(b) is an application-specific part, component, accessory or attachment having properties peculiarly responsible for achieving or exceeding the performance levels, characteristics, or functions*

[11] Proposed Definition at 36,412.
[12] Proposed Definition at 36,419.

of an end item enumerated in the relevant ECCN or U.S. Munitions List (USML) paragraph.

***Note to definition**: In the case of integrated circuits, only ASICs are captured by this definition, where "ASIC" means an integrated circuit developed and produced for a specific application or function and for a single customer*.

Such a single-stage, positive definition appropriately would place all items on an equal footing and would obviate the need for any exclusions or "release" of items that are obviously not designed specially. The various exclusions contained in paragraph (b) of the Proposed Definition would no longer be necessary because only parts, components, accessories and attachments developed in a special and particular manner for the end items into which they are incorporated or with which they are used would be deemed "specially designed" in the first instance — just as is the case for end items under the Proposed Definition.

This straightforward and streamlined "specially designed" definition would comport with the natural meaning of the term and would greatly simplify the analysis required by exporters. Accordingly, SIA urges BIS to implement this definition.

V. At Least With Respect To Components, The Proposed Definition Of "Specially Designed" Fails To Achieve Several Of The Objectives Set Forth By BIS

A. As Applied to Components, The Proposed Definition Does Not Correspond to The Natural Meaning of The Term "Specially Designed" and Is Not Easily Understood or Easy to Apply

The "catch-and release" methodology employed in the Proposed Definition vis-à-vis components is inherently complicated and requires special expertise generally not held by many exporters. Contrary to BIS' claim,[13] paragraphs (b)(4) and (b)(5) of the Proposed Definition do to a significant extent depend on a determination of the predominant market application for a component in order to determine whether the component is "specially designed." More importantly, there are several terms and phrases used in the Proposed Definition that are undefined and are therefore subjective and unclear:

- First, while the term "enumerated" is defined in Note 1 to the Proposed Definition, the distinctions between an "enumerated commodity," a "referenced commodity," a "commodity described on the CCL," and a "commodity" are unclear. Without an understanding of the differences between these various items and a definition of each of the items, it is difficult, if not impossible, to decipher the Proposed Definition.

- Second, the meaning of "application" (as employed in paragraph (b)(5) of the Proposed Definition) is unclear. This term can be subject to widely

[13] Proposed Definition at 36,410.

divergent interpretations, some of which are so broad as to render the exclusion provided by paragraph (b)(5) essentially useless.

B. The Proposed Definition Is Not Necessarily Consistent With Definitions Used by the Multilateral Export Control Regimes

The only definition provided for "specially designed" within the Wassenaar Arrangement is the Missile Technology Control Regime (MTCR) definition that, at least explicitly, applies only to items covered by the MTCR. What's more, at least vis-à-vis components, the Proposed Definition is far more complicated and apparently far broader in scope than is the MTCR definition of "specially designed." The MTCR definition requires exclusive use in a particular end item; the Proposed Definition does not go nearly so far. The Proposed Definition is likely to capture items that are not encompassed in the MTCR definition of "specially designed," as exclusive use is narrower than "reasonable expectation of use."

Whether the Proposed Definition is consistent with the Wassenaar Arrangement as a whole is unclear and a matter for conjecture, as there is no generally applicable definition of "specially designed" within the Wassenaar Arrangement. However, it is clear that the Proposed Definition, at least vis-à-vis components and accessories, is not consistent with the natural meaning of that term and is convoluted — attributes that are not consistent with the Wassenaar Arrangement.

C. By Trying to Avoid an Ostensible "Definitional Loop," The Proposed Definition Creates New Definitional Problems

As an initial matter, BIS states it intends for the Proposed Definition to avoid using "specially designed" as a control criterion.[14] This is a curious statement, as it is undoubtedly the case that "specially designed" is used as a control criterion in every instance in which it appears in a catch-all provision throughout the CCL and USML.[15] If BIS intended to state that among its objectives for the Proposed Definition is to avoid using "specially designed" as a control criteria within non-catch-all provisions of the CCL and USML, then it should have stated as much.

Beyond that, BIS notes that paragraph (b)(1) of the Proposed Definition exists in order to avoid a "definitional loop."[16] Regardless of the validity of that justification, paragraph (b)(1) generates definitional problems of its own by creating situations in which "specially designed" has no meaning whatsoever. If "specially designed" plays no definitional role in the control of a USML enumerated item (*i.e.*, an item not within a non-catch-all provision of the USML), then "specially designed" should be eliminated from the description of that enumerated item.

[14] Proposed Definition at 36,410.
[15] Indeed, the definition of a catch-all paragraph provided by the State Department explicitly notes that "specially designed" is the control criterion used in such paragraphs. Amendment to the International Traffic in Arms Regulations: Definition for "Specially Designed," 77 Fed. Reg. 36,428, 36,432 (June 19, 2012).
[16] Proposed Definition at 36,410.

Alternatively, if "specially designed" does play a substantive role in the control of an enumerated item, then the term should be given a clear meaning — and it should be the same one used throughout the USML and CCL.

The solution to the "definitional loop" problem referenced by BIS is not to create a term with no meaning, but rather to eliminate all situations in which a "definitional loop" might arise by removing "specially designed" from all places in the regulations where it is not needed. Having "specially designed" mean different things in different instances or, even worse, providing no meaning whatsoever to "specially designed" in certain instances is in complete opposition to BIS' stated goal — supported by SIA — of developing a single, cohesive and unified definition of this important and often-used term.

D. The Proposed Definition Covers Both End Items and Components, But Applies Quite Differently to End Items and Components

While it is true that the Proposed Definition nominally covers all items, it is not a positive, unified definition that applies equally to all items. For no apparent reason and without any convincing justification, the Proposed Definition applies a straightforward positive definition to end items, but applies a convoluted "catch-and-release" definition to parts, components, accessories and attachments. This dichotomy is unwarranted and should be eliminated.

The same positive definition consistent with the natural meaning of the term "specially designed" should apply to all items. Moreover, the Proposed Definition does not apply to "components that were "specially designed" for particular end items" if the components are enumerated on the USML. As noted in the previous section, that definitional vacuum should be eliminated.

VI. Several Of The Rationales Provided By BIS In Support Of The Proposed Definition Are Unconvincing And Warrant Scrutiny

A. It Is Not Apparent That The Proposed Definition Applies the "Normal Commercial Use" Carve Outs

BIS claims that the Proposed Definition would "consistently apply the normal commercial use carve outs."[17] However, the term "normal commercial use" is never defined. Accordingly, it is unclear whether the Proposed Definition actually would "consistently apply the "normal commercial use" carve outs." "Normal commercial use" should include having a reasonable expectation of use within a civil, commercial application, such that if the developer of a component has a reasonable expectation that the component will be incorporated into civil, commercial end items, then the component should be in "normal commercial use" — regardless of the extent to which the component is incorporated into defense articles. The regulation should define "in normal commercial use" to encompass a reasonable expectation that the component

[17] Proposed Definition at 36,410.

will be incorporated into a civil, commercial end item or utilized in a civil, commercial application.

B. The Directorate for Defense Trade Controls Should Not Have the Discretion to Override the Plain Meaning of "Specially Designed"

In discussing the Proposed Definition, BIS notes that

> the ITAR and the new "600 series" ECCNs should not control items that (a) have predetermined civil applications and performance equivalents to those used for civil applications and (b) do not have significant military or intelligence applicability such that control under the new ITAR (or new "600 series" ECCN) is warranted.[18]

This statement implies that both requirements must be met in order for controls not to be warranted, which in turn implies that if the Directorate for Defense Trade Controls ("DDTC") and/or BIS determines that an item has "significant military or intelligence applicability" it may control that item even if the item clearly falls outside of the definition of "specially defined." If an item falls outside of control as a result of being not "specially designed," then that should be the end of the matter. Neither DDTC nor BIS should have the discretion to impose controls on such an item by denying the actual character of the item simply based on a belief that the item has "significant military or intelligence applicability."

