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September 13, 2011

Mr. Timothy Mooney
Regulatory Policy Division
Bureau of Industry and Security, Room 2099B
U.S. Department of Commerce
14th Street and Pennsylvania Avenue, N.W.
Washington, D.C. 20230

Subject: RIN 0694-AF17
Proposed Revision to the Export Administration Regulations (EAR): Control of Items the President Determines No Longer Warrant Control Under the United States Munitions List (USML)
Federal Register/Vol. 76, No 136, July 15, 2011

Dear Mr. Mooney:

The Boeing Company (Boeing) welcomes the opportunity to comment on the referenced proposed revision to the Export Administration Regulations (EAR). We applaud the steps the U.S. government is taking to implement comprehensive export reforms and the architecture for reform delineated in the proposed rule. We also appreciate your engagement with industry over the last eighteen months of the reform process, and once again reiterate our support, as well as our commitment to provide substantive responses to the Bureau's requests for comments.

As a company that has equally large international business in the defense and commercial areas, as well as a number of defense programs that use our commercial platforms, we are particularly interested in this new regulation, since it would significantly affect both our defense and commercial business processes. As such, we engaged with many business stakeholders throughout Boeing to analyze the impact of this proposed rule on business operations and our compliance processes. We also tested the provisions of the rule against export transactions in both defense and commercial businesses to determine whether the changes would positively or negatively impact our international efforts.

As a result of this analysis and our testing, we support the proposed July 15 revision to the EAR as a necessary step towards realization of President's Obama export reform initiative. However, we must caution that absent adoption of a new structure based on a single control list and a single agency, some of the changes proposed in this rule could potentially represent additional complexity, regulatory burden, uncertainty and cost for U.S. exporters. The full plan of a fundamentally reformed export control system, as described by former Secretary of

Defense Gates on April 20, 2010, is required to realize the full benefit of the measures proposed within this proposed rule. Secretary Gates expressed his firm conviction, solidified by the findings of the 2009 Beyond "Fortress America" report by the National Research Council of the National Academies, that an export system that is no longer bifurcated along commodity jurisdiction lines, but rather defined on the basis of tiered levels of military capability and significance would more adequately address the national security interests of the United States. We agree with that vision and believe that the reform plan must be brought to fruition, as designed, if the goal of a clear, simple, and seamless system of controls is to be fully achieved.

Our principal concern with the proposed rule is that if it becomes an end in and of itself rather than a step towards completion of the President's reform initiative, an increasingly complex export environment would result that would continue to impose controls on the basis of commodity jurisdiction, perpetuate the complexity of managing jurisdiction under two control regimes, and actually increase the export licensing burden for U.S. companies. Such a situation could result in having to obtain approvals from two licensing agencies for many defense programs and having to comply with two different export regimes for every impacted program. The message communicated from the Administration when the reform effort was unveiled was that controls would focus not on commodity jurisdiction, but on levels of national security sensitivity. We believe this is a solid premise for reform and hope to see it become a reality.

In general, our analysis did find that the proposed rule, as an intermediate step, would offer important benefits to industry. We welcome the following changes:

- Items that are of no significant military consequence would be subject to a more flexible system of controls predicated upon country group policies, with generally wide license-free treatment to close U.S. allies.

- Controls would have a stronger multilateral basis, giving greater consideration to foreign availability than currently is the case for items under the USML.

- Restructuring of the Commerce Control List (CCL) to create the Commerce Munitions List (CML) and allowing for a logical and predictable transfer process for items moved to the CML from the USML. This fundamental change would result in a streamlined USML that would capture only significant military items.

- Availability of the Strategic Trade Authorization (STA) license exception and other exceptions for the new "600 series" items enumerated on the CML. If adopted with the changes suggested below, the application of these exceptions should result in a meaningful reduction in the volume of licenses currently required for non-militarily significant items, better reflecting the Administration's export control objective of "higher fences around fewer items."

- The ability to use 600 series parts and components in the serial production of commercial end items without rendering an end item subject to higher levels of control, which would be particularly helpful to diversified U.S. companies.

- Reducing the risk that exportability of commercial items could be "tainted" by a single incorporated part which is later determined to be controlled under the ITAR, resulting in potentially costly disruptions to commercial production lines, scheduled deliveries, and the perception of risk associated with the purchase of U.S. products by international buyers.

