

**DEPARTMENT OF COMMERCE****Bureau of Industry and Security**

**15 CFR Parts 734, 738, 740, 742, 748, 750, 772, and 774**

[Docket No. 110818512–3478–02]

RIN 0694–AF37

**Revisions to the Export Administration Regulations (EAR) To Make the Commerce Control List (CCL) Clearer**

**AGENCY:** Bureau of Industry and Security, Commerce.

**ACTION:** Final rule.

**SUMMARY:** This final rule implements changes that were proposed on November 29, 2012 in a proposed rule entitled *Revisions to the Export Administration Regulations (EAR) To Make the Commerce Control List (CCL) Clearer*. The changes in the November 29 proposed rule were informed by public comments received in response to an advance notice of proposed rulemaking entitled *Commerce Control List: Revising Descriptions of Items and Foreign Availability* published as part of the President's Export Control Reform (ECR) Initiative on December 9, 2010. This final rule implements changes that can be made to the CCL without requiring changes to multilateral export control regime guidelines or lists.

This final rule also makes conforming changes and minor clarifications as a result of the publication of two final rules implementing the Export Control Reform Initiative: the April 16, 2013 final rule entitled *Revisions to the Export Administration Regulations: Initial Implementation of Export Control Reform*; and the July 8, 2013 final rule entitled *Revisions to the Export Administration Regulations: Military Vehicles; Vessels of War; Submersible Vessels, Oceanographic Equipment; Related Items; and Auxiliary and Miscellaneous Items that the President Determines No Longer Warrant Control under the United States Munitions List*.

Lastly, this final rule is making revisions to the EAR as a result of public comments received in response to the November 29 proposed rule and to a notice of inquiry (NOI) entitled *Request for Public Comments on Shipping Tolerances for Export Licenses Issued by the Bureau of Industry and Security (BIS)*, that BIS published on July 5, 2012.

**DATES:** *Effective Date:* This rule is effective on October 15, 2013, except that amendatory instructions 25, 28, 31 and 35.c to Supplement No. 1 to part 774 are effective January 6, 2014.

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**SUPPLEMENTARY INFORMATION:**

**Background**

This final rule implements changes proposed on November 29, 2012 in a proposed rule entitled *Revisions to the Export Administration Regulations (EAR) To Make the Commerce Control List (CCL) Clearer*. The changes in the November 29 proposed rule were also informed by public comments received in response to an advance notice of proposed rulemaking entitled *Commerce Control List: Revising Descriptions of Items and Foreign Availability* as part of the President's Export Control Reform (ECR) Initiative that was published by BIS on December 9, 2010 (75 FR 76664). The December 9 notice sought, among other things, public comments on how descriptions of items controlled on the Commerce Control List (CCL) could be made clearer.

Although the revisions proposed in the November 29 proposed rule originated with the ECR initiative, the November 29 proposed rule and this final rule are consistent with Executive Order 13563. Executive Order 13563 requires agencies to review their “existing significant regulations, and consider how best to promote retrospective analysis of rules that may be outmoded, ineffective, insufficient, or excessively burdensome, and to modify, streamline, expand, or repeal them in accordance with what has been learned.” In response to this requirement, on August 23, 2011, Commerce released a plan for the review of its regulations. This proposed rule was identified by the Department as part of its plan for the retrospective analysis of regulations and is being implemented today in final form with the publication of this final rule. The Department's plan may be found at: <http://open.commerce.gov/news/2011/08/23/commerce-plan-retrospective-analysis-existing-rules>.

This rule implements changes that can be made to the CCL without requiring a multilateral regime change. For certain changes BIS identified that would make the CCL clearer, but would require a multilateral export control regime change to implement, the U.S. Government is developing regime change proposals for consideration by the relevant multilateral export control

regimes. BIS will implement those changes, if approved by the multilateral export control regimes, in separate rulemakings.

To better facilitate intelligibility of the provisions implemented by BIS, this final rule identifies new phrases or headings within double quotations. The EAR identifies terms defined in part 772 with double quotations as well. Not all the terms in double quotations in this final rule are defined in part 772. The additional double quotations around new phrases, headings, or commonly used words, are used in the Background section of this final rule to assist in the readability of the text.

The descriptions of the changes implemented in this final rule are organized under the four subject headings used in the November 29 proposed rule and two additional subject headings. The descriptions include summaries of the public comments received and BIS's responses to those comments. The fifth subject heading describes changes that are being implemented as a result of comments received in response to a notice of inquiry (NOI) that BIS published on July 5, 2012 (77 FR 39679), entitled *Request for Public Comments on Shipping Tolerances for Export Licenses Issued by the Bureau of Industry and Security (BIS)*. The sixth subject heading describes clarifications to the final rule published on April 16, 2013 (78 FR 22660) entitled *Revisions to the Export Administration Regulations: Initial Implementation of Export Control Reform* (the April 16 (initial implementation) rule). The public comments BIS received in response to the notice of inquiry prompted BIS to include these changes in this final rule because they are not only responsive to the public comments, but they will also make the CCL clearer and easier to use.

The six headings are:

- (1) Clarifications to existing CCL controls, including the use of the terms “parts” and “components” on the CCL;
- (2) Changes to conform the CCL to the multilateral export control regime control lists and previous amendments to the EAR;
- (3) Structural changes to improve the clarity of the CCL;
- (4) Removal of fourteen Export Control Classification Numbers (ECCNs) subject to the exclusive jurisdiction of the Nuclear Regulatory Commission (NRC);
- (5) Revisions to Shipping Tolerances and removal of all “Unit” paragraphs; and
- (6) Clarifications to the April 16 (initial implementation) rule.

The public comment period for the November 29 proposed rule closed on January 28, 2013. BIS received 10 public comments in response. When referring to specific comments, BIS identifies those as Commenters No. 1 through No. 10. The comments, including the table for the Record of Public Comments, can be found on the BIS Web site at <http://efoia.bis.doc.gov/index.php/electronic-foia/index-of-documents>.

Most commenters thought the cumulative impact of the November 29 proposed rule would be beneficial for exporters and would improve the clarity of the CCL. BIS did not accept some of the comments and addressed others in ways different than the recommendation. Commenter No. 7, for example, commended and fully supported the effort by BIS to modify the CCL in order to make all sections consistent and the CCL easier to read and interpret. Commenter No. 7 agreed with BIS that the cumulative impact of the proposed changes should improve clarity, and hence understanding, of the CCL. Commenter No. 7 expressed support for the rule, and noted that the increased ease of use of the CCL would especially benefit exporters of items that may transfer to the CCL as a result of Export Control Reform. Commenter No. 9 noted that the CCL contains a number of ambiguities and inconsistencies that require attention. Commenter No. 9 endorsed the recommendations specified in the November 29 proposed rule, asserting that the modifications, if implemented, will improve the overall clarity of the CCL. Commenter No. 3, however, was critical of BIS's proposal to remove fourteen NRC ECCNs. Commenter No. 8 objected to the proposed "parts" and "components" changes and questioned whether the changes in the November 29 rule were too extensive for industry to be able to review in a single proposed rule.

Some comments identified specific changes that needed to be made to achieve the objectives of certain proposed changes. Others identified formatting errors or typos in the November 29 rule. Some commenters also suggested additional changes that were not specifically proposed in the November 29 rule, either by specifically identifying additional changes or highlighting where additional review should be conducted under the CCL clean-up effort. BIS has incorporated some of these changes, for example the formatting errors and typos, although other changes may need to be addressed in subsequent reviews of the CCL. An effective control list is not static; therefore, although this final rule implements a large number of changes

to improve the CCL, no single rule, including this final rule, can eliminate the need for review of the CCL to ensure that it is clear and the scope reflects the current national security and foreign policy interests of the United States.