At a minimum such a policy would render the entire classification process opaque and indeterminate — contrary to the express goal of BIS. More importantly, it would significantly undercut the usefulness of a "specially designed" definition, given that such a definition could be overridden at any time based on a finding of "significant military or intelligence applicability." The policy of the U.S. government should be that any item, and any IC in particular, having civil applications and performance equivalents to those used for civil applications or a reasonable expectation of such civil applications and performance equivalents, *i.e.*, in normal commercial use — will be deemed not "specially designed" for munitions items of applications. Any different policy would undercut the usefulness and efficacy of a "specially designed" definition, especially as applied to ICs.

As BIS itself notes in its discussion of paragraph (b) of the Proposed Definition:

> [I]n general, a commodity should not be ITAR controlled if it has predominant civil application or has performance equivalent . . . to articles used for civil applications. If such an article nonetheless warrants control under the ITAR because it provides the U.S. with a critical military or intelligence advantage or for another reason, then it is or should be enumerated on the USML . . . .[19]

[18] Proposed Definition at 36,410.
[19] Proposed Definition at 36,413.

C. The Example for Paragraph (a)(1) Evidences The Applicability of That Paragraph to Components

The example used by BIS to illuminate paragraph (a)(1) of the Proposed Definition contrasts a component having properties that allow a robot to conduct 2D image processing (and therefore is not peculiarly responsible for achieving or exceeding the robot's controlled characteristics) with a component having properties that allow a robot to perform in real time full three-dimensional image processing (and therefore is peculiarly responsible for achieving or exceeding the robot's controlled characteristics).[20] That example conclusively demonstrates that, as is the case for end items, it is quite feasible to differentiate components that are peculiarly responsible for achieving the controlled parameters of an end item from components that are not. Nothing about the example provided differentiates end items (or equipment) from components. That the example could easily apply to a component underscores the appropriateness of including components in paragraph (a)(1) of the Proposed Definition.

The explanation of and justification for paragraph (a)(1) — an item is not "specially designed" unless "someone did something during the item's development so that it would achieve or exceed the performance levels, characteristics, or functions described in a referenced ECCN or USML paragraph"[21] — does and should apply with equal force to components as it does to end items. There is no reason provided, and no compelling reason available, why such should not be the case, especially with respect to ICs.

D. Paragraph (a)(1) and (a)(2) Are Quite Dissimilar in Their Scope and The Sole Justification Offered for Paragraph (a)(2) of the Proposed Definition Is Inadequate to Support The Need for That Paragraph

As an initial matter, BIS claims that paragraph (a)(2) of the Proposed Definition "is similar to (a)(1)."[22] That claim appears to be a gross overstatement. The scope of paragraph (a)(2) is far broader than the scope of paragraph (a)(1). While paragraph (a)(1) captures only items that are "peculiarly responsible" for the performance levels, characteristics or functions listed in the relevant CCL or USML category, paragraph (a)(2) captures all parts and components that are merely necessary for an enumerated item to function as designed. In doing so, paragraph (a)(2) appears to capture virtually all components, as almost all components may be said to be "necessary" for the proper functioning of the end items into which they are incorporated. These provisions do not appear "similar" in their scope.

In addition, BIS maintains that paragraph (a)(2) of the Proposed Definition is necessary "because not all descriptions of commodities on the USML and the CCL include performance levels, characteristics, or functions as a basis for control."[23] That justification is insufficient. Many components covered by the USML and CCL appear in provisions that do contain

[20] Proposed Definition at 36,419.
[21] Proposed Definition at 36,412.
[22] Proposed Definition at 36,412.
[23] Proposed Definition at 36,412.

descriptions with performance levels, characteristics or functions as a basis for control. In those frequent instances, there is no need for paragraph (a)(2) of the Proposed Definition.

It is inappropriate and counterproductive to force an overreaching definition on all components when only a subset of components warrants such treatment. Moreover, and perhaps more importantly, even in those instances where an end item's control criterion does not contain any performance level, characteristic or function, it is usually possible to distinguish what features make the item inherently military or sensitive to national security. Accordingly, even in those instances, it is appropriate to limit the "specially designed" definition to only those components that are peculiarly responsible for the controlled attributes of the end items into which the components are incorporated.

E. The Example Of A "Component" Excluded Under Paragraph (b)(1) and the Discussion of Positively Listed Components Evidences a Fundamental Flaw in The Treatment of Components

In its discussion of the Proposed Definition, BIS provides an example of a component that would be excluded under paragraph (b)(1) of the Proposed Definition.[24] BIS also notes at least twice that a component may be subject to export controls even if it is not "specially designed" for a controlled end item if the component is positively listed on the USML or CCL.[25] Those examples evidence a fundamental discontinuity in the structure of the USML and the CCL. No component should be enumerated on either the USML or the CCL as an end item. Because a component, by definition, is useless unless and until it is incorporated into an end item, all controls on components, with the exception of those components already enumerated as such in Category 3 of the CCL, should be derivative, *i.e.*, determined entirely by the end item(s) into which the component is incorporated. If a component is "specially designed" for a controlled end item, then the component should be controlled; if a component is not "specially designed" for any controlled end item, then the component should not be controlled as an end item itself and should be subject only to controls beyond those applicable to EAR99 items if it already is an enumerated component in Category 3 of the CCL. Any other practice violates the definition and inherent characteristic of components.

Furthermore, it undermines the overriding theory behind the "specially designed" definition to say that a component incorporated into USML and CCL end items should be controlled under the USML — as the BIS example does. Such a component is inherently dual use and hence not "specially designed" for the USML item into which it is incorporated. Controls imposed on such a component should be under the CCL, not the USML. Indeed, if BIS' claim that the Proposed Definition would "consistently apply the "normal commercial use" carve outs"[26] is to be at all credible, it should be the case that a component incorporated into both USML and CCL end items is employed in "normal commercial use" and accordingly should not be "specially designed" for purposes of the USML. "Normal commercial use" should describe

[24] Proposed Definition at 36,413.
[25] Proposed Definition at 36,415.
[26] Proposed Definition at 36,410.

any actual or reasonably expected use in a civil, commercial end item or within a civil, commercial application.

F. BIS' Discussion of General Purpose ICs Evidences The Illogic Underlying Treatment of ICs As End Items

In discussing the Proposed Definition, BIS notes that

> [n]on-application specific general purpose integrated circuits that are not designed for a particular application would not be "specially designed" items, even if they are used in controlled end items. [27]

SIA endorses this clarification and urges BIS to implement it. At the same time, this clarification evidences the illogic underlying USML Category XV(d). USML Category XV(d) captures all ICs that meet certain technical parameters regardless of whether the ICs are ASICs. As SIA has repeatedly pointed out, and evidenced in the BIS discussion quoted above, such a practice of controlling an IC as an end item is misguided, inappropriate and counter-productive.

VII. If A "Catch-And-Release" Methodology Is Retained, Then Modifications Should Be Made To The Current Structure

A. The Definition of "End Item" Should Be Modified

The definition of "end item" put forward by BIS is flawed and needs modification. End items must be able to operate by themselves and perform functions independent of other items. As currently drafted, the definition of "end item" could capture items that squarely fall within the definition of "component." For example, an IC, which clearly meets the definition of a "component," also meets the definition of an "end item," as it is "an assembled commodity ready for its intended use" and requires only energy "to place it in an operating state." Yet an IC cannot perform any meaningful operation by itself; instead, it must be connected to something else.

If wholesale confusion is to be avoided, there should not be any overlap between the definition of an "end item" and the definition of a "component."[28] In order to avoid such a result, BIS should modify its definition of "end item" as follows:

[27] Proposed Definition at 36,410.

[28] Properly defined, a "component" should have three distinguishing characteristics: (1) it is an assembled item; (2) it is used in another item; and (3) it has no functionality or performance capability on a stand-alone basis, but only when incorporated into another item. The definition of "component" put forward by BIS captures the first two distinguishing characteristics, but fails to capture the third distinguishing characteristic. This problem may be resolved by distinguishing "components" from "assemblies," with an "assembly" defined as an item sharing the first two distinguishing characteristics of a "component," but, unlike a "component," having functionality or performance capability on a stand-alone basis.