- Benefits for suppliers to U.S. defense and commercial companies of parts and components that would be included in the 600 series category because they would not have to be concerned about compliance with two different sets of regulations, a requirement that invariably adds to the cost of compliance, increases compliance risks for the supplier, and results in higher costs for the prime contractor.

- Availability of *"de minimis"* for 600 series item would help U.S. manufacturers of parts and components intended for incorporation into foreign end items to become more competitive in the global marketplace.

However, our analysis did reveal two areas that that we believe are problematic for U.S. exporters. Specifically:

- The proposed definition of "specially designed" is difficult to understand and interpret, and could also constitute an expansion of controls by capturing dual-use items in development. The remaining definitions are also challenging, particularly since in some cases they appear to overlap.

- The proposed rule could result in dual licensing and dual compliance requirements for 600 series items that would not be eligible for available exceptions. Other concerns related to the exceptions are listed in Section E below.

Following are detailed comments for your consideration, offered in the order recommended in the proposed rule.

***(1) 600 Series***

**A. Proposed Structure**

Incorporating the 600 series into the existing CCL structure to create a new CML is a sound transitional approach that would make it easier for industry to adapt to sweeping regulatory changes. The proposed consolidation of all Commerce munitions items in the 600 series would

reduce the time exporters spend to properly classify items and technologies. Further, and importantly, the alignment of the numbering system for Wassenaar 600 series items with that of the Wassenaar Arrangement Munitions List (WAML) would facilitate understanding and interpretation of the Commerce munitions items by our international partners in government and industry.

We appreciate the creation of the "y" category which lists insignificant items controlled for Anti-Terrorism (AT) reasons only. We urge the adoption of a classification request process for adding additional items to the "y" category or moving benign 600 series items to EAR99 or another AT-only controlled Export Control Classification Number (ECCN).

**B. Potential for Double Licensing**

As noted earlier, our analysis and testing revealed a critical unintended consequence with respect to the proposed rule in that contractors may observe a net *increase* in export licensing for sales to countries for which the STA is not available and when other exceptions available to 600 series items cannot be used. In addition to the ITAR authorizations obtained for items remaining on the USML, contractors could be required to obtain EAR export authorizations for the 600 series items that are related to the military systems proposed for export.

We also have compliance concerns related to the fact that dual authorizations and related compliance requirements for the same program to the same customer and under the same contract could increase the risk of exports being processed against the wrong authorization. This could lead to confusion at the border as U.S. officials track exports and imports. We believe that this matter merits more in-depth discussions between the government and industry before the final rule is issued.

**C. Technology Controls Relating to 600 Series Items**

Regarding technology ECCNs associated with 600 series items, we believe that technology control should only be extended to that which is peculiar to achieving the military characteristics and performance of the those items. The control text of the technology listing for a 600 series item should be carefully worded so that conventional technologies otherwise not requiring licensing by the EAR are not controlled simply because they are used to develop or produce a 600 series end item. The Federal Register notice for the migration of USML Category VII technology items (0E606) indicates the term "required" under the ECCN heading, and continuation of that practice would mitigate the risk above.

**D. *De Minimis* and 600 Series Items**

Boeing welcomes the application of the EAR *de minimis* concept to the 600 series items. Application of *de minimis* to these items would reduce the incentives for non-U.S. companies to design-out U.S. content to avoid regulatory constraints. We do not believe, however, that controls on the 600 series warrant a more restrictive 10% threshold. The current 25% provides

adequate constraints for items of this nature and would reduce confusion caused by multiple *de minimis* levels for items destined for the same country.

**E. Exceptions Applied to 600 Series Items**

Boeing welcomes the alternative export authorities outlined in the proposed rule to facilitate the exports of non-critical 600 series items to allies, friendly countries, and regime members. These are sensible and positive reforms that would enable industry and government to focus on more critical areas. We offer comments on the application of license exceptions to 600 series items and propose several revisions below.

i. **Amend § 740.2(a)(13) to allow the export of development and production software and technology to intermediary suppliers under STA**. As proposed, 600 series software and technology can use STA "provided the ultimate end use for the 'software' or 'technology' is one of the countries" eligible for STA. This seems to allow export of "use" technology but not development or production technology. The proposed rule further states that exports and re-exports to non-governmental end users in STA countries are authorized provided that the "item at issue" is ultimately destined for end use by a governmental end user in an STA country. This is potentially confusing as written. The text does not accommodate the export of production or development technology to foreign suppliers for parts destined for incorporation into 600 series end items. This production and development technology, unlike tangible exports, flows to the foreign supplier and not to the ultimate end user. *See* our proposed revision to § 740.2 below.