Some comments addressed issues outside the scope of the November 29 proposed rule. BIS did not address these comments in this final rule, but it provides a brief overview of the issues raised by the commenters for transparency. Commenter No. 5 submitted comments that were submitted previously on July 23, 2012 in response to a BIS proposed rule dealing with personal protective equipment and the proposed "600 series" ECCN 1A613. This comment is not addressed in this final rule because it is outside the scope of the November 29 rule, but this comment is being evaluated along with other comments received in response to the June 7, 2012 proposed rule as BIS prepares the final rule for publication. Another comment received that was outside the scope of the November 29 proposed rule dealt with the proposed definition of "components" that was set forth in the proposed rule published on July 15, 2011 (76 FR 41958). BIS completed its review, responded to comments received on the definition of "components," and published a definition of "components" in the April 16 (initial implementation) rule. Lastly, one commenter made a number of suggestions regarding the meaning and use of the term "specially designed" and regarding other design related terms on the CCL. These comments are outside the scope of the November 29 proposed rule. BIS proposed a definition of "specially designed" in a proposed rule published on June 19, 2012, and also an advance notice of proposed rulemaking published on the same day that requested comments on the feasibility of enumerating "specially designed" components on the CCL. BIS reviewed and responded to comments received on the definition of "specially designed" submitted in response to the June 19 proposed rule. A final definition of "specially designed" was published in the April 16 (initial implementation) rule. BIS is still evaluating where it may be feasible to remove the term "specially designed" from non-"600 series" ECCNs on the CCL.

*(1) Clarifications to Existing CCL Controls, Including the Use of the Terms "parts" and "components" on the CCL*

The majority of changes proposed in the November 29 rule and being implemented in this final rule amend the CCL without changing the scope of

the controls. The bulk of the changes this final rule is making to the CCL are non-substantive and will provide additional regulatory guidance to people classifying items subject to the EAR. One proposed change from the November 29 rule that is being implemented in this final rule will clarify the scope of ECCNs by providing clearer definitions of the terms "part" and "component," which is discussed below. However, this final rule does include changes that would affect the scope of one ECCN. Specifically, this final rule removes ECCN 8A918 and adds certain marine boilers to ECCN 8A992, where they would be controlled for AT and UN reasons.

BIS proposed in the November 29 proposed rule changes to align the regulations with the definitions of "part" and "component" included in a proposed rule published on July 15, 2011 (76 FR 41958) entitled "*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)*" (hereinafter "the July 15 (framework) rule"), which were made final in the April 16 (initial implementation) rule. The changes that are implemented in this final rule include adding additional references to "part" (although scaled back considerably compared to what was proposed in the November 29 proposed rule), and "component" in certain ECCNs to clarify that the scope of those ECCNs also extends to "parts" and "components" even if previously those ECCNs may have only referenced either "part" or "component," but not both terms together. The proposed definitions of "part" and "component" were provided in the November 29 proposed rule as a reference, along with a discussion of the context for the need to make certain conforming changes. The November 29 proposed rule indicated that the conforming changes would not be published in final form until the revised definitions of "part" and "component" were published in final form, which occurred, as noted above in this paragraph, in the April 16 (initial implementation) rule that is effective on October 15, 2013. Because of the relationship between this final rule and the initial implementation rule, this final rule's effective date is coordinated to become effective on the same day as the initial implementation rule.

As was noted in the November 29 proposed rule, BIS is not attempting to add additional references to "parts" and "components" in this final rule that would change the scope of what the

affected ECCNs control. In the past, BIS had not drawn clear distinctions between what was a “part” or “component” because both terms were undefined on the CCL. Having newly defined terms for “part” and “component” makes the CCL clearer and allows for more nuanced controls to be developed, but making the necessary conforming changes to the current CCL control text to conform to those new definitions, while not changing the intended scope of those existing ECCNs is also an important part to the Export Control Reform effort. BIS encouraged the public to participate in this process by reviewing the proposed changes in this area included in the November 29 rule.

In the November 29 rule, BIS indicated that if, however, the public believes any of the proposed changes would change the present scope of the affected ECCNs, then the public should submit comments that identify such changes and explain how the changes would cause the ECCNs to deviate from their present scope. One commenter did submit comments that were highly critical of these changes and questioned BIS’s assumptions, in particular whether such conforming changes would not change the scope of these ECCNs. BIS addresses this comment below in detail, including discussing the additional review conducted by BIS and the other agencies that reviewed this rule that led to a significant reduction in the number of ECCNs where “parts” are being added in this final rule. In addition, in the November 29 proposed rule, the public was encouraged to review the entire CCL to identify and comment on any other ECCN that uses the terms “parts” or “components” where additional changes may be warranted to conform to the intended scope of those ECCNs. Certain commenters conducted such analysis and made suggestions for additional changes that are addressed or implemented in this final rule. These public comments and additional reviews conducted by BIS and the other agencies helped to improve this final rule.

The following describes the changes included in this final rule, the comments received that pertained to changes proposed in the November 29 rule, and any additional changes that are being implemented in this final rule as a result of BIS’s review of the comments and additional analysis conducted of the CCL.

The clarifying changes being implemented in this final rule are as follows:

#### (A) Revisions to ECCN Headings To Clarify Meaning

*Revision to the headings of thirty-one ECCNs.* In Supplement No. 1 to part 774—The Commerce Control List, this final rule revises, to enhance clarity, the headings of the following thirty-one ECCNs: 0A018, 1A995, 1B018 1B115, 1C350, 1C355, 1C992, 2A291, 2A991, 2B005, 2B201, 2B109, 2B991, 2B992, 3B991, 3B992, 4A994, 5A991, 5A992, 5D992, 5E992, 6A997, 6A998, 6B995, 6D993, 7A103, 7A107, 8A992, 9A004, 9A106 and 9B991. This final rule also clarifies the relationship between the headings and the “items” paragraph in the List of Items Controlled section of these thirty-one ECCNs. For example, in certain ECCNs, the entries include an “items” paragraph, but the ECCN heading does not direct people to review the “items” paragraph. This rule will add the phrase “(see List of Items Controlled)” to these ECCN headings. For other ECCNs listed above, the heading includes the phrase “(see List of Items Controlled),” but the placement of the phrase is not correct in terms of what BIS intended to control in the ECCN. If the phrase appears at the end of the heading, then that means the “items” paragraph in the List of Items Controlled section is the exclusive, complete list of the items the ECCN controls. If, however, the phrase appears in the middle of the heading, then that means only that portion of the heading prior to the phrase “(see List of Items Controlled)” is specifically identified in the “items” paragraph in the List of Items Controlled section, and that the remaining part of the heading (i.e., the rest of the heading after the phrase “(see List of Items Controlled)”) is an exclusive, complete description.

The placement of the phrase “(see List of Items Controlled)” is important for “parts” and “components” referred to in ECCN headings. If “parts” and “components” references appear before the phrase, the entry only controls “parts” and “components” specifically identified in the “items” paragraph in the List of Items Controlled section. If, however, the phrase is in the middle of the heading and the reference to “parts” and “components” appears after the phrase—such as “and specially designed “parts” and “components” therefor”—that means the ECCN would control “specially designed” “parts” and “components” for any item identified in the “items” paragraph in the List of Items Controlled section. This rule does not address the definition of “specially designed,” which was published in the April 16 (initial implementation) rule, but rather the

relationship between these headings and the “items” paragraph in each of these respective ECCNs.

*Revisions to fourteen ECCNs.* In addition, this rule adds the phrase “as follows” to the headings of the following fourteen ECCNs: 0A981, 2B201, 5D991, 5D992, 5E992, 6A992, 6A994, 6A995, 6A997, 6A998, 6B995, 6C994, 6D993 and 9B991, to ensure consistency with the structure of other ECCNs on the CCL. The phrase “as follows” is used on some of the multilateral export control regime control lists, which is why the phrase appears on the CCL, including in some ECCNs that reflect controls applied unilaterally by the United States based on domestic foreign policy to conform to the structure of the regime-based ECCNs. The multilateral export control regimes do not use the phrase “(see List of Items Controlled),” but this phrase is used in many of the multilateral-based ECCNs on the CCL. BIS seeks greater consistency in how CCL headings are constructed, in particular how these two phrases are used in the ECCN headings. Commenter No. 8 to the November 29 proposed rule recommended, where the two phrases appear together at the end of the heading, that the use of “as follows” serves no purposes and therefore should be removed. Although BIS agrees there is redundancy in such cases, BIS desires to maintain consistency with the Wassenaar Arrangement, which uses the term “as follows” while at the same time using the CCL convention of directing the public to the “items” paragraph when needed. Thus, BIS is not accepting the recommendation in this comment, but will continue to consider whether additional changes should be made, including whether multilateral regime change proposals or discussions in this area may be warranted.