> *End item.* This is an assembled commodity ready for its intended use, **capable of operating by itself and performing functions independent of any other item**. Only ammunition, fuel or other energy source is required to place it an operating state. Examples of end items include ships, aircraft, **computers,** firearms, and milling machines.

It is noteworthy that BIS itself included the requirement of "stand-alone use" in its original "end item" definition.[29] BIS erred in removing that requirement and should now re-insert it into the "end item" definition as indicated above. This definition should apply with equal force to both the CCL and the USML. Consistent with this definition, the universe of "defense articles" should consist entirely of end items, that is, items that need only an energy source to operate on a stand-alone basis and in accordance with their intended use.

B. If Paragraph (a)(1) of The Proposed Definition is Not Modified, Then Paragraph (a)(2) Should Be Modified to Distinguish Between Parts and Components Used With or In Enumerated End Items With Specified Performance Levels, Characteristics, or Functions and Parts and Components Used in Other End Items

Paragraph (a)(2) of the Proposed Definition should be modified to distinguish between parts and components used with or in enumerated end items with specified performance levels, characteristics, or functions in the relevant ECCN or USML paragraph and parts and components that are used with or in other types of end items. As noted above, the logic supporting the treatment of end items in paragraph (a)(1) applies with equal force to parts and components, and the only compelling reason not to apply the "peculiarly responsible" standard to certain parts and components is that in some unusual instances it may be difficult to do so.

Accordingly, paragraph (a)(2) of the Proposed Definition should be modified as follows:

> (2) **(i) In the case of a part or component for an enumerated end item having stated performance levels, characteristics or functions, is an application-specific part or component having properties peculiarly responsible for achieving or exceeding the performance levels, characteristics, or functions of the enumerated end item**; **or (ii) In the case of a part or component not meeting the requirements of (i),** is **an application-specific** ~~a~~ part or component **required** ~~necessary~~ for an enumerated ~~or referenced commodity~~ **end item on the CCL to function as a national security-controlled end item** ~~or defense article to function as designed~~ **or for an enumerated defense article on the USML to function as a defense article.**[30]

[29] July 2011 Proposal at 41,980.

[30] As discussed above, even for items with no stated performance levels, characteristics or functions, it is surely possible to distinguish what features make the item inherently military or sensitive to national security. Accordingly, an ASIC used in a targeting system in a jet fighter would be "particularly responsible for achieving the control parameters" of the jet fighter, while an ASIC used in a navigation system or for general avionics purposes in the same jet fighter would not be "particularly responsible for achieving the control parameters" of the jet fighter.

(continued on next page . . .)

And the following additional Note should be added to the definition:

> **Note to paragraphs (a)(2):** *In the case of integrated circuits, only ASICs are captured by this definition, where "ASIC" means an integrated circuit developed and produced for a specific application or function and for a single customer*.

The replacement of "necessary . . . to function as designed" with "required . . . to function as a national security-controlled end item . . . or as a defense article" in paragraph (a)(2) is needed in order to narrow the scope of that "catch" provision and target it more specifically to parts and components that are tied to the controlled attributes of an end item or defense article. As currently drafted, paragraph (a)(2) may capture virtually all parts and components. Such an all-encompassing "catch" is inappropriate. Instead, only parts and components contributing significantly to the controlled attributes of an end item or defense article should be deemed "specially designed."

C. Paragraph (a)(3) of The Proposed Definition Should Be Narrowed To Capture Only Accessories and Attachments Necessary to the Functioning of an End Item

As currently drafted, paragraph (a)(3) of the Proposed Definition captures all accessories and attachments used with enumerated or referenced end items. Given that the definition of "accessories and attachments" includes all items that enhance the usefulness or effectiveness of an end item,[31] virtually every "accessory" and "attachment" by definition will meet the requirement of paragraph (a)(3) of the Proposed Definition.

It is inappropriate and illogical for BIS to capture all accessories and attachments within the "specially designed" definition. Accordingly and consistent with the recommended treatment of components, BIS should revise paragraph (a)(3) of the Proposed Definition to capture only those accessories and attachments that are peculiarly responsible for the controlled characteristics of the end items with which they are used.

D. Paragraph (b)(1) of the Proposed Definition Should Be Eliminated, Rather Than Imposing a Convoluted Solution to a Self-Created Problem

Paragraph (b)(1) of the Proposed Definition stipulates that a part, component, accessory or attachment will not be "specially designed" if it is enumerated in a USML paragraph. For purposes of the USML, this provision essentially limits the applicability of the "specially designed" definition to parts and components that are within "catch-all" provisions of the USML,

---

(continued from previous page . . .)

Similarly, components developed for a Helicopter Crew Safety System (HCSS) should not be considered "peculiarly responsible" for the controlled characteristics of a military helicopter, even if those components are developed to meet certain military specifications and requirements.

[31] Proposed Revisions to the Export Administration Regulations (EAR): Control of Items the President Determines No Longer Warrant Control Under the United States Munitions List (USML), 76 Fed. Reg.41,958, 41,980 (July 15, 2011).

notwithstanding that "specially designed" may be employed with respect to parts and components listed outside of "catch-all" provisions of the USML. Accordingly, this paragraph would render the term "specially designed" meaningless whenever that term applies to parts and components outside of a catch-all provision of the USML.

It is untenable for a term to be devoid of any meaning in certain circumstances, and creating such a scenario is not a solution to any perceived problem of a "definitional loop." The appropriate (and obvious) solution to the perceived "definitional loop" problem is for DDTC to ensure that parts and components appear only in catch-all provisions of the USML.[32] As noted above, parts and components serve no purpose on their own and derive their usefulness only when used in or with end items. Any controls imposed on parts and components should be derivative in nature (*i.e.*, derived entirely from the end items into which the parts and components are incorporated), and, accordingly, parts and components, with the exception of those components already enumerated as such in Category 3 of the CCL, should appear only within catch-all provisions of the USML and the CCL.

If parts and components were removed from non-catch-all provisions of the USML, then there would be no need for paragraph (b)(1) of the Proposed Definition and that paragraph could be eliminated without effect.

E. "Commodity" Should be Replaced With "End Item" in Paragraphs (b)(3) and (b)(4) of the Proposed Definition

The term "commodity" used in paragraphs (b)(3) and (b)(4) of the Proposed Definition is defined by BIS as "any article, material, or supply except technology and software."[33] The term therefore includes parts, components, accessories, attachments and end items. Yet, paragraphs (b)(3) and (b)(4) of the Proposed Definition pertain only to parts, components, accessories and attachments that are used in or with end items. Accordingly, "commodity" should be replaced with "end item" throughout paragraphs (b)(3) and (b)(4).

F. The Phrase "Same Form and Fit" Should Be Eliminated From Paragraph (b)(3) of the Proposed Definition

The exclusion contained in paragraph (b)(3) of the Proposed Definition is limited to parts, components, accessories and attachments with the "same form, fit and performance capabilities" as parts, components, accessories or attachments used in or with an non-enumerated end item. While the requirement that items have the same performance capabilities is well-reasoned and appropriate, the requirement that items have the same form and fit is baseless and inappropriate. Form and fit are inherently superficial and non-substantive characteristics and as such should play no role in the control status of a part, component, accessory or attachment. Two components that have equivalent performance capabilities should be deemed to be substantively

[32] In particular, USML category XV(d) of the USML should be eliminated and all components currently captured by that provision should instead by captured by the catch-all provisions of the USML.
[33] 15 C.F.R. §772.1.

identical and therefore worthy of the same control status, regardless of any differences in form and fit between the two components.

Accordingly, BIS should revise the first section of paragraph (b)(3) of the Proposed Definition as follows:

> (3) Has the same ~~form, fit, and~~ **basic** performance capabilities**, or substantively equivalent performance capabilities,** as a part, component, accessory, or attachment used in or with a**n end item** ~~commodity~~ that:

G. "Described" Should Be Replaced with "Enumerated" Within Paragraph (b)(4)

The term "described on the CCL" used in paragraph (b)(4) has no defined meaning. In order to clarify that paragraph and provide the appropriate parallelism, "described on the CCL" should be replaced with "enumerated on the CCL."