ii. **Amend STA to make the United States an STA-eligible destination.** STA as proposed does not accommodate the situation where exporters send development or production technology to a foreign supplier for parts, components, accessories, and attachments that will be incorporated into an end item ultimately destined for use by the United States government. We note, however, that the July 18, 2011 BIS *Fact Sheet: Plan for Controlling Items Transferred from the USML to the CCL* states that the exceptions available for 600 series items would be "...limited to personnel <u>and agencies of the United States</u> and agencies of the 36 governments eligible for License Exception Strategic Trade Authorization (STA-36)) (page 3, section 2)." *See* our proposed revision to § 740.2 below.

iii. **Amend the STA end item eligibility process to include an appeal for exporters and for governmental agencies.** Proposed § 740.2(g) requires interagency consensus for an "end item" to be eligible for license exception STA. These determinations are made by the Advisory Committee on Export Policy (ACEP). In effect this allows each agency a *de facto* veto. The STA eligibility decision should be based on a majority vote of the ACEP with each dissenting agency holding the right to escalate conflicting positions as is the case currently with license escalation procedures. The proposed rule states that if STA eligibility is not approved, the license application will be

reviewed under the normal license review process. That process includes a right by the exporter to escalate an unfavorable license decision to the BIS Operating Committee and on to the ACEP. The existing escalation right for exporters for licensing decisions should be available to STA eligibility decisions as well.

iv. **License exception TSU appears to have limited usefulness.** The TSU exception covers "use" type technology but does not enable the provision of development or production technology to foreign suppliers that are working on a part, component, accessory, or attachment for an end item ultimately destined for a governmental end user as discussed above. Technology exports to non-U.S. intermediary suppliers represent a significant percentage of Boeing exports. We recommend revisions to the STA exception, as discussed in paragraph vi below, and also suggest adopting similar changes for the TSR exception to enable export of development and production technology in these circumstances.

v. **License exception RPL appears to be less useful than exemptions available in the ITAR.** Parts, components, accessories, and attachments in the 600 series would be eligible for export under license exception RPL. This exception is limited in its usefulness because spares may only be exported as one-for-one replacements, the export can only be sent by the party that originally exported or re-exported the commodity to be replaced, and holding spares abroad for future use is prohibited. These conditions could likely impose shipping delays that harm U.S. competitiveness. By contrast, ITAR exemption 123.16(b)(2) does not contain the one-for-one replacement requirement and permits multiple shipments of parts per year to approved end users under a dollar value limit. This flexibility is lost when items move from the ITAR to the EAR 600 series.

vi. **Proposed revision to §740.2**

§ 740.2 Restrictions on all License Exceptions
(a) ***
(13)
(iii) "600 series" "software" and "technology" may only be authorized by the following license exceptions:
(C) License Exception STA (§ 740.2(c)(1)), provided the ultimate end use for the "software" or "technology" is by a government in one of the countries listed in §740.2(c)(1) or by a non-governmental end user in a §740.2(c)(1) country that is developing or producing an item destined for ultimate end use by a governmental entity in a §740.2(c)(1) country or in the United States. Exports and reexports to non-governmental end users in a country listed in §740.2(c)(1) are authorized through License Exception STA under § 740.2(c)(1) as long as the "software" or "technology" ~~item~~ at issue at the time of export, reexport or transfer (in-country) is for an item ultimately destined for end use by the armed forces, police, paramilitary, law enforcement, customs and border protection, correctional, fire, and search and

rescue agencies of a government of one of the § 740.2(c)(1) countries. This provision does not alter the limitations on the use of License Exception STA contained in § 740.2(b)(2).