*ECCN 1C011.* This final rule is removing the cross reference from the heading of 1C011 to 1C111 because this text is no longer needed as a result of the addition of Supplement No. 4 to Part 774—Commerce Control List Order of Review in the initial implementation rule. Under Step 5 of the new CCL Order of Review, if an item is not classified by a “600 series” ECCN, then starting from the beginning of the product group you should analyze each ECCN to determine whether any other ECCN in that product group describes the item. This new CCL Order of Review makes the relationship clear between these two ECCNs, so there is no need to qualify the heading of 1C011 with the phrase “other than those specified in 1C111.” Therefore, this final rule

removes those phrases from the heading of 1C011.

*ECCN 1D993.* This rule revises the heading of 1D993 to remove the term “equipment” to be consistent with the definition of “equipment” added to the EAR in the April 16 (initial implementation) rule. This ECCN currently refers to equipment or materials, but the only ECCNs cross referenced in the heading are for controls on materials, so the term equipment is not needed in 1D993. BIS did not receive any comments on this change, so BIS is implementing this change, as proposed, in this final rule.

*ECCNs 0D001, 3D980, 3E980, 4D980 and 4E980.* This rule revises the headings of ECCNs 0D001, 3D980, 3E980, 4D980 and 4E980, by removing the term “items” and adding the term “commodities” in its place. BIS makes this change because in the context of these five ECCN headings, the term “commodities” is more accurate and specific regarding the scope of these entries. BIS did not receive any comments on this change, so BIS is implementing this change, as proposed, in this final rule.

*ECCN 2B998.* The heading of 2B998 uses the undefined term “units.” To add greater specificity regarding what the term “unit” is intended to cover in this ECCN, this rule modifies the heading by removing the term “units” and adding the term “circuit boards.” This change will clarify that “circuit boards” are the items covered under the heading of 2B998. BIS did not receive any comments on this change, so BIS is implementing this change, as proposed, in this final rule.

*ECCNs 3A980 and 3A981.* This rule adds the term “therefor” immediately before the term “n.e.s.” to the headings of ECCNs 3A980 and 3A981. This rule makes this change to emphasize that these ECCNs refer only to components of the subject voice print equipment and polygraph equipment. BIS did not receive any comments on this change, so BIS is implementing this change, as proposed, in this final rule.

*ECCN 9A004.* Commenter No. 7 suggested the term “specifically designed” should be replaced with “specially designed” on the CCL wherever it occurs. The November 29 proposed rule did not propose this change to ECCN 9A004. Commenter No. 7 noted that ECCN 9A004 still uses specifically designed “parts” and “components” as opposed to “specially designed.” For consistency this commenter suggested “specially designed” should be used all the time on the CCL. As part of the Export Control Reform Initiative, BIS will

review the use of “specifically designed” on the CCL as it corresponds to the USML categories, and how those categories are revised during the USML-to-CCL regulatory process.

(B) Clarification of the Use of the Terms “parts” and “components” on the CCL

The July 15 (framework) rule included proposed definitions for the terms “part” and “component.” The April 16 (initial implementation) rule included a final definition for the terms “part” and “component.” Specifically, the initial implementation rule, and the July 15 (framework) proposed rule, defined “parts” as “any single unassembled element of a component, accessory, or attachment which is not normally subject to disassembly without the destruction or the impairment of design use. Examples include 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.”

The April 16 (initial implementation) rule, and the July 15 (framework) rule, defined “components” as an item that is useful only when used in conjunction with an “end item.” Note that components are also commonly referred to as assemblies. For purposes of this new definition that was added to the EAR on April 16, 2013, in the initial implementation final rule that becomes effective on October 15, 2013, an assembly and a component are the same. Additionally, there are now 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 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.” Note also that “components” consist of “parts.” References in the CCL to “components” include both “major components” and “minor components.”

Another example for applying the definition of “component” in the automobile context would be a fuel pump and the engine. Under this additional example, the fuel pump is a minor component of an automobile, as it is an assembled element of a “major component,” the engine. While the car will not function without the fuel pump, it is not a “major component”

because it is integrated into a “major component,” the engine.

The July 15 (framework) rule indicated BIS would review the use of these two terms on the CCL and would likely make clarifications to CCL entries to conform to the proposed definitions included in the July 15 (framework) rule under a separate rule. The November 29 proposed rule addressed the use of the terms “parts” and “components” on the CCL to ensure these terms were being used in a manner consistent with the final definitions included in the April 16 (initial implementation) rule. BIS received a variety of different comments on these proposed changes that are addressed here.

The terms “parts” and “components” sometimes have been used interchangeably in various ECCNs, which may have been the source of some confusion. The final definitions included in the initial implementation rule were developed to provide clear, distinct definitions for both these terms and other terms such as “end item,” “system,” “accessories,” and “attachments,” to align with the definitions of these terms in the International Traffic in Arms Regulations (ITAR). See 22 CFR § 121.8. Such distinctions are significant for purposes of determining whether an ECCN applies to an item.

If an ECCN does not include a control on “parts” or “components,” then that ECCN would not, by definition, apply to the export of any particular “parts” or “components.” However, as mentioned above, the terms “parts” and “components” have sometimes been used interchangeably. Therefore, to ensure that once the definition of “part” and “component” are added to the EAR the scope of existing controls is not narrowed, the November 29 rule proposed adding additional references to “parts” or “components,” in particular for ECCNs that are based on the multilateral export control regime control lists. The November 29 rule took a cautious approach, possibly erring on the side of potential over control versus under control when making these conforming changes for “parts” and “components,” in particular for the addition of “parts” to entries that only identified components.

Under the current EAR, many of the ECCNs based on the multilateral control lists reference “components,” but not “parts.” For these entries where parts were not referenced, the U.S. Government had to take into account in drafting the November 29 rule how the U.S. Government has interpreted these ECCNs as well as how the other multilateral regime members have

interpreted these ECCNs to determine whether the intent of the U.S. Government and the other regime members was for these entries to include “parts.” In certain contexts BIS has determined the intent of the U.S. Government and the respective multilateral regimes is to also control “parts.” However, in other contexts after further review, BIS has determined the addition of “parts” is not needed, and therefore this final rule does not add references to “parts.” The Departments of State and Defense, along with other agencies that reviewed this final rule, assisted BIS in making these determinations. These determinations were focused on making sure that the conforming changes for “parts” and “components” being implemented in this final rule are consistent with past practice and would not result in a change in existing controls.

As noted in the November 29 rule, over the mid- to long-term, BIS will work with the other U.S. Government agencies involved in the multilateral regimes, in particular the Department of State as the lead representative to the multilateral export control regimes, to raise in the respective multilateral export control regimes whether certain ECCNs should be limited to “components” or “parts” or some other subset of “components,” such as major components or minor components.

Based on the public comments received, there appears to be some degree of disparate interpretation regarding whether some of these ECCNs are intended to also include “parts.” For example, Commenter No. 8 believes that in the vast majority of contexts, these ECCNs are not intended to reach “parts.” However, Commenters No. 6 and 7 supported the conforming changes, including those involving the addition of “parts.” Because BIS in the past had not defined or clearly distinguished between these two terms, it is not surprising to BIS that certain commenters would arrive at differing determinations regarding whether current ECCNs that do not include “parts” are intended to also include “parts.”