There are two possibilities if such a revision is made: (1) the meaning of the paragraph remains the same, but is clarified, or (2) the meaning of the paragraph changes. If (1) is the case, then there is every reason to make the change. If (2) is the case, then BIS must intend that the set of items "described on the CCL" is different from (and presumably broader than) the set of items "enumerated on the CCL." However, if that is the case, then it would be possible for "commodities not enumerated on the CCL" to also be "commodities described on the CCL," and, accordingly, the word "and" in paragraph (b)(4)(i) would be rendered superfluous and moot — at least in certain circumstances. Thus, under any circumstance, BIS should replace "described" with "enumerated" in paragraph (b)(4).

H. The Term "Particular Application" in Paragraph (b)(5) of the Proposed Definition Is Ambiguous and Should Be Modified with "Of A Particular End Item"

Paragraph (b)(5) of the Proposed Definition excluded from the definition of "specially designed" those parts, components, accessories or attachments that were or are being developed with no reasonable expectation of use for a "particular application." SIA endorses this exclusion and expects that it means that, in the case of ICs, only certain ASICs may be "specially designed." However, it is not entirely clear that such will in fact be the meaning of this exclusion, as the term "application" can be subject to wide-ranging interpretations.

If "application" is interpreted very broadly and given a meaning that would encompass, for example, an activity as broad as computing, communications, data processing, signal processing or data conversion, then very few items would ever be excluded from the "specially designed" definition under paragraph (b)(5) — rendering the paragraph largely, if not entirely, irrelevant. Instead, this paragraph should be given particular scope and meaning by ascribing a relatively narrow definition to "application."

This may be achieved by an appropriate regulatory history and by making the following modification to paragraph (b)(5):

> (5) Was or is being developed with no reasonable expectation of use **only** for a **customized or specific** ~~particular~~ application **and in a particular end item.**

This modification would tie "application" to a specific end item and so would narrow the scope of that term, thereby infusing the exclusion provided by this paragraph with meaning and usefulness.

In addition, the following example of a component excluded under paragraph (b)(5) provided by BIS should be included in the regulations in a Note to paragraph (b)(5):

> **Note to paragraph (b)(5):** A component that would not be "specially designed" as a result of paragraph (b)(5) is one that was developed for general or multi-purpose or non-customized applications. For example, many catalog electronic components are designed as basic building blocks for other equipment, regardless of whether the equipment is military or civilian, controlled or uncontrolled. At the same time, a component would not be "specially designed" if it is developed for a particular class or category of end items that have general or multi-purposes applications (e.g., general purpose computers or communications equipment). In contrast, a component that would not be excluded from the "specially designed" definition under paragraph (b)(5) would be one that is customized and/or specifically adapted for a particular use in a specific end item.

Inclusion of this new note in the regulations will clarify the intended scope of the exclusion contained in paragraph (b)(5).

VIII. Conclusion

SIA urges BIS to simplify and clarify the "specially designed" definition such that the definition captures the natural meaning of that term in a positive fashion without any need for overreaching and exclusions or exceptions. SIA also maintains that it is both logical and feasible to tie the control of a "specially designed" component to the related end item, but only to the extent that the "specially designed" component is peculiarly responsible for the controlled parameters or the controlled character as a whole of the end item.

If BIS for whatever reason chooses not to implement SIA's recommendations for all components, then, at a minimum, BIS should implement targeted modifications or additions to the Proposed Definition (*e.g.*, through a targeted Note to the definition) such that SIA's recommendations are implemented with respect to ICs.

* * * * *

SIA appreciates the opportunity to comment on the proposed "specially designed" definition and looks forward to continuing its cooperation with the U.S. Government on this subject. Please feel free to contact the undersigned or SIA's counsel, Clark McFadden of Orrick, Herrington & Sutcliffe LLP, if you have questions regarding these comments.

Cynthia Johnson
Co-Chair, SIA Trade Compliance Committee

David Rose
Co-Chair, SIA Trade Compliance Committee

OHSUSA:750960496.11

J:\Export Controls\SIA Comments to BIS.doc

PUBLIC SUBMISSION

Docket: DOS-2012-0043
Amendment to the International Traffic in Arms Regulations: Definition for ‘‘Specially Designed’’

Comment On: DOS-2012-0043-0001
International Traffic in Arms Regulations: Definition for "Specially Designed"

Document: DOS-2012-0043-DRAFT-0003
Comment on DOS-2012-0043-0001

Submitter Information

Name: Howard Stanislawski
Address:
Sidley Austin LLP
1501 K St. NW
Washington, DC, 20005
Email: hstanislawski@sidley.com
Phone: 2027368566

General Comment

On behalf of one of our clients, I am providing the comments below with regard to proposed ITAR 120.41.

Attachments

Comments on Proposed ITAR 120.41

COMMENTS REGARDING PROPOSED ITAR 120.41, "SPECIALLY DESIGNED"

August 2, 2012

We appreciate the opportunity to submit the comments provided herein. We believe that incorporation into the proposed ITAR provision of the suggestions that are made here would provide greater clarity regarding the proper exclusion of certain types of commodities from being treated as "specially designed" for the purposes of the ITAR (and the EAR). Specifically, we believe that application of these suggestions would clarify what we understand to be a primary purpose of this effort, namely, the treatment of commercial products, and, even more specifically, commercial-off-the-shelf (COTS) items under the ITAR, as not being captured by the "specially designed" catch-all. As we discuss below, the scenarios described in this set of comments are commonplace in the commercial world yet could fall within the definition of "specifically designed" as currently proposed, unless their exclusion is specified in the final rule. We hope that these comments will be helpful to DDTC as it proceeds to revise and finalize the proposed rule.

Scenarios Involving Treatment of COTS Items

There are various real life scenarios in which very small adaptations might be made to COTS items – none of which detract from their COTS status – yet could possibly bring the treatment of such COTS items within the scope of paragraph (a) of the proposed rule, principally because of the wide scope of the definition of "development" provided in Note 2 to paragraph (b)(3), which includes, among other things, "design, design research, design analysis, design concepts…design data…layouts." Such examples include the following:

(a) A wire harness assembled from several COTS items, none of which are controlled by the ITAR, but the identification of the shape of the harness and the manner in which its COTS components fit together might be construed as falling within the definition of "development," and the wire harness is necessary for the ultimate defense article to function as designed;

(b) Selections made from a manufacturer's commercial matrix catalogue of COTS items, so that a product such as a flow meter can be assembled with a probe of a specified length and with specified intervals, but the manner in which the flow meter is assembled might be construed as falling within the definition of "development," and the flow meter is needed for the ultimate defense article to function as designed;

(c) A COTS motor capable of operating at 5,000 rpm is throttled down to 2,000 rpm for use in a defense article by attaching a COTS governor to the COTS motor, so that application of the COTS governor can be construed as introducing a "design" feature, and the motor is needed for the ultimate defense article to function as needed; in this situation, the only change with respect to the COTS motor is a degradation of its performance capability;

(d) As is standard in the commercial world, a COTS printed circuit board is ordered that consists of a selection of COTS components, assembled in accordance with the customer's configuration requirements;

(e) COTS pipes, bars or plates are cut to lengths specified by the customer to allow for storage or transportation of the items to the customer's location, with no other changes being made to the COTS items;

(f) COTS components are acquired for ultimate incorporation into a defense article, and more rigorous testing standards are applied to the COTS components than testing standards generally used in the normal course by the purchaser of the COTS components; however, no changes are made to the COTS components themselves as a result of the more rigorous testing; or

(g) COTS items are altered as a result of other unrelated laws, regulations, or customer preferences, without detracting from their COTS status. For example, a COTS item that in its standard formulation is coated with one substance might have to be coated with a different substance because of environmental regulatory requirements entailing the use of "green" processes, for which the original coating would not qualify. Neither the operation nor the performance capabilities of the COTS items are affected by this environmental requirement, but it could be seen as emerging from a "design" process, and such COTS items could be "necessary for an enumerated defense article to function as designed."