**§ 740.2 License Exception Strategic Trade Authorization (STA)**
(c) ***

*Note to paragraph (c)(1).* License Exception STA under § 740.2(c)(1) may be used to authorize the export, reexport or transfer (in-country) of "600 series" items, provided the ultimate end-use for the "parts," "components," "accessories and attachments" or for any item classified in a "600 series" product group B or C ECCN is by a government in one of the countries listed in § 740.2 (c)(1) or by the United States government. For "600 series" end items, see paragraph (g) of this section. Exports and re-exports to non-governmental end-users in a country listed in § 740.2(c)(1) are authorized through License Exception STA under § 740.2(c)(1) as long as the item at issue at the time of export, re-export or transfer (in-country) is ultimately destined for end use by the armed forces, police, paramilitary, law enforcement, customs and border protection, correctional, fire, and search and rescue agencies of a government of one of the § 740.2(c)(1) countries. This provision does not alter the limitations on the use of License Exception STA contained in § 740.2(b)(2).
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***(2) Creation of ECCN 0Y521 as an Equivalent to USML Category XXI***

The proposed rule states that ECCN 0Y521 would be a temporary "holding" category for items not elsewhere classified on the CCL for which the U.S. government is determining an appropriate control, typically emerging technologies. The proposed ECCN text states that control would be imposed "because it provides at least a significant military or intelligence advantage to the United States or for foreign policy reasons." RS1 controls will apply with only GOV license exception eligibility. The decision, then, to designate an item as 0Y521 is to be a foreign policy determination rather than an appealable technical classification.

ECCN 0Y521 appears to apply to 600 series items as well as all other Commerce-jurisdiction items – but only if they provide a significant military or intelligence advantage to the United States or for foreign policy reasons. This poses the question of whether BIS makes that determination, and whether it will include input from the manufacturer or exporter? We recommend a mechanism allowing for government – industry collaboration in order to utilize exporters' deep product knowledge. (Use of the BIS Technical Advisory Committees is an excellent means of sharing knowledge and updating controls). The "foreign policy reason" criterion seems overly broad, and more detail on what types of items it is intended to cover is welcome. A determination to place an item in this category should be appealable as is the current practice with licensing decisions.

A primary concern is that this category could be used to house benign items, thereby subjecting them to worldwide licensing (except to Canada) for several years. As an operating principle, when regulatory authorities understand an emergent item well enough to determine it should be controlled, work should focus on moving it directly to a new or revised ECCN. A legitimate concern here is the prospect of what is ultimately an EAR99 commodity being subject to a worldwide licensing requirement for up to three years, especially for technology where competitive advantage can be lost quickly. Additionally, keeping an item controlled for up to three years in order to seek multilateral controls could be harmful to U.S. industry because the item would remain decontrolled by Wassenaar throughout the regime's review and consensus vote cycle.

***(3) Changes to Definitions to Address the Movement of Items from the USML to the CCL, Including Adopting a Single Definition of "Specially Designed"***

**A. Proposed Definition of "Specially Designed"**

Boeing applauds the Administration's goal of moving away from design-intent control parameters. There are indeed tens of thousands of parts, components, accessories, and attachments that are slightly modified from their commercial 'cousins' to meet a specific form, fit, or function requirement for a USML or CCL enumerated end item. In most cases, these "specially designed" items have little if any military significance. For example, wire bundles, fuel pumps, de-icing systems, aircraft power systems, and aircraft structures could be made longer, shorter, thicker, thinner, or otherwise slightly modified in order to fit onto a platform that will ultimately serve as a defense article. These types of modifications are also made to commercial aircraft to accommodate customer use of a commercial aircraft in certain climactic conditions. Such modified items perform functions that are not inherently military or intelligence related. Rather they deliver electricity, pump fuel, prevent ice build-up, or meet load requirements. Boeing does, however, offer a number of comments and revisions below.

i. **The proposed definition of "specially designed" is difficult to understand and challenging to apply.** BIS's stated goals for the "specially designed" definition are that it be "single, clear, and objective." However, we found this provision challenging. This was the case for both trade controls specialists and technical staff within Boeing. It takes considerable time and study to parse through the meaning of the terms "item" and "enumerated," determine whether the text refers to the part or component being analyzed or to the item it is used with, decide if a separate analysis of the "serial production" criteria is needed, and develop a full understanding of the interpretive notes. We propose revisions below.