Many unilateral ECCNs on the CCL refer to “parts” but not “components.” For unilateral ECCNs, BIS has more discretion in whether these ECCNs should control “parts” and “components.” However, for consistency with the approach implemented for the multilateral-based ECCNs in this final rule, and to ensure the scope of the unilateral ECCNs is not changed, this final rule is adding references to “parts” and “components” as needed in the unilateral ECCNs to

reflect how BIS has interpreted the scope of these ECCNs in the past. These changes proposed in the November 29 rule were not opposed by any of the public comments received.

Consistent with the April 16, 2013 final definitions of “part” and “component” included in the initial implementation rule, BIS is implementing a number of changes to the CCL to incorporate the terms “parts” and “components” in specific ECCNs. However, as noted above, BIS has significantly scaled back the number of “parts” additions included in the final rule. The primary purpose of these ECCN changes is to conform to those definitions and to ensure that no substantive changes are made to the current U.S. Government interpretation of these ECCNs.

Public Comments Received for Clarifying the Use of the Terms “parts” and “components” on the CCL

The following discusses the comments received regarding the clarification of the use of the terms “parts” and “components” on the CCL.

*Two commenters supported the “parts” and “components” changes.* Commenter No. 6 noted that the definition of “part” and “component” is a welcome clarification.” Commenter No. 7 also indicated these changes should resolve ambiguities about ECCN coverage and enable companies to correctly classify items falling under each of these designations. BIS agrees with these comments. Commenters No. 6 and 7 support BIS’s rationale for these changes and provide additional rationale highlighting the benefits and need to make these changes.

*One commenter opposed the “parts” and “components” changes.* Commenter No. 8 opposed the “parts” and “components” changes because central to the proposed “parts” and “components” changes are the definitions of “specially designed” and “component,” respectively. This commenter noted that it is difficult to gauge the impact of the proposed changes in this area set forth in this rule without knowing the definitions of these terms. BIS acknowledges that these other terms have been proposed in other proposed rules being implemented under the ECR Initiative. BIS made this explicit in the November 29 proposed rule by including references to the definitions of “part” and “component” included in the July 15 (framework) rule. The public was informed in the November 29 proposed rule that those proposed definitions should be used as they evaluate the clarifying changes that were proposed in the November 29

proposed rule, and was given ample opportunity to review and comment on those proposed definitions. The April 16 (initial implementation) final rule that includes the definitions for these terms was informed by such public comments. The definitions of “part” and “component” included in the initial implementation rule did not substantively change from what was originally proposed in the July 15 (framework) rule.

Commenter No. 8 also stated as part of their rationale that the proposed rule tries to accomplish far too much at one time. BIS acknowledges that the proposed rule was large. However, the proposed rule clearly identified the proposed changes and the rationale for the various clarifying changes to “parts” and “components.” The public, including all potentially affected industries, was given adequate notice to review the proposed changes and submit comments. Certain specific examples were provided by commenters, such as Commenter No. 6 that noted in certain places the importance of the use of “and” or “or” as it related to certain technology ECCNs. BIS made clarifying changes to certain technology ECCNs as a result of these comments regarding “and” or “or.” The specific technology ECCNs that were revised to address the “and” or “or” issue are discussed elsewhere in this rule under the specific ECCNs.

Over time if the public identifies additional entries where changes should be made to “parts” and “components,” BIS may make additional clarifications to such controls, including implementation of multilateral export control regime changes, if approved by the relevant regime.

Commenter No. 8 also opposed these changes, asserting that these changes will cost exporters substantially more time to evaluate whether the numerous additions of “parts” or “components” will change the scope of an ECCN in a material way for their operations. This commenter noted that a substantial amount of time will also be required for exporters to evaluate the numerous inherent ambiguities the additions create in given ECCNs. BIS does not agree that the addition of “part” or “component” references by this rule will require exporters to spend substantially more time to determine the scope of the potentially relevant ECCN. Interested members of the public had adequate notice to review the proposed changes and submit comments as the November 29 proposed rule included a 60-day public comment review period. The preamble to the rule also identified changes to “parts” and “components”

and provided a considerable amount of detail regarding what was changing and why. Based on the comments received, BIS and the other agencies as mentioned above conducted a review of all the “parts” and “components” changes, which resulted in a significant scaling back of the “parts” changes. The proposed rule and the comments received along with the subsequent U.S. Government review led to a better final rule that more clearly achieves the stated objectives for the conforming “parts” and “components” changes.

As noted earlier, exporters and any other affected party may also submit additional suggestions for clarifications to the CCL at any time, so if in the future someone wishes to submit suggestions for further clarifying the use of “parts” and “components,” they may do that at any time consistent with § 756.1(a)(1) of the EAR.

Commenter No. 8 also requested that BIS publish several proposed rules proposing “parts” and “components” to be evaluated for each industry or related ECCNs. This commenter suggested that one option would be to propose “parts” and “components” rules for fewer ECCNs at a time, and possibly only pertaining to similar products or industries, so that BIS can be more confident that exporters will have identified and evaluated any unintended scope changes and ambiguities that may arise. BIS does not believe that such an approach is warranted based on the reasons noted above.

Commenter No. 8 also questioned BIS’s premise that these changes were limited to making clarifications to the CCL. This commenter argued that references to “parts” and “components” will significantly change the scope of many well established ECCNs. This commenter disputed BIS’s assertion that the addition of the term “parts” or “components” to numerous ECCNs, to ensure they include both terms, will not change the CCL substantively. BIS stated in the November 29 proposed rule that one of the objectives was to not change the scope of the ECCNs. As a result of this concern raised by Commenter No. 8, BIS and the other agencies reevaluated the “parts” and “components” changes and were able to identify a large number of ECCNs where the “parts” additions were not needed, and thus are not being implemented in this final rule. This change also addresses the clarity issues raised by Commenter No. 8. This reevaluation confirmed that the remaining ECCNs included in this rule where “parts” are being added need “parts” to be added

in order to maintain the intended scope of control.

However, Commenter No. 8 also argued that “parts” and “components” cover very different things, so BIS cannot interpret them interchangeably. The commenter noted that even if BIS sometimes interprets the terms “parts” and “components” interchangeably, the new proposed definitions of those terms describe very different items and will, therefore, require that those terms cover different items. To add one or the other of those terms to an ECCN in which it does not currently appear will dramatically change the scope and coverage of the ECCN. BIS agrees that the terms “part” and “component” under the new definitions will be distinct. Prior to the addition of a definition for “part” and “component” by the initial implementation rule, BIS had not used the same level of specificity in interpreting the scope of the undefined terms parts and components as used on the CCL. If the entry used the term “part,” BIS typically also interpreted the entry to extend to components. Similarly, when the entry used the term “components,” BIS in the context of certain entries interpreted those entries to extend also to parts. More importantly, because the terms part and component were not defined, this was not perceived as an issue. However, now that the two terms are defined, and as indicated in the comment cover different commodities, there is a need to specify in the context of each ECCN what was intended.

Commenter No. 8 also argued that treating “parts” and “components” as interchangeable is counter to the ECR goal of harmonizing terms and concepts across the USML and CCL. This commenter noted that the USML maintains separate definitions of “part” and “component.” Because one of the goals of export control reform is to harmonize terms and concepts across regulatory regimes, the notion that “parts” and “components” are “interchangeable” terms in the EAR will potentially create confusion and drafting problems as items move from the USML to CCL, or as well as when the planned consolidation of the two control lists eventually occurs. BIS does not agree that treating the undefined terms “parts” and “components” as interchangeable is counter to the ECR goal of harmonizing terms and concepts across the USML and CCL. BIS is making the changes as part of the larger effort to begin the harmonization between the EAR and the ITAR of key terms. If BIS did not make the changes, then “parts” that are within the scope of the word “components” throughout

the CCL would become decontrolled once the EAR adopted in Part 772 the ITAR’s definition of “part.” Thus, this conforming change will bring the non-“600 series” into alignment with the structure of both the ITAR and the “600 series” ECCNs. As noted above, Commenters No. 6 and 7 view the greater specificity as a benefit to exporters, so although these “parts” and “components” changes are integral to the larger USML-to-CCL process now under way under the ECR Initiative, these changes will also make the overall CCL clearer.