In all of the above examples, the performance capabilities of the COTS items are not enhanced in any way; however, the form or fit of the COTS items might be changed, a more rigorous testing standard might be applied, or a different type of process might be applied. In each of these scenarios, it appears possible that the requirements of paragraph (a) of the proposed rule might be satisfied, so that the only way in which the COTS items would not remain caught within the "catch-all" would be through modifying the language of the exceptions listed in paragraph (b).

Proposed Revisions to Rule

1. In order to deal with the problem identified above, we suggest the following:

In paragraph (b)(3) of the proposed final rule, delete the words "form, fit and," so that the provision reads "[h]as the same or lower performance capabilities as a part, component, accessory, or attachment used in or with a commodity that…[,]" with the text continuing as proposed through the end of this paragraph.

Application of such a provision would focus on performance as the key measure for determination of whether a COTS item is "specially designed," so that, if the same or higher performance capabilities are available for items that are not in development and that are not enumerated on the USML, the item would be viewed as not "specially designed," even if its form or fit might have been altered slightly to meet customer requirements. Such a standard would also allow exclusion from the catch-all of the scenarios described above regarding environmental substitution of coating and enhanced testing requirements, since these applications would not enhance performance capabilities.

2. For clarification purposes, we would also suggest that the fourth sentence in the introductory paragraph under proposed Section 120.41 be changed slightly, so that it reads as follows: "Commodities described in any one of paragraphs (b)(1) through (5) of this section are

not “specially designed” commodities…[,]” with the same text continuing through the end of this sentence.

Thank you in advance for your attention to these comments.

From: Bump, Mark W. [mailto:mark.bump@timken.com]
Sent: Thursday, August 02, 2012 9:20 AM
To: DDTC Response Team; publiccomments@bis.doc.gov
Cc: Christensen, Larry
Subject: RE: Specially Designed Definition (RIN 1400-AD22) and (RIN 0694-AF66)

Via Email

Ms. Candace M. J. Goforth
Director
Office of Defense Trade Controls Policy
U.S. Department of State

Re: RIN (1400–AD22)

DDTC proposed definition of "specially designed" 77 Fed. Reg. No. 118, 36428-36433 (June 19, 2012).

Via Email

Mr. Timothy Mooney
Regulatory Policy Division
Bureau of Industry and
Security U.S. Department of
Commerce 1401
Constitution Avenue, N.W.
Washington, DC 20230

Re: Docket No. 120403245–1034–01, RIN 0694–AF66**,** BIS proposed definition of "specially designed", 77 Fed. Reg. No. 118, 36409-36419 (June 19, 2012).

Dear Ms. Goforth and Mr. Mooney**:**

The Timken Company ("Timken") appreciates this opportunity to comment on the proposed rules published in the Federal Register by the U.S. Department of Commerce, Bureau of Industry and Security ("BIS") and the U.S. Department of State, Directorate of Defense Trade Controls ("DDTC") on July 19, 2012 (77 Fed. Reg. 118, 36409-36419 and 36428-36433, respectively) regarding the proposed

definition for “specially designed.” Because this letter addresses the largely identical definition of “specially designed” and the relationship of the term to the proposed revisions of the United States Munitions List (“USML”) and the Commerce Control List (“CCL”), we address this letter to both export control agencies.

Background

Timken is a 110 year old international business, with an expertise in friction management and power transmission. We are headquartered in Canton, Ohio. Our web site is at: www.Timken.com. Our most famous product is bearings.

In the past 10 years, the global "footprint" of bearing manufacturing has changed dramatically. China is the world's largest bearing manufacturing country, passing the U.S. and Japan in 2007. European and Japanese bearing makers have made significant advancements. Japanese bearing makers have made bearings for spaceflight, using "home grown" capabilities. European aerospace and defense customers want "ITAR free" aircraft and weapons, and our European competitors have been able to provide bearings to accomplish this. Timken continues to lose business with our aerospace and defense customers in Western Europe, as these customers push their preference for "non-ITAR" bearings. A good example is the EC-175 helicopter.

Introduction

We commend DDTC and BIS for their efforts to amend the International Traffic in Arms Regulations (“ITAR”) and the Export Administration Regulations (“EAR”) as part of the President’s ongoing Export Control Reform effort. The proposed definition of “specially designed” is a significant improvement over earlier versions of the definition. It is quite apparent from the draft, from comments of agency officials, and from our experience with commodity jurisdiction determinations that it was an enormous challenge to address all nine of your goals with the definition. We believe the current proposal can be improved further with clarifications via interpretation of the new elements.

In the interest of national security, we believe it is important to publish the redrafted United States Munitions List (“USML”) categories and Commerce

Control List ("CCL") entries to reflect positive, objective criteria in the control lists and avoid overlapping or conflicting claims of jurisdiction. Because the definition of the term "specially designed" is a precondition to the publication of the control lists in final form, we believe the proposal to define "specially designed" should be finalized with clarifying interpretations of the type suggested below.

We suggest the following specific comments on key aspects of the proposed definition:

I. **Aircraft Parts and Components "Specially Designed" – Discussion re Timken 629-code Aircraft Wheel Bearings Previous Commodity Jurisdiction Determination**

We believe that DDTC and the Administration should retain the discretion to issue a determination that a component is not subject to ITAR jurisdiction under proposed Category VIII(h)(1)[1] and that a commodity jurisdiction ("CJ") determination granting EAR jurisdiction and suggesting an ECCN 9A991.d. classification should not be reversed with the publication of the proposed definition of "specially designed". An example is the recent commodity jurisdiction determination and suggested classification of Timken 629-code[2] aircraft wheel bearings.[3] We believe this determination should not be reversed even when certain of the components would otherwise be considered "specially designed" under the BIS and DDTC proposals to define "specially designed", rewrite Category VIII, and establish the 600 series for aircraft parts and components. Specifically, the DDTC decision at Matter No. 1244-11 should be grandfathered; the described bearings should be classified under ECCN 9A991.d. and not under proposed ECCN 9A610.y99. The U.S. Government also should not reverse CJ Case No. 1244-11 which is a consolidated response to all three requests (February 17, 2012) and should not change the ECCN 9A991.d. classification for the specific bearings reviewed in this CJ determination.

---

[1] 76 Fed. Reg. 68694, 68697 (November 7, 2011) (hereafter Category VIII).

[2] The "629-code" is an internal Timken standard that defines a common set of manufacturing tolerances, testing procedures, and testing frequencies described in the CJ requests discussed in this paragraph. The "629-code" does not refer to 629 different bearings.

[3] Timken 629-code Aircraft Wheel Bearings and Recent Commodity Jurisdiction Determination Made by DDTC under Matter Case No. 1244-11 (combining Case Nos. 1245-11 and 1246-11), request submitted Dec. 23. 2011, DDTC Determination Issued Feb. 17, 2012.

The three CJ requests made clear that, of the 385 tapered roller bearings reviewed in the CJ, some are used exclusively on military aircraft, a handful were not derived from civil aircraft bearings and are of a unique geometry[4], and some of the bearings are used on low observable aircraft identify in proposed Category VIII published well before the CJ determination.[5] Thus, some of the bearings are "necessary" under (a)(2) and are not released by (b)(3) of the proposed definition of "specially designed." That said, all civil and military landing gear wheel bearings result from identical production methods and tolerances, which we believe influenced DDTC in its conclusion that all of the bearings fall outside the category of commodities that warrant ITAR controls.

We ask the Administration to confirm that the licensing agencies have the discretion to maintain an ECCN 9A991.d. classification in the above circumstances as well as in future CJ decisions the Administration will make regarding aircraft parts, components, attachments, and accessories given the proposed definition of "specially designed." We do not believe that a part or component unique for a military aircraft should presumptively be subject to proposed ECCN 9A610.y.99. The current Guidance in the Preamble to the proposed Transition Rule supports this position. When referring to a part or component that DDTC has determined is not subject to the ITAR, the Guidance provides:

> If it was identified or, as a matter of law or the result of a subsequent commodity classification ("CCATS") determination by Commerce, controlled by another legacy ECCN, such as 9A991.d, 7A994, or 9A003, that ECCN would continue to apply to the item.