ii. **The proposed definition of "specially designed" captures dual-use items in development and thus constitutes an expansion of controls.** Boeing applied the proposed definition to hypothetical export situations to determine its applicability (*see* Attachment A). We found no change, and in some cases a reduction, in controls on items that are currently on the CCL with "specially designed" as a control element. We

also found an increase in controls on items that are currently considered "dual-use." This is especially problematic in the case of a new product being developed with known applications in both commercial and CCL-enumerated defense applications. In applying the criteria for specially designed, we observed that with the exception of some parts, nearly all of the components common to the civil variant would be controlled as "specially designed" until the point at which the civil variant entered "serial production." At that point, all parts on the civil variant would be decontrolled. The "serial production" exclusion does not cover the many years of development activity related to an otherwise benign and fundamentally commercial modified part. We believe this problem can be mitigated by our proposed revision (*see* below) to the serial production note. Without modification to the serial production criteria, the proposed definition has the additional consequence of requiring classification changes when items move from development to production. Classification shifts have broad impacts including changed markings and compliance activities, a potentially massive, expensive, and time-consuming undertaking.

iii. **The definition lacks a nexus to the criticality of the part or component at issue.** The definition in paragraph (a) reasonably narrows the scope of "specially designed" through the "peculiarly responsible" concept which is established and understood by exporters. However, subparagraph (b) captures all "specially designed" parts and components, including those outside the 600 series. Unless an existing CCL "specially designed" part or component falls away through the exclusion analysis, these items will be subject to more controls than they are at present. The function of a part or component and its criticality to the military mission should be incorporated into the definition. This can be accomplished by applying the 'peculiarly designed' standard to all items and adding a paragraph (c) to exclude existing commercial components that are peculiar to meeting the control parameters of the 600 series end item.

iv. **Proposed revisions to "specially designed."** The simplified definition of "specially designed" below maintains controls on those items that make a controlled item special while reducing the excessive controls on items unrelated to the controlled performance levels, characteristics, or functions of the enumerated item.

**[Proposal #1]**

(a) A "specially designed" item, other than a "part" or "component," is an item that is enumerated on the CCL and USML and, as a result of "development," has properties peculiarly responsible for achieving or exceeding the controlled performance levels, characteristics, or functions of the referenced item identified in the CCL.

(b) A "specially designed" "part" or "component" is one that is specific to an end item enumerated on the CCL, and, as a result of "development," has properties peculiarly responsible for achieving or exceeding the controlled performance levels, characteristics, or functions of the specified end item identified in the CCL.

(c) An items is not considered "specially designed" if it is used in an end-item in "serial production" that is not enumerated on the USML or CCL (*i.e.*, the item is EAR99 or AT-only controlled), and the item's form, fit, and function have not been altered for use in another end item enumerated on the USML or CCL after "serial production" of the non-enumerated item has begun.

If however, the more modest reform step of moving controls on insignificant military items from ITAR to EAR controls is intended by this proposed rule, then the following revisions to the definition and its accompanying Note to Exclusion Paragraph Number 3 are suggested. 'New models or versions' refers to new commercial product platforms. This is intended to remedy the problem of the "specially designed" definition imposing 600 series controls (*e.g.*, RS and NS) over dual use parts being developed for dual use end items which are also in development, since a dual use part would be captured by paragraph (b) and not excluded by d(3) (*i.e.*, the end item is in development and not in serial production). We do not believe it is the intent of the USG to increase controls on dual use parts in development.

**[Proposal #2]**

(a) A "specially designed" item, other than a "part" or "component," is an item that is enumerated on the CCL and, as a result of "development," has properties peculiarly responsible for achieving or exceeding the controlled performance levels, characteristics, or functions of the referenced item identified in the CCL.

(b) A ~~"specially designed" "part" or "component" is a~~ "part" or "component" of an item 'enumerated' in a category of the CCL or the USML is considered "specially designed" unless excluded by (c) or (d) below.

(c) For the purposes of this definition, an item is not considered "specially designed" if it is separately 'enumerated' in an USML subcategory or an ECCN that does not have "specially designed" as a control criterion.

(d) Items that are not so separately 'enumerated' for purposes of this definition, are also not considered "specially designed" in any category of the CCL if they are:

(1) A single, unassembled part used in multiple types of ~~civil~~ items, such as threaded fasteners (e.g., screws, bolts, nuts, nut plates, studs, inserts), other fasteners (e.g., clips, rivets, pins), common hardware (e.g., washers, spacers, insulators, grommets, bushings), springs and wire; or

(2) An item specifically excluded from control on the USML or the CCL; or

(3) A "part" or "component" used in ~~as a "part" or "component" of~~ an end- item in "serial production" and not 'enumerated' on the USML or CCL (i.e., the end item is ~~an~~ EAR99 or AT-only controlled), and the part's or component's form, fit, and function have not been altered for use in another end item enumerated on the USML or CCL after "serial production" of the end- item not enumerated on the USML or CCL has begun; or

(4) A "part" or "component" that can be exchanged with an EAR99 or AT-only controlled "part" or "component" on a one-for-one replacement basis without modification to the form, fit and function of the EAR99 or AT-only "part" or "component," and the EAR99 or AT-only part's or component's function is identical to the "part" or "component" at issue.