Commenter No. 8 also noted that adding one term or another to an ECCN’s heading as a matter of course to ensure the heading includes both terms will inevitably create new ambiguities in interpreting an ECCN. BIS clearly described the intent of these changes in the proposed rule and then requested the public to review each of these changes and to identify any changes that either were not consistent with how they interpret the scope of these ECCNs or created any perceived ambiguity. BIS received comments on this issue that related to ECCNs 1C007, 2A292 and 6A992, 2B116, and 3A001 and analyzed them as follows:

*ECCN 1C007.* Commenter No. 7 suggested BIS replace “components” in 1C007 with the term “ingredients,” which the commenter thought makes more sense in this materials category. BIS did not propose this change in the November 29 rule, but understands the rationale for the suggestion. However, BIS is addressing the commenter’s suggestion by not adding quotes around the term components in 1C007.e. BIS is not adding quotes around the reference to “components” in 1C007.e, because the controls are for “carbon and nitrogen components,” which is interpreted as a single term for purposes of 1C007.e, in this final rule. This is similar to the rationale provided below for why quotes are not being used in ECCNs 3A001.b, 3A982 and 3D982 in this final rule.

*ECCNs 2A292 and 6A992.* BIS received comments from Commenter No. 8 in response to the proposed changes to the “unit” paragraph in ECCNs 2A292 and 6A992. However, as noted elsewhere in this final rule, BIS is not implementing the proposed changes to the “unit” paragraphs because this final rule is removing the “unit” paragraph from all ECCNs on the CCL as part of the effort to simplify the shipping tolerance provisions under the EAR that are also being implemented in this final rule. For these reasons, BIS is not implementing the changes suggested in the comments to 2A292 and 6A992.

*ECCN 2B116.* Commenter No. 8 noted a specific ECCN example (2B116) as a basis for their concern regarding the use of “parts.” This commenter noted that the November 29 rule proposed to add “parts” to 2B116, which currently covers only “components” for relevant vibration test systems. This commenter was concerned that none of items listed in 2B116, however, would likely be considered a “part” under the new definition. This commenter believed that if implemented, exporters would then be left with uncertainty as to whether an item that could be considered a “part” of a covered vibration system is controlled. BIS does not believe any changes for clarity need to be made for 2B116. The subsequent review conducted by the U.S. Government of the “parts” changes determined in the context of 2B116 that “parts” is needed in order to maintain the intended scope of control. Moreover, BIS believes with “(see List of Items Controlled)” appearing at the end of the entry, there should be no confusion as to what is controlled because only the items listed are controlled. This interpretation also aligns with the original Missile Technology Control Regime (MTCR) text and interpretation regarding the scope of this entry. Therefore, for the reasons noted above, BIS is implementing the changes, as proposed; in this final rule.

*ECCN 3A001.* Commenter No. 8 also noted ECCN 3A001.c as an example of their specific concerns about the use of “parts.” This commenter thought this change would result in new compliance obligations for companies that deal in less complex elements (“parts”) of a covered wave device. The subsequent review conducted by the U.S. Government of the “parts” changes determined in the context of 3A001 that “parts” is not needed in order to maintain the current scope of control. Therefore, BIS is not implementing this change to 3A001 and to all other ECCNs where the subsequent review determined “parts” was not needed in order to maintain the current scope of control.

Commenter No. 8 also noted that the “parts” and “components” changes are not consistent with multilateral regime control lists. This commenter asserted the proposed rule makes changes to many ECCNs that are governed by multilateral export control regimes, including WA, which BIS acknowledges is a correct statement. Commenter No. 8 indicated that adding “parts” to CCL headings represents a significant change and marked expansion of scope of the current entries and is not consistent with specific WA language. This

commenter believed the U.S. Government should submit this change to the Wassenaar Arrangement. This commenter believes these proposed changes will require consent of WA members before they can be made. The same is true with other proposed changes to other CCL entries that are based on other multilateral regimes, such as the Australia Group (AG). This commenter encouraged BIS to consult with the other regime members before these changes are made because failing to do so could lead to a different scope of coverage in the U.S.

The United States is a member of the four major multilateral export control regimes. In accordance with the terms of membership of these regimes, the CCL is consistent with the control lists used by the respective multilateral export control regimes, although there is national discretion in how those lists are implemented in the various member countries’ controls. BIS’s interpretation of the usage of the term “parts,” which informed the proposed changes included in the November 29 proposed rule, was that “parts” generally fall under “components” for the typical WA control text. BIS applies this same interpretation to the other multilateral control lists, which also informed the changes included in the November 29 proposed rule. However, based on the concerns raised by Commenter No. 8, the U.S. Government, including the Department of State, conducted an additional review of the “parts” and “components” changes that were included in the November 29 rule. This review, as noted above, resulted in a significant reduction in the number of ECCNs where “parts” is added in this final rule, in particular for many of the Wassenaar Arrangement-based ECCNs. In the remaining ECCNs where “parts” is being added, the U.S. Government has determined that the intent in the context of these ECCNs, including the multilateral based ECCNs, is that “parts” is needed in order to maintain the current scope of control.

In the future, if one of the respective multilateral regimes specifies under one of the multilateral-based entries that such entries are intended to only reach “components” or some other formulation, BIS will implement those changes to the respective entries on the CCL consistent with the U.S. Government’s multilateral regime commitments.

The November 29 rule proposed changes implemented in this final rule revise one hundred and one ECCNs on the CCL where the term “parts” or “components” is used, as identified and

described in the paragraphs below in more detail.

*“Parts” is used, but “specially designed” “components” or “components as follows” is intended or “specially designed” “parts” and “components” is intended.* In three ECCNs, the term “parts” is used, but the term “specially designed” “components” is intended. This final rule removes the term “parts” and replaces it with the terms “specially designed” “components” in the following three ECCNs: 0A979, 3A980, and 3A981. This rule removes the term “part” and replaces it with the terms “specially designed” “parts” and “components” in the following four ECCNs: 0A982, 0A983, 0A985, and 0A986. In ECCNs 0A984 and 0A987, the term “parts” is used, but the term “components” or ““components” as follows” is intended. This rule removes the term “parts” and replaces it with the term “components” or ““components” as follows” in these ECCNs. BIS is implementing these changes, as proposed, in this final rule.

*The hybrid term “component parts” is used, but “parts” and “components” is intended.* In certain ECCNs, the hybrid undefined term “component parts” is used, but the intent is “parts” and “components.” This final rule changes ECCN 3A201 to bring its meaning into alignment with this intent by changing “component parts” to “parts” and “components.” BIS is implementing these changes, as proposed, in this final rule. This same issue appears in some of the “xY018” ECCNs on the CCL, but given that those ECCNs will be addressed in the ongoing USML-to-CCL process as those items in the “xY018” ECCNs are moved to the “600 series” ECCNs, the November 29 proposed rule did not propose making changes to those “xY018” entries.

*“Parts” or “components” is used, but “parts” and “components” is intended.* Because the terms “parts” and “components” are currently used interchangeably in the context of several entries on the CCL, maintaining current controls while adopting definitions for these words requires the use of both words in each of the seventy-two ECCNs where one of those terms is currently used but both terms are intended. This will ensure that existing ECCNs maintain the same controls that existed when the terms were undefined, so that “parts” and “components” will encompass all subsidiary elements of a complete system in the context of these ECCNs. The November 29 rule proposed adding “parts” or “components” to one hundred and forty-six ECCNs, but after further review conducted by the U.S.



Government, BIS determined only seventy-two ECCNs needed “parts” or “components” added in order to maintain the current scope of control. The significant reduction in the number of these changes is from the reduction in the number of ECCNs where “parts” is being added in this final rule. BIS, in consultation with the other agencies and multilateral export control regimes, intends to revise these entries in the future to further refine the CCL controls, but BIS has determined the changes being implemented in this final rule are the only ones needed at this time and are consistent with the current multilateral regime control lists.