Preamble to Transition Rule at 76 Fed. Reg. 68675. 68681 **(**November 7, 2011).

II. Conflicts between Proposed Category VIII(h)(1) and Proposed ECCN 9A610.y.

[4] See, page 10 of CJR 1244-11.

[5] See, pages 14-15 of CJR 1246-11 of certain low observable aircraft described in proposed Category VIII(h)(1).

As proposed, Category VIII(h)(1) and the items specified in ECCN 9A610.y contain conflicting and overlapping language. Officials at the Update 2012 Conference explained that Category VIII(h)(1) will prevail when this overlap occurs. We also learned that the only other example of this resolution of conflicting language occurs in proposed Category XX. Conflicts between the 600 series and USML categories for parts, components, accessories and attachments are resolved in favor of the 600 series. We urge the agencies to confirm this information given the structure of the proposed definition of "specially designed" and the Administration's objective to avoid conflicts between the revised USML and CCL.

III. Changes to an EAR Item During the Production Period for Feature Enhancements, Cost Reductions or Quality Improvements that Do Not Change the Basic Performance or Capability of the Commodity.

A significant issue for Timken under the Export Control Reform proposals thus far pertains to the changes that a manufacturer may make to a component subject to the EAR without creating a different item and potentially changing the classification or agency jurisdiction. This is particularly important, given the proposed definition of "specially designed." In summary, the proposed definition of "specially designed" provides that a component classified under EAR99 or an ECCN other than the proposed 600 series will retain that agency jurisdiction and classification so long as (a) the changes are for feature enhancements, cost reductions or quality improvements, and (b) changes do not alter the "basic performance or capability of the commodity. . .":

> **Note to paragraph (b)(3):** Commodities in "production" that are subsequently subject to "development" activities, such as those pertaining to quality improvements, cost reductions, or feature enhancements, remain in "production." However, any new models or versions of such commodities developed from such efforts that change the basic performance or capability of the commodity are in "development" until and unless they enter into "production."

77 Fed. Reg. 36409, 36419 (June 19, 2012) (hereafter, "BIS Proposed Specially Designed Rule").

Timken offers thousands of bearings in a vast variety of geometries and performance capabilities that we believe meet the "production" standard in the Note to (b)(3) even though many such Timken bearings are used in military applications. Its existing offerings include a small number of predefined options for base bearings.

A base bearing contains a single type of anti-friction device, such as a tapered bearing, ball bearing, cylindrical bearing, or spherical bearing anti-friction element. A bearing with a different type of anti-friction element is a different base bearing. There are other unique features for a single base bearing assembly. These include the amount and direction of loads it will carry, torque needed to turn a shaft in the base bearing, dimension of the inner diameter for the axle, length of space taken on the axle, other basic geometry, and, as noted above, the type of anti-friction element. A bearing with a different type of anti-friction element is a different base bearing and a different product. Timken believes that changes to any of the above types of performance capability, form and fit to a base bearing which alter the basic performance or capability of the base bearing will constitute new “development” of a new model that would be outside the scope of the allowable “production” period.

We urge the Administration to confirm that the following types of changes to a base bearing are allowed in the production phase without creating a new model or new development, i.e., that a base bearing with the features described in this paragraph will continue to constitute the identical “form, fit, and performance capability” as that phrase is used in (b)(3) of the proposed definition of “specially designed.” Timken is confident that none of the following features, when applied to a base bearing assembly, will change its “basic performance or capability”, which is defined by the elements described in the prior paragraph regarding the base bearing assembly with a unique product identification number. These optional features for a given base bearing assembly include (a) different production tolerances permitted during production and (b) testing procedures and frequency of testing during production. These features are predefined and are already in production of other based bearings. Timken’s bearing offerings also include features such as different cages, cups, and cones to retain the anti-friction elements of the base bearing in place within a base bearing assembly. The feature offerings also include different lubrication options. The “basic performance or capability” of each base model of a given bearing offered by Timken remains the same when a new customer selects that base model and then

chooses among the various features described in this paragraph. A new customer or its Timken customer representative may choose a combination of options that have not been chosen by another Timken customer in exactly the same combination of base model and features.

The offerings for both the base bearing assembly and the optional features are defined and made available to each potential customer. Most importantly, Timken has already developed the feature options and has put the options into production for many of the base bearing assemblies. Timken offers options for most of its bearings. For example, Timken has a base bearing first designed for and used in an agricultural tractor or combine. Timken may then receive a request for the same base bearing for use in a military ground vehicle after making changes with preexisting and predesigned feature options such as a different method of lubrication, which Timken has offered and made on other base bearing assemblies. The basic performance and capability of the modified bearing assembly remain exactly the same in terms of the agricultural tractor, the agricultural combine, and the military ground vehicle. As another example, Timken has a base bearing assembly for a commercial aircraft landing wheel bearing. It may then receive a request for a bearing to be used on a military aircraft using the same base model bearing assembly but using a different cage to hold the anti-friction elements in place. In fact, Timken has many such aircraft bearings modified with the above-described feature. Many of the bearing assemblies reviewed in CJ Matter Case No. 1244-11 discussed in detail at Part I of this letter fit this scenario and were reviewed by DDTC, who found them to be subject to EAR jurisdiction and suggested classification ECCN 9A991.d. See Matter Case No. 1244-11 (combining Case Nos. 1245-11 and 1246-11, request submitted Dec. 23. 2011, DDTC Determination Issued Feb. 17, 2012).

IV. Conflicts between Proposed Category VII and Series 600 for Vehicle Parts and Components

We believe the descriptions for parts and components in proposed Category VII are consistent with the descriptions for vehicle parts and components in the Series 600 proposals. Nonetheless, we are concerned about the Guidance in the preamble to the BIS proposed aircraft 600 series for the general applicability of "y.99" in relation to ITAR Categories other than Category VIII. Other categories do not have related legacy ECCNs.

We urge BIS and DDTC to maintain their discretion to reclassify a part or component as EAR99, even if it was initially captured by "y.99," where DDTC issues a determination that the ITAR does not cover the part or component. We urge the Administration to modify the text of the Guidance to permit the Administration to reclassify a part or component as EAR99 in these circumstances. We see no reason "y.99" has to be the default position if DDTC agrees another non-600 series is an appropriate classification. This suggestion is related to the proposal to amend the definition of "specially designed" and is in response to the Administration's request for examples of how the proposed rules in Export Control Reform would operate in practice if finalized in their pending form without clarification or additional guidance.

V. Application of (b)(4) of the Proposed Definition of "specially designed" to Timken Bearing Assemblies

Release pursuant to Section (b)(4) of the proposed definition of "specially designed" is determined by a developer's reasonable expectation of use as documented during development. The qualifying expectation is of a use in an unenumerated item on either the CCL or USML or such an actual use in addition to a reasonable expectation of a use in or with an enumerated item or commodity. Administration officials have indicated that a manufacturer need not revisit those expectations after the initial release of the item or commodity to the marketplace. We urge the Administration to confirm this interpretation by including clarifying language in the final rule.

Further, provision (b)(4)(i) of the BIS proposed definition "releases" from control under "specially designed" a part or component that is developed with a reasonable expectation of "use in or with commodities *described* on the CCL" (emphasis added). We suggest "described" should be changed to "enumerated" to make the definition parallel in construction to the DDTC proposed definition covering items with a reasonable expectation of use in or with defense articles enumerated and not on the USML.

At Timken, we offer some bearings based solely on a catalogue published by a competitor without market research or a request from a specific customer. Assuming the competitor's catalogue does not advertise a particular use, we urge the Administration to clarify whether the practice of meeting a

competitor's offering qualifies for release under (b)(4) of the proposed definition of "specially designed."