*Note to Exclusion Paragraph Number 3:*
*"Serial production" is defined in section 772.1 as a type of production where the "items" being produced are no longer in "development." In this type of production the "items" have passed production readiness testing (i.e., an approved, standardized design ready for large scale production) and are being or have been produced based on the approved, standardized design, including and especially on assembly lines. "Development," is defined in EAR section 772.1 as being "related to all stages prior to serial production, such as: design, design research, design analyses, design concepts, assembly and testing of prototypes, pilot production schemes, design data, process of transforming design data into a product, configuration design, integration design, layouts." Items in "serial production" that are subsequently subject to "development" activities, such as those pertaining to new models or versions, quality improvements, cost reductions, or feature enhancements, remain items in "serial production."* ~~*Any new models or versions of such items developed from such efforts are in "development" until and unless they enter into "serial production."*~~

When read in conjunction with d(3), this change would keep the "specially designed" definition from expanding control on most dual use parts that are in development while maintaining controls on parts being specifically or solely developed for enumerated end items (*i.e.*, a dual use part being developed for a new model commercial aircraft would not be "specially designed" because it would be a part of an item in serial production but not enumerated on the CCL or USML (an AT controlled aircraft)). However, a part being developed solely for a military tanker derivative of the aircraft would be specially designed and controlled as a 600 series part because it would be developed for an item which is enumerated.

## B. The Other Proposed Definitions

Our assumption in reading the below terms was that they were intended to be mutually exclusive. Assuming that to be the case, their interpretation is challenging, especially regarding end items, components, and systems. Our concern is that exporters may reach different conclusions, which could have a significant negative impact on complex items that have many supply chain elements. In other words, different companies in the supply chain for a particular commodity reaching different, though well-intentioned, interpretations for the same item or parts thereof. We urge BIS to provide examples, illustrations, charts, or annotations to assist exporters in the uniform application of these terms.

Consider an aircraft fuel system: it falls within the definition of major "component" and "system." The consequences of which definition applies are important: If "specially designed," and considered a "system," it is subject to the 'peculiarly responsible' standard in paragraph (a) of this proposed rule; if considered a "component," it is subject to paragraph (b) of the definition, which is broader in scope but provides automatic STA eligibility.

i. **Accessories and attachments.** The term "accessory" is so widely used that redefining it could cause considerable confusion. Defining 'attachment' does not present this problem. We note the difference between things that enhance *usefulness*, (*e.g.,* things that serve an unrelated function such as safety or convenience) and things that enhance *effectiveness* (*e.g.,* things that improve the controlled attribute of the "component," "end item," or "system"). In the BIS example, a grass catcher enhances usefulness by eliminating the need to rake clippings but does not make a lawn mower cut grass better.

ii. **Component.** We suggest that the proposed changes seen below add clarity and better distinguish "components" from "accessories and attachments." We do not see a basis for the distinction between minor and major components as both are treated the same. The automobile example creates an understanding that a component is one without which the "end item" does not function. If that is a critical element, we recommend it be added to the first sentence rather than as an example. Also we question whether components are meant only to capture tangible items. Often software is an item that is useful only when used as part of an "end item."

**[Proposed revision]**

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

iii. **End item.** We presume "material" and "system" are consistent with the definitions below, and have added quotation marks.

**[Proposed revision]**

This is a combination of "components," "parts," "accessories and attachments," or "material" in the form of a product, "system," or piece of equipment (a set of tools,

devices, kits, or similar items assembled for a specific purpose) that is ready for its intended stand-alone use, such as a ship, aircraft, firearm, or milling machine.

iv. **Equipment.** This term is mentioned in the "end item" definition and is treated no differently from an "end item." Accordingly, we find that breaking this out as a separate definition adds confusion rather than clarity and recommend it be folded into the "end item" definition as shown above.

v. **Material.** We believe that "software," "system," "equipment," and "facilities" are so far from "'crude or processed matter'" as not needing to be mentioned here, unless the intention is to make "material" a catch-all, which seems counter-intuitive.