This final rule will insert “parts” and add quotation marks in the following sixty-four ECCNs (in the November 29 proposed rule “parts” was to be added in one hundred and twenty-seven ECCNs): 1A001, 1A002, 1A102, 1A995, 1B003, 1B101, 1B102, 1B115, 1B117, 1B118, 1B119, 1C117, 2A991, 2B109, 2B116, 2B229, 2B351, 2B352, 2B992, 2B998, 2D351, 3A101, 3A201, 3A292, 3A999, 3B991, 3B992, 3D991, 3E982, 3E991, 4A101, 4A994, 5A991, 6A107, 6A203, 6A991, 6B995, 6E001, 6E002, 6E993, 7A101, 7A102, 7A103, 7A104, 7A105, 7A107, 7D101, 7E101, 8A002, 8A992, 9A004, 9A010, 9A011, 9A106, 9A108, 9A109, 9A111, 9A120, 9B001, 9B002, 9B009, 9B115, 9B116 and 9E003. BIS is implementing these changes as proposed, except for the following sixty-three ECCNs: 1A004, 1A005, 1A006, 1A008, 1B001, 1C007, 1C230, 2A001 (although BIS is adding a new Note to 2A001.a to clarify this paragraph includes a control on roller bearing and roller elements “specially designed” for the items specified therein), 2B001, (not implemented for heading), 2B003, 2B004, 2B005, 3A001, 3A003, 3A233, 3A982, 3A991, 3B001, 3B002, 3D982, 3E001, 3E003, 4A001, 4A003, 4A004, 5A001, 5B001, 5E001, 5A002, 5A992, 6A001, 6A002, 6A003, 6A004, 6A005, 6A006, 6A008, 6A102, 6A205, 6A992, 6A995, 6A996, 6A998, 6B008, 6D001, 7A001, 7A002, 7A003, 7A004, 7A005, 7A008, 7D001, 7E001, 7E002, 9A002, 9A003, 9A005, 9A006, 9A008, 9A012, 9B003, 9B010, and 9D004 (not implemented for 9D004.e) that will not be changed based on the subsequent U.S. Government review of the “parts” and “components” changes, in this final rule.

*ECCN 3A001.* After further review of the proposed changes, including a review of input received from BIS’s TACs, BIS decided to not add quotes around the first reference to “components” in the phrase “electronic components” in the heading of ECCN 3A001 to avoid creating confusion over

the meaning of the phrase. “Electronic components;” although undefined; is interpreted as a single term for purposes of 3A001. For similar reasons, BIS is not adding quotes around the reference to “components” in 3A001.b because the controls are for microwave or millimeter wave components, which is interpreted as a single term for purposes of 3A001.b, as well as the references to the phrase microwave or millimeter wave components in the headings of ECCNs 3A982 and 3D982 in this final rule.

This final rule inserts “components” and adds quotation marks in the following eight ECCNs: 2A994, 2B201, 5A980, 6A203, 6B995, 8A992, 9A106, and 9A991. In this final rule, BIS is implementing these changes as proposed, except 2A292, 2B001 (in the heading), and 9A012 will not be changed based on the subsequent U.S. Government review of the “parts” and “components” changes included in the November 29 rule.

This final rule will add quotation marks to the existing term “components” in the following fifty-two ECCNs: 1A004, 1A005, 1A006, 1A008, 1B001, 1C007, 2A001, 2B003, 2B004, 3A003, 3B001, 3B002, 3E001, 4A001, 4A003, 4A004, introductory text of Note 1, the N.B.2 and Note 2 that immediately follows the Category 5 Part 1—Telecommunications, 5A001, 5A002, 5A992, 5B001, 5E001, 6A001, 6A002, 6A003, 6A004, 6A005, 6A006, 6A008, 6A992, 6A995, 6A996, 6A998, 6B008, 6D001, 7A001, 7A002, 7A003, 7A004, 7A005, 7A008, 7E001, 7E002, 9A002, 9A003, 9A005, 9A006, 9A008, 9B003, 9B010, 9A012, 9D003 and 9E003.

This final rule will reposition the term “parts” before “components” and will add quotation marks to the existing terms “parts” and “components” in the following ten ECCNs: 1C002, 2A983, 2A984, 3A001, 4A994, 7A994, 9A106, 9A991, 9B990, and 9E003. BIS is implementing these changes, as proposed, in this final rule, except 1A004, 3A001, and 6A992 will not be changed based on the subsequent U.S. Government review of the “parts” and “components” changes included in the November 29 rule.

*ECCN 1C350 and 1C355.* After further review of the proposed changes to ECCNs 1C350 and 1C355, including reviewing input received from BIS’s TACs, BIS decided to not add the term “parts” to ECCNs 1C350 and 1C355. BIS decided it would be better to replace the term “components” in these two ECCNs with the alternative term “ingredients.” This change will more clearly reflect the intent of these two ECCNs and avoid potential confusion with the new definition of “component.”

*ECCN 9E003.* Commenter No. 6 noted that although they supported the addition of the conforming changes for “parts” and “components,” for certain technology entries using “and” instead of “or” between “parts” and “components” may inadvertently allow the release of certain technology. This commenter noted that the proposed rules used the phrases “parts” or “components” and “parts” and “components” interchangeably. The commenter further asserted that there are cases where this may cause some readers to read the control as being narrower than intended, specifically in ECCNs 9E003.a.7, 9E003.a.8, and 9E003.c. In the case of the proposed wording for 9E003.a.7, Commenter No. 6 asserted this could be interpreted to mean that the “technology” is “required” only if it applies to both “parts” and “components”, which is narrower than the “technology” for either item. This commenter recommended using “or” in these three items paragraphs of 9E003. However, as a result of this comment, BIS also evaluated the other entries where conforming changes for “parts” and “components” were being made and determined that “and” should also be replaced with “or” in the following two ECCNs: 2B201 note to .a, and 9B009 heading.

#### (C) Clarification of the Use of the Term “assemblies” on the CCL as Components

In the “component” definition added to the EAR in the April 16 (initial implementation) rule, it states that “components are also commonly referred to as assemblies. For purposes of this definition, an assembly and a component are the same.” BIS has reviewed the CCL to ensure the term “assemblies” is not being used redundantly on the CCL. This review identified five ECCNs (5A991, 9A002, 9A003, 9B002, and 9D004) where the terms “assemblies” and “components” are being used in the same ECCN, but where the term “assemblies” should be removed to avoid the incorrect interpretation that assemblies are different from components. This final rule adds the term “electronic” before the term “assemblies” in 5A991 under “items” paragraphs (c.1) and (g) to distinguish the particular type of assembly that is intended to be controlled under this entry. As was noted in the November 29 proposed rule, with regard to ECCNs 9A002, 9A003, 9B002, and 9D004, the U.S. Government intends to develop a proposal to submit to the Wassenaar Arrangement that would propose the



removal of the term “assemblies” from these ECCNs or, in the alternative, propose the addition of more descriptive terms, such as “electronic” to clarify the scope of those other multilateral-based ECCNs.

This final rule removes reference to the term “assemblies” in ECCN 6A998 and adds the term “components” in its place. As described above, this rule also adds the term “parts” to 6A998. BIS is implementing these changes as proposed, with the one exception, in this final rule.

(D) Revisions to the Following ECCNs, Including Changes Made as a Result of Comments

*ECCN 1A005.* Commenter No. 7 noted that “specially designed” does not consistently appear in quotation marks, as exemplified by 1A005. This commenter believes that to conform to the new definition of “specially designed” added in the initial implementation rule, the term should be in quotes in 1A005 and wherever else the term “specially designed” is used on the CCL. BIS agrees and is adding quotes wherever the term “specially designed” is used on the CCL in this final rule.