VI. "Particular Application" and Release under (b)(5) of the Proposed Definition of Specially Designed

Section (b)(5) of the proposed definition for "specially designed," bases the release upon the "reasonable expectation" of the manufacturer or developer that the unit is not for use for a "particular application." Timken believes that every development is for one or more "particular" applications even if the item is developed for a general purpose. For example, Timken commonly conducts market research in aerospace, vehicles, and electronics to determine whether a given function or performance level may have a market. However, that research often will not allow Timken to know whether buyers will use that function for military or civil applications or both. We do not anticipate the Administration intends (b)(5) to be an empty box and release no items or commodities. We urge the Administration to interpret (b)(5). We urge it to explain in writing whether market research precludes a release under (b)(5) if the research or other knowledge indicates a potential market for an unenumerated mechanical function or electronic function but does not indicate whether the future buyers will use the function for a civil application, a military application, or both and does not indicate whether a use or application is or is not enumerated.

VII. "Reasonable Expectation" and Release under (b)(5) of the Proposed Definition of Specially Designed

Timken believes that the proposed regulations at (b)(5) are unclear: does "reasonable expectation" have the same definition of "knowledge," including "high probability," as defined in Part 772 of the EAR? We believe the "high probability" standard is appropriate and achieves the Administration's national security goals. If this is the standard, we trust the Administration will confirm that in the final rule. However, Administration officials have indicated the "reasonable expectation" standard is established and interpreted in federal law in other areas outside of export controls and sanctions. If so, we ask the Administration to provide a clarifying note and, especially for the export control bar, to indicate which body or bodies of law have interpreted the "reasonable expectation" standard.

VIII. Metric vs Imperial Measurements in Production under Note 3 to (b)(3) of the Proposed Definition of Specially Designed

We believe the Administration should consider the release from "specially designed" based upon changes that consist solely of adjustments to internal diameters of a bearing assembly to accommodate slightly different dimensions in metric vs imperial units of measurement. Such a change should be viewed as an improvement during the production phase so long as the improvement or feature is within the existing offerings of Timken and already made by Timken with the same techniques and to the same standards (materials, tolerances, testing, and published commercial standards).

IX. Ongoing Publication or Posting of Guidance

The national security and companies manufacturing items controlled for export will greatly benefit if the export control agencies will publish examples that clarify the application of the criteria used in the various provisions of the proposed definition of "specially designed." After promulgation of the proposed rule in final form, we also urge the agencies to continue to post, on an ongoing basis, additional examples regarding end items, parts, components, accessories, and attachments that meet and do not meet the various standards within the definition of "specially designed." Publishing new interpretations periodically will ultimately provide a full and robust interpretation of each standard sufficient to permit the private sector to self-classify "specially designed" items on the CCL and commodities on the USML. Publishing examples should be more than a one-time exercise by the agencies.

X. Classification Disputes and Agency Jurisdiction

Timken supports the creation of positive control lists in order to create lists that complement each other, avoid overlaps, and avoid control gaps between the USML and the CCL. We hope that the rewriting of the lists will significantly reduce the number of conflicting claims of authority between DDTC and BIS. Below, we recommend processes that we believe will reinforce and institutionalize these goals over the long term.

First, for the fewer remaining jurisdictional conflicts, we recommend that the Administration establish a single decision-maker to resolve such disputes. For example, the National Security Advisor would be a good candidate for this role.

Second, BIS should repeal Section 734.3(b)(1)(i) of the EAR. Each control list should be considered on an equal footing without any regulatory presumptions. Rather, objective classification processes and standards should apply.

Third, DDTC should modify Section 120.3 of the ITAR to eliminate terms such as "developed, configured, adapted, or modified for a military application." It is essential to eliminate these terms in order to avoid overlapping agency jurisdiction. In resolving the few remaining ambiguities, the single-decision maker should consider each control list on an equal footing without a regulatory preference. That would be the practical result of a single agency, and it is a goal of the Administration to amend the two control lists to serve as a future single list in a single agency.

Without these procedural changes, a major flaw of the current system will remain. A well-managed corporate export control program may seek a classification or CCATs request from BIS and be left with the potential that a prosecutor or future managers of DDTC will disregard the BIS decision to the surprise of a well-intended and compliant company. We believe that senior officials in the Administration must ensure internal coordination of classification decisions of the two agencies and that such decisions must be prospective. Well-intended and compliance-minded exporters should not be left to wonder if current classification decisions by one agency of the Government will be changed later by another agency. The procedures we recommend will avoid the temptations of future classification officials and managers in the agencies to forget the current lessons well-recognized by Defense, State, and Commerce in the Export Control Reform Initiative. These procedures will avoid the temptation to return to a former time when the rules were intentionally opaque; decisions were based on a rule providing unlimited discretion without changes in the list to reflect decisions; and jurisdiction decisions were enforced retroactively.

XI. Seeking Reduction in the Multilateral Regimes for the Use of "Specially Designed"

We recommend that the Administration move to implement the rewritten control lists as soon as possible. The tremendous challenge of defining "specially designed" illustrates that the United States and its regime partners should work to reduce the use of the term "specially designed" and replace it with objective

control criteria with defined functionality. While the multilateral efforts will require a commitment of many years, the gains to the national security will be well-worth the effort. Timken therefore urges the Departments of Defense, State, and Commerce to commit to that effort.

Conclusion

We commend Defense, State, Commerce, and the NSC staff for their tremendous effort in defining "specially designed" in regulations that will determine agency jurisdiction, classifications, and license requirements. With the additional interpretations we suggest, we urge the agencies to finalize the "specially designed" rules and move on to the tasks of reporting to the relevant oversight committees and publishing the rewritten control lists. Timken believes these changes will maintain controls on critical U.S. technology while allowing new opportunities for U.S. companies to increase exports of items that do not warrant more restrictive control and is often readily available from our foreign competitors.

Most importantly, we believe clearer control lists benefit the national security of the United States and give the export control agencies more than sufficient authority to change the lists from time to time in order to respond to new technologies and new threats. A well-executed revision of the USML and CCL will provide the nation several benefits.

First, a clearer set of control lists will reduce the number of unlicensed exports that many small- and medium-sized corporations make because many portions of the USML are unclear and such companies do not realize they have a product that may require a license.

Second, a positive list will enable effective oversight by the Congress. Without a positive USML and CCL, complete with detail regarding the multilateral control language, Congress cannot effectively perform its important oversight role.

Third, a positive USML will be more enforceable. Prosecutors will be less likely to face the challenges described in the Seventh Circuit opinion in *Pulungan*.

Fourth, the private sector can more effectively administer and comply with positive control lists.

Sincerely,

Mark Bump
The Timken Company
Mgr - Global Trade & Compliance
Customs Attorney
330-471-3949
GNE-12

United Technologies Corporation
1101 Pennsylvania Avenue, NW
10th Floor
Washington, DC 20004
(202) 336-7400

United Technologies

August 3, 2012

U.S. Department of State
Bureau of Political-Military Affairs
Department of Defense Trade Controls Policy
2401 E Street , N.W.
Washington, D.C.

ATTN: Ms. Candace Goforth
Director, DTC Policy

SUBJECT: RIN1400-AD22 Proposed amendment to the International Traffic in Arms Regulations - definition of "specially designed"

Dear Ms. Goforth:

United Technologies Corporation ("UTC") is submitting the attached comments in response to the State Department's proposed rule concerning the definition of "specially designed," as published in the June 19, 2012 Federal Register.

We appreciate the opportunity to comment on this important proposed rule. Please feel free to contact me if you have any questions about these comments.

Sincerely,

Jim Lemon
202-336-7462

Attachment: UTC comments on June 19, 2012 proposed ITAR definition of "specially designed"

UTC Comments on June 19, 2012 Proposed ITAR Definition of "Specially Designed"

General Comments

Clarity and Understanding

The concept of 'specially designed' is subjectively understood, but there is significant difficulty in providing an objective definition. While a simple and direct definition would be ideal, given both the importance and usage history of the term, 'simple' is not compatible with providing a robust definition. The 'catch-and-release' approach is probably the best under the situation.

Even with a 'catch-and-release' approach that is suitable for a decision tree, some of the decision entries in the tree are themselves complex and require study and analysis. For those who have not spent a significant amount of time studying the regulations, or have not followed the evolution from the original July 15 rule, the definition may be initially difficult to understand. To mitigate this, we recommend the published rule include a number of illustrative examples.