**[Proposed Revision]**

This is any list-specified crude or processed matter ~~that is not clearly identifiable as any of the types of items defined in section 772.1 under the defined terms, "end item," "component," "accessories and attachments," "part," "software," "system, "equipment," or "facilities"~~.

vi. **System.** In the definition of "accessories or attachments" a system is addressed separately from an end item, but the definition of "end item" includes systems and the definition of "systems" includes "end items." The implication is that Commerce considers systems as both end items and elements of end items. This is an example of the sometimes circular nature of the definitions that may be valid but require additional explanation or examples.

***(4) Other Changes to Assist in the Structural Alignment of the USML and CCL***

Instituting a phased implementation for this rule would be helpful to balance the need for exporters to implement extensive training, re-markings, and overall system changes in order to begin operating under the rule. In this regard, we recommend the following:

- A pilot program, starting soon after comments received from industry are evaluated, to test against concrete transactions, prior to the publication of an interim or final rule.
- An interim rule with a request for comments.
- A transition period within the final rule allowing companies to adapt to the new environment and train their employees to operate under the new regulatory regime.

Given that the proposed rule lays out the architecture of a reform plan that will determine the shape of the U.S. export control system for years to come, we encourage BIS to consider implementing a roadmap which defines the form of engagement with industry as the regulatory process progresses. We believe that close consultation with industry throughout the entire regulatory process on a change of this magnitude is an imperative.

Once again, we reiterate our support for the reform effort and extend our offer to assist in any way possible. 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, International, Policy, and Licensing Administration
Global Trade Controls

Attachment A: trial application of the proposed definition of "specially designed"

***Analysis 1: Composite lay-up tooling and related items***

**1B001.g tow placement machine ("TPM"):**

The tow placement machine is used to produce composite structures and is "for" production of 1A002 structures.

(a) – not applicable because "specially designed" is not in the control language for the 1B001 end items; only the associated components and accessories. However, because the TPM is considered to be "for"production of composites controlled by 1A002, the TPM does fall under control of 1B001.g.

(b) – not applicable because this is not a part or component

(c) – not applicable because the TPM is not a "part" or "component"

(d) – not applicable because the TPM is enumerated

*Conclusion: no change to control because the TPM remains covered by 1B001.g.*

**IB001.g lay-up mold for a tow placement machine (this ECCN covers "accessories and components" used with the TPM)**

A lay-up mold is a self supporting structure having surfaces on which composite materials are applied and cured. A lay-up mold for a TPM will have special features that enable its use with tow placement machines.

(a) – not applicable because this is a "component" (the mold is only useful when used with the TPM)

(b) – is applicable because this is a "component" of an item enumerated on the CCL

(c) – not applicable because the mold does not appear in a separate listing controlled above the AT level and not having "specially designed" as part of the control criteria

(d)(1) – not applicable because the mold is not a single unassembled item

(d)(2) – not applicable because the mold is not specifically excluded on the USML or CCL

(d)(3) – not applicable because the mold is not a component of a TPM that is a. not enumerated and b. in serial production.

(d)(4) – not applicable because it is not interchangeable with an EAR 99 or AT-only controlled item

*Conclusion: Because the mold is considered a component of the enumerated end item and none of the exceptions available in (c) or (d) apply, the mold is determined to be a "specially designed" "component" of the controlled end item and therefore falls under coverage of 1B001. This is consistent with application of previous definitions and represents no change to the classification of the mold driven by the new definitions.*

**1B001.g encoder**

An encoder is an electromechanical device used to validate the geometric position of the delivery head on a tow placement machine.

(a) – not applicable because the encoder is a "component"

(b) – applicable because the encoder is a " component" of the TPM which is enumerated

(c) – not applicable because the encoder is not elsewhere enumerated in an ECCN having reasons for control beyond AT.
(d)(1) – not applicable because the encoder is not a single unassembled item
(d)(2) – not applicable because the encoder is not excluded from the CCL
(d)(3) – is applicable because it can be shown the encoder is being used in another application in serial production. The other application is not an enumerated item.
(d)(4) – is applicable because the encoder is interchangeable with a different encoder on an item controlled for only AT reasons.