*ECCN 1B001.* Commenter No. 7 requested that BIS clarify in this final rule whether the July 15 (framework) rule proposed definition of “accessories” applies to 1B001 and to other places it is used on the CCL. This commenter also requested that BIS add quotation marks around “accessories” in 1B001 and wherever else on the CCL the term “accessories” is used. The definition for “accessories” was added to the EAR in the initial implementation rule, and will apply to 1B001 and wherever the term “accessories” is used on the CCL. Therefore, BIS in this final rule accepts these comments and is adding quotation marks to wherever the term “accessories” is used in this rule. Note that “accessories” and “attachments” are defined as separate terms in part 772, but the definition is the same for “accessories” and “attachments” and each definition cross references the other. For the same reason that BIS is adding quotation marks around “accessories,” BIS is also adding quotation marks around “attachments” in this final rule.

*ECCN 1C996.* This final rule will amend 1C996 by revising the heading to add the phrase “not controlled by 1C006,” to clarify the scope of 1C996 as it relates to 1C006. BIS did not receive any comments on this change, so BIS is implementing this change, as proposed, in this final rule.

*ECCN 2A994.* As an additional clarification to existing controls, Commenter No. 4 suggested adding an ECCN-specific definition of “portable electric generator” to 2A994. This commenter was aware of past advisory opinion guidance provided by BIS that had interpreted the term “portable electric generator” for purposes of 2A994. BIS is aware of this past advisory opinion and agrees it would be beneficial to add an ECCN-specific definition based on that previously provided guidance. This new ECCN-specific definition added by this final rule makes it clear that the generators that are in 2A994 are portable—5,000 lbs or less on wheels or transportable in a 2½ ton truck without a special set up requirement.

*ECCN 2B350.* This final rule amends 2B350 by revising the “Related Definitions” paragraph in the List of Items Controlled section to indicate for purposes of this entry that the term ‘chemical warfare agents’ includes those agents “subject to the ITAR” (see 22 CFR parts 120 through 130). In addition, this rule adds a note at the end of the “items” paragraph in the List of Items Controlled section to provide a reminder and cross reference to the Note for exporters, reexporters and transferors, stating the following: “See Categories V and XIV of the United States Munitions List for all chemicals that are ‘subject to the ITAR’ (see 22 CFR parts 120 through 130).”

Commenter No. 8 requested BIS to specify whether the definition for the “chemical warfare agents” proposed for 2B350 also applies to 1A004 and 2B351. The 2B350 definition is an ECCN-specific definition, so it does not apply to 1A004 or 2B351. If the definition were intended to also apply to other ECCNs, then adding a definition of “chemical warfare agents” to 772 would be the appropriate change to make, but as noted that was not intended in the November 29 proposed rule.

Commenter No. 8 also indicated the “chemical warfare agents” definition scope proposed for ECCN 2B350 is not correct in terms of its reference to USML categories referenced. Specifically, Commenter No. 8 was concerned that proposing that the ITAR-controlled chemicals are only found in USML Categories V and XIV is not correct because such chemicals could conceptually fall within USML Category XXI and possibly others. In drafting the November 29 proposed rule, BIS consulted with the Department of State on the appropriate USML categories to reference in the 2B350 definition. In reviewing this comment and preparing this final rule, BIS also consulted with

the Department of State. BIS acknowledges USML Category XXI, which is a temporary holding category on the USML, could be applicable, but USML Category XXI could also be applicable for any other USML-related cross reference provided on the CCL. For this reason, BIS does not add references to USML category XXI. Based on the interagency review of this comment and the draft final rule, no additional USML categories need to be added to the ‘chemical warfare agents’ definition in ECCN 2B350. For the reasons noted above in responding to the commenter, BIS is implementing this change, as proposed, in this final rule.

*ECCN 2B996.* This final rule amends 2B996 by revising the heading to clarify that dimensional inspection or measuring systems or equipment not controlled by 2B006 or 2B206 are controlled under this ECCN. Certain dimensional inspection or measuring systems or equipment controlled under 2B206 would also be controlled under 2B996. To clarify the relationship between 2B996 and 2B206, this rule adds 2B206 to the exclusion in 2B996. BIS did not receive any comments on this change, so this change is implemented, as proposed, in this final rule.

*ECCN 2B999.* Commenter No. 1 requested BIS clarify the scope of 2B999.g for fittings. The commenter asked BIS to clarify whether or not 304 and 316 stainless steel pipe fittings, which do not fall under 2A292.a, are classified under 2B999.g. This commenter noted that currently, manufacturers have differing interpretations. Some classify fittings under 2B999 and others EAR99. Confusion comes from some thinking 2B999.g includes fittings because “fittings are simply shorter pieces of pipe.” However, others may classify fittings as EAR99 because they are not specified in 2B999.g. Lastly, this commenter noted that whether the fittings are EAR99 or 2B999.g the same license requirements apply. BIS addressed this commenter’s suggestion for removing 2B999 elsewhere in this rule and addressed the request for clarification here regarding the scope of 2B999.g. BIS confirms here that fittings are considered part of “piping” for purposes of 2B999. BIS also adds a new note to 2B999.g to clarify the scope of this item.

*ECCN 6A002.* This final rule revises the STA (License Exception “Strategic Trade Authorization”) paragraph in the License Exceptions section, which as proposed in the November 29 rule and as implemented in the final rule, is now

in its own section called Special Conditions for License Exception STA. This final rule removes the phrase, "to any of the eight destinations listed in § 740.20(c)(2) of the EAR" from the end of the current STA paragraph and adds it to the introductory text of the STA paragraph. BIS makes this change to clarify the 6A002 "items" paragraphs that are not eligible for License Exception STA to any of the eight destinations listed in § 740.20(c)(2). BIS did not receive any comments on this change, so BIS is implementing this change, as proposed, in this final rule.

**ECCN 6E001 and 6E002.** This final rule removes the term "equipment" and replaces it with the term "items" in the "NP" and "RS" controls paragraphs in the License Requirements section of 6E001 and 6E002. This clarification is made as a conforming change to the new "equipment" definition added in the April 16 (initial implementation) rule. The clarification is made because the "NP" and "RS" items include paragraph references to other ECCNs that control items other than equipment and therefore the broader term "items" is intended in these two controls paragraphs in 6E001 and 6E002.

**ECCN 8A918.** This final rule removes the marine boilers from 8A918 and moves these items to two new "items" paragraphs in the List of Items Controlled section of 8A992. This rule adds a new "items" paragraph (l) to 8A992 for marine boilers designed to have any of the characteristics in the new 8A992.l.1 or .l.2. This rule adds "items" paragraph (m) to 8A992 for "components," "parts," "accessories," and "attachments" for marine boilers that would be described in 8A992.l. This rule's movement of these commodities from 8A918 to 8A992.l and .m will remove the Regional Stability (RS) Column 2 control on these commodities. The Anti-Terrorism (AT) and United Nations (UN) controls will be retained for the commodities moved to 8A992.l and .m. BIS proposed this change in the November 29 rule because these marine boilers do not warrant an RS control or a separate ECCN entry and can therefore be added under ECCN 8A992 to be controlled with other types of marine commodities warranting an AT control. BIS did not receive any comments on this change, so BIS is implementing this change, as proposed, in this final rule.

**ECCN 9A980.** This final rule revises 9A980 by removing the term "parts" from the heading of the ECCN and adding a new heading note to clarify the scope of the ECCN. The Crime Control (CC) parts that would have been

alone are already accounted for on the CCL and controlled for CC reasons. The new heading note clarifies that in order for a vehicle to be classified as a nonmilitary mobile crime scene laboratory under ECCN 9A980, the vehicle must contain one or more analytical or laboratory items controlled for Crime Control (CC) reasons on the CCL, such as items controlled under ECCN 3A980 or 3A981. This new heading note does not change the scope of the ECCN, but clarifies the scope of this ECCN and the relationship to other CC ECCNs. BIS did not receive any comments on this change, so BIS is implementing this change, as proposed, in this final rule.