Elimination of the Section 17(c) clarification

The new Category XIX no longer contains the clarification of the use of the Section 17(c) criteria. This clarification is essentially replaced by the (b)(3) 'release' paragraph, as a part or component considered standard equipment and integral to a civil aircraft covered by a civil type certificate issued by the FAA would be 9A991.c or .d, which is an AT-only control. Therefore, "parts," "components," "accessories," or "attachments" with the same form, fit, and performance capabilities as an ECCN 9A991.c or .d item would by definition not be "specially designed."

However, the Section 17(c) clarification in Category VIII of the ITAR states that a non-SME *component* or *part* that is not controlled under another category of the USML, that: (a) Is standard equipment; (b) is covered by a civil aircraft type certificate (including amended type certificates and supplemental type certificates) issued by the Federal Aviation Administration for a civil, non-military aircraft (this expressly excludes military aircraft certified as restricted and any type certification of Military Commercial Derivative Aircraft); and (c) is an integral part of such civil aircraft, is subject to the jurisdiction of the EAR.

The Section 17(c) rule specifically makes the parts and components subject to the jurisdiction EAR. The proposed (b)(3) states an item would not be "specially" designed if it has the same form, fit, and function as, in the case above, an item used or with a ECCN 9A991.c or .d commodity. While an item would have the identical form, fit, and function as itself, there is some room for confusion.

Aerospace suppliers have made significant use of the Section 17(c) rule in determining the jurisdiction of items since it was clarified in 2008. UTC has

utilized it to determine the jurisdiction of in excess of 125,000 items. It would be advantageous not to have to review each of the items where the Section 17(c) rule has been previously applied.

We would request an entry in the final Federal Register notice for the Rule stating that the intent of paragraph (b)(3) is to provide the same function as the Section 17(c) rule, simply extended beyond Category VIII.

Specific Comments

Revise paragraph (b)(2) of the proposed definition of "Specially Designed"

From:

(2) Is a single unassembled part that is of a type commonly used in multiple types of commodities not enumerated on the U.S. Munitions List or the Commerce Control List, such as threaded fasteners (*e.g.,* screws, bolts, nuts, nut plates, studs, inserts), other fasteners (*e.g.,* clips, rivets, pins), basic hardware (*e.g.,* washers, spacers, insulators, grommets, bushings, springs), wire, and solder.

To:

(2) Is a single unassembled part that is of a type commonly used in commodities not enumerated on the U.S. Munitions List or the Commerce Control List, such as threaded fasteners (*e.g.,* screws, bolts, nuts, nut plates, studs, inserts), other fasteners (*e.g.,* clips, rivets, pins), basic hardware (*e.g.,* washers, spacers, insulators, grommets, bushings, springs), wire, and solder.

Rationale:

The term 'multiple types' is unclear, as in this context, 'types' implies a grouping. Without defining 'types', it is not clear if commodities fall into different types. For example, if a bolt is used in aircraft tail sections and also aircraft seat-backs, are they different commodity types because tail sections are not seat backs, or are they the same commodity type because they're both used in aircraft? 'Types' imparts the sense of significantly different uncontrolled commodities (e.g. toasters and automobiles), but provides no specificity (pop-up toasters versus toaster ovens.) Since the intent is to identify parts used in otherwise not controlled commodities and 'multiple types' provides no legally defensible difference, we recommend removing the term and going with 'used in commodities…' This is effectively the same without the need to parse commodities into undefined 'types'. The critical aspect of this paragraph is 'not enumerated on the CCL or the USML', and we strongly support the change made from 'civil items' as it provides necessary specificity.

Currently, much time is needlessly expended investigating and analyzing minor parts in order to establish export control jurisdiction and classification. It is important that the reform initiative succeed in eliminating this burden on industry which serves little if any national security objective.

We also believe that consideration should be given to expanding this paragraph beyond single unassembled parts. There are many innocuous components (e.g. electrical connectors) that should not be on the USML and should not warrant investigation and analysis to determine jurisdiction.

Revise paragraph (b)(4) of the proposed definition of "Specially Designed"

From:

> (4) Was or is being developed with a reasonable expectation of use in or with defense articles enumerated on the U.S. Munitions List and commodities not on the U.S. Munitions List

To:

> (4) Was or is being developed with a reasonable expectation of use both in or with defense articles enumerated on the U.S. Munitions List *and* commodities not on the U.S. Munitions List

Rationale:

A key criterion to paragraph (b)(4) is that the item must be used in or with both items on and off the USML. The Commerce version emphasizes this by italicizing the word 'and.' Because of the importance of this dual test, for additional emphasis the word 'both' should be added and the italics from the Commerce version be used.

Revise Note 1 of the proposed definition of "Specially Designed"

From:

Note 1: The term "enumerated" refers to any article which is identified on the U.S. Munitions List or the Commerce Control List.

To:

Note 1: 'Enumerated' means any item (i) on either the USML or CCL not controlled in a 'catch-all' paragraph and (ii) when on the CCL, controlled by an ECCN for more than AT-only reasons.

Rationale:

The Commerce version of the proposed definition defines 'enumerated' as being on the USML or CCL *and* not controlled in a 'catch-all' paragraph. The ITAR version of the proposed definition defines 'enumerated' in Note 1 as being 'identified' on the USML or CCL. As the meaning of 'identified' is not clear and does not specifically omit 'catch-all' paragraphs, 'identified' could be interpreted to include those items "specially designed" for a commodity, resulting in a circular definition. Additionally, for items on the CCL, 'enumerated' only applies to those items controlled for more than AT-only reasons. The term 'identified' does not exclude AT-only controlled items.

The Commerce version of "specially designed" paragraph (b)(2) does not control single unassembled parts of a type commonly used in multiple types of commodities not enumerated on the USML or CCL. Using the Commerce definition of 'enumerated', hardware commonly used in aerospace applications (e.g. nuts and bolts for aircraft or aircraft engines) is 9A991.c or .d, which is an AT-only control. Therefore, such common aerospace hardware is not "specially designed" through (b)(2). However, under the proposed ITAR definition of 'enumerated', since an aircraft or engine is 'identified' on the CCL under 9A991.c or .d, they are 'enumerated', and therefore (b)(2) can't be used.

Since paragraph (b)(3) 'releases' items with the same form, fit, and performance capabilities as a part used in or with a commodity both in production and not 'enumerated' (identified) on the USML, an argument can be made that such nuts, bolts, and other hardware found in a 9A991.c or .d (and therefore not USML) aircraft or engine are 'released' under (b)(3). Given that interpretation, there is no value in keeping (b)(2), and (b)(3) is quite broad. The proper solution is not to eliminate (b)(2), but to fix the definition of 'enumerated' by making it common with that of the Commerce rule.

PUBLIC SUBMISSION

Docket: DOS-2012-0043
Amendment to the International Traffic in Arms Regulations: Definition for ‘‘Specially Designed’’

Comment On: DOS-2012-0043-0001
International Traffic in Arms Regulations: Definition for "Specially Designed"

Document: DOS-2012-0043-DRAFT-0005
Comment on DOS-2012-0043-0001

Submitter Information

General Comment

The comment below is provided in the hope that it will help clarify an important point regarding the proposed text of ITAR Section 120.41. Specifically, the proposed text provides a number of exceptions in paragraph (b), but it does not address directly what is an important real world situation that government contractors face and that we believe should also be excluded from the “specially designed” standard. This concern relates to manufactured items, machined bodies, forging, castings or extrusions that have not yet reached the stage in which they are identifiable as defense articles under ITAR Section 121.10 and are created on a build-to-print basis using manufacturing equipment, technologies and raw materials normally used to manufacture non-defense articles. We believe it appropriate that such items not be viewed as “specially designed.” By definition, in such situations, the manufacturer of the item has not itself developed the relevant technical data or design, and the item in question has not yet reached the stage at which it would become subject to ITAR coverage under Section 121.10. The following additional exception is therefore recommended as a new subparagraph (b)(6) to ITAR Section 120.41:

“Is manufactured, machined, forged, cast, or extruded based on a manufacturer’s build-to-print instructions using manufacturing equipment, technologies or raw materials normally used to manufacture non-defense articles (other than items enumerated under Section 121.10).”

Thank you for your consideration of this comment.