*Conclusion: Because the encoder was originally designed to be used on (among other non-controlled applications) a TPM, it was previously considered to be covered by "specially designed". The new definition in exception (d)(3) and (d)4) allows exclusion of the encoder because it is also used in a non-enumerated application in serial production and different encoders used on non-enumerated end items can be directly substituted for the encoder in question. This does represent a change in coverage driven by the new definitions. Previously, the encoder would have been controlled because it was designed with the intent it be used in the controlled end item application.*

***Analysis 2: New part/fuel pump***

An aircraft fuel pump prototype designed to be used in commercial and military aircraft without change to form or fit. The related new commercial aircraft model is still in development. The fuel pump is not currently usable for non-aircraft purposes or for an existing commercial aircraft already in serial production.
(a) – not applicable since this is a "component"
(b) – is applicable since the fuel pump will be used on military aircraft which is enumerated as a 600 series item in the CCL or on the USML (*we understand that USML was inadvertently left off here*)
(c) – not applicable because a fuel pump is not specifically enumerated on the CCL or USML
(d)(1) – not applicable because the fuel pump is not a single unassembled part
(d)(2) – not applicable because the fuel pump is not currently excluded from the USML or CCL
(d)(3) – not applicable because the part is not yet used in serial production on an AT-controlled commercial aircraft
(d)(4) – not applicable because there currently is no existing EAR99 or AT-only controlled interchangeable part

*Conclusion: The fuel pump prototype would fall into a "specially designed" part section of a 9A610x type category and would be controlled for NS, RS, UN, and AT even though the pump is common to both the enumerated defense item and the fully commercial item. However, once the commercial aircraft containing the fuel pump entered serial production, the (d)(3) exclusion would then apply and the fuel pump would no longer be "specially designed" and revert to ECCN 9A991.*

***Analysis 3: Technology for development and production of the fuel pump described in Analysis 2 above***

Technology for the fuel pump includes the design and analysis peculiar to the specific pump in question as well as technology generally applicable to development and production of fuel pumps for similar applications on enumerated and non-enumerated items.

The definition will be used to determine if the fuel pump is "specially designed" and, in Analysis 2 above, that was found to be the case. It is presumed there will be technology control ECCNs corresponding to "parts" and "components" "specially designed" for enumerated end items. Thus there will likely be a technology control relating to the fuel pump in Analysis 2. An example of such a technology control is provided in the Proposed Rule:

**0E606 "Technology" "required" for the "development," "production" or "use" of "equipment," "parts" and "components" controlled by 0A606.**

If the technology control corresponding to the ECCN for the fuel pump above is structured similar to 0E606, the analysis would be as follows:

Fuel pump "development", "production", and "use" technology peculiar to the fuel pump application above would fall under control of XE6XX ECCN. Such technology would include the specific analysis results for that application as well as the design definition for the specific fuel pump.

Technology such as design analysis methods and fuel pump production technology applicable to both enumerated and non-enumerated fuel pumps would not fall under control of the XE6XX ECCN because those technologies are not peculiar to the development or production of the enumerated fuel pump.

At such time as the commercial variant for the platform on which the fuel pump is used enters serial production, the fuel pump item would no longer fall under control of the XA6XX ECCN and therefore the controls imposed by the XE6XX ECCN would no longer apply to the fuel pump design and analysis.

**Analysis 4: Aluminum wing tip for a commercial airplane**

*Conclusion: a wing tip is not a "specially designed" part or component of an end item controlled beyond the AT level.*

Subsequently a decision is made to use the same wing tip on an enumerated item. Sections of the definition of "specially designed" are applicable or not applicable as follows:

(a) – not applicable because the wing tip is a "component"
(b) – applicable because the wing tip is a "component" of an enumerated item
(c) – not applicable because the wing tip is not separately enumerated in the CCL
(d)(1) – not applicable because the wing tip is not a single unassembled item
(d)(2) – not applicable because the wing tip is not excluded from the CCL or USML

(d)(3) – applicable because, although a component of an enumerated item, the wing tip is also a component of a non-enumerated item (9A991 civil aircraft) in serial production
(d)(4) – not applicable because there is no existing replacement or interchangeable part

*Conclusion: The wing tip is not found to be a "specially designed" component of the enumerated item because it satisfies exclusion (d)(3) in the definition of "specially designed".*