**ECCN 9A991.** In reviewing the conforming changes for "parts" and "components," Commenter No. 6 raised concerns regarding whether the proposed changes to 9A991.d should be implemented due to a concern that the proposed wording may inadvertently classify some aircraft "parts" and "components" as EAR99 while an aircraft is in development. Commenter No. 6 asserted that under the proposed wording, the "parts" and "components" to be controlled are only those for "aircraft" that meet requirements of 9A991.a or .b. ECCN 9A991.a controls specific military aircraft, and ECCN 9A991.b controls "civil aircraft." Prior to receiving a civil airworthiness certificate, developmental aircraft do not meet the definition of "civil aircraft" in § 772.1 of the EAR. The commenter stated that it would follow that "parts" and "components" "specially designed" for pre-certification non-military aircraft or in countries where such certificates are not granted are not described in 9A991.d, and barring any other control, would be classified EAR99. Once the aircraft is certified, these parts would move to 9A991.d. Commenter No. 6 indicated they believed this is not the intent of the control. BIS agrees that this is not the intent of the control. BIS reviewed this issue and determined it was better to revise 9A991.b by replacing the term "civil aircraft" with the term "aircraft n.e.s." This revision to 9A991.b would describe more precisely the scope of the ECCN and would be consistent with how BIS now interprets the ECCN. Aircraft subject to the ITAR will remain ITAR controlled. Aircraft subject to the EAR and controlled by ECCN 9A610.a will continue to be controlled by that ECCN. Aircraft described in ECCN 9A991.a will continue to be controlled by that subparagraph. ECCN 9A911.b will continue to control all other aircraft at all stages of their development or

production, and regardless of whether they have a certification from an aviation authority. This final rule also makes a conforming change to the change in 9A991.b by revising the regional stability (RS) 1 control in ECCNs 7D001, 7E001, 7E002, and 7E101. These ECCNs are amended by removing the term "civil aircraft" and replacing it with the more accurate phrase 9A991.b aircraft. This change is not substantive and is limited to conforming to the clarification made to 9A991.b and to add greater specificity in these three RS controls. For additional clarity, this final rule also adds the conjunction "and" to the RS control between the terms "inertial navigation system" or "inertial equipment" in 7D001, 7E001, 7E002 and 7E101, along with other clarifying text to the RS control in 7E101 to clarify the scope of this RS control by adding the terms "required" and "specially designed."

**xY999 ECCNs.** Commenter No. 1 suggested BIS remove all xY999 ECCNs where items controlled are only AT-controlled. BIS evaluated this change in drafting the November 29 proposed rule and considered implementing the removal of certain xY999 entries in this final rule. However, in evaluating these possible removals with the other agencies involved in the review process of the November 29 rule, it was determined that additional analysis is needed before moving forward with these removals. This determination also took into account the minimal impact that such removals would have, given that the only xY999 ECCNs under consideration for removal are those where the license requirements would be redundant with EAR99 items. BIS is still evaluating whether it may be possible to remove some or all of the "xY999" ECCNs on the CCL that may have redundant license requirements with EAR99 items.

#### (E) Addition of "Related Controls" To Aid in Classification

Most ECCNs on the CCL contain a "related controls" paragraph in the List of Items Controlled section that provides cross references to related ECCNs to assist the public in classifying items that are subject to the EAR. In some ECCNs, the "related controls" paragraph also includes cross-references to the export controls other U.S. Government agencies administer.

The November 29 rule proposed adding a number of additional "related controls" paragraphs or revising existing "related controls" paragraphs to assist the public in classifying items. This final rule implements those changes, along with certain additional "related

controls” changes in response to BIS’s review of the public comments. In the November 29 proposed rule, BIS advised that in responding to the proposed rule, the public may also provide suggestions for additional “related controls” that would assist the public in classifying items. This final rule is revising the “related controls” paragraphs in the following twelve ECCNs: 1A985, 1B117, 1B118, 1B119, 1B225, 1C117, 1C233, 2B105, 2B116, 3A230, 7A103 and 9B009 that were proposed in the November 29 rule. In addition, as a result of the review of public comments, this final rule is also revising the “related controls” paragraphs in the following three ECCNs: 2A226, 2A292 and 2B350 as follows:

**ECCN 2A226.** Commenter No. 9 suggested adding ECCN 2B999 to the “related controls” paragraph of 2A226. This commenter noted that 2A226 references other valve ECCNs (2A292 and 2B350), but has no reference to 2B999. BIS agrees that adding 2B999 would be helpful, so this final rule is implementing this change.

**ECCN 2A292.** Commenter No. 9 suggested adding ECCNs 2B350 and 2B999 to the “related controls” paragraph of 2A292. This commenter noted 2A292 references to one other valve ECCN (2A226), but has no reference to 2B350 or 2B999. BIS agrees that adding 2B350 and 2B999 would be helpful, so this final rule is implementing this change.

**ECCN 2B350.** Commenter No. 9 suggested adding ECCNs to the “related controls” paragraph of ECCN 2B350 instead of using N/A. The commenter was concerned that the use of “N/A” may lead you to mistakenly conclude that there are no applicable technology ECCNs or any other potential valve ECCNs. BIS agrees that adding ECCNs 2A226, 2A292, 2A293, 2B231 and 2B999 to the “related controls” paragraph of 2B350 would be helpful, so this final rule is implementing this change.

**ECCN 2B999.** Commenter No. 9 suggested adding ECCNs 2A226 and 2A292 to the “related controls” of 2B999. This commenter noted that 2B999 refers to a number of other ECCNs, including 2B350, but it does not refer to the other valve ECCNs (2A226 and 2A292). BIS does not accept this change because it is clear within the context of this ECCN 2B999 that the only valves that are controlled are those referenced in the long list of “items.” BIS is also still evaluating whether it may be possible to remove 2B999, along with similar “xY999” ECCNs on the CCL that have redundant license

requirements with EAR99 items. Additional analysis is needed, however, before any such “xY999” ECCNs can be removed from the CCL, as noted above.

Commenter No. 9 also suggested BIS conduct a review of all the “related controls” on the CCL to identify additional changes to make and address inconsistencies. This commenter recommended BIS review the “related controls” section of each ECCN in Groups A, B or C to identify all related ECCNs. The “related controls” then should be updated accordingly to include similar ECCNs of Groups A, B or C as well as the applicable software and technology ECCNs of Groups D and E. BIS agrees that regular review of the “related controls” paragraphs should be conducted. BIS has already conducted a review of all the “related controls” paragraphs on the CCL, and these are the changes that were proposed in the November 29 rule. In evaluating the comments received in response to the November 29 proposed rule, BIS also identified additional “related controls” changes that are being implemented in this final rule, as described above for ECCNs 2A226, 2A292, and 2B350. BIS will continue conducting regular reviews of the “related controls” paragraphs and make updates as necessary on the CCL. Note, however, that although the “related controls” paragraphs are a useful tool for classifying related items under the CCL, the “related controls” paragraphs are not exhaustive or determinative of an item’s control status. They are not part of the control text for a specific ECCN. Related controls are a method of identifying other ECCN entries that may be applicable to a particular item, including highlighting in certain cases when a related item may be subject to the exclusive jurisdiction of another agency of the U.S. Government. However, to determine whether an item is classified under another entry on the CCL or another control list, such as the Nuclear Trigger List or the United States Munitions List (USML), a person classifying an item should review the other ECCN or other control lists as applicable to determine the jurisdictional and classification status of a particular item.

Supplement No. 4 to part 774—Commerce Control List Order of Review—was added to the EAR in the initial implementation rule, and identifies the proper order of review for reviewing the CCL.

**ECCNs 7A005 and 7A994.** This final rule also revises the “related controls” paragraphs in ECCNs 7A005 and 7A994 and includes the substance of the amended related control paragraph as a

new “license requirement note” in 7A994. This change will clarify the relationship between 7A005 and 7A994 and provide guidance on the appropriate classification for GPS equipment. The added text in 7A005 and 7A994 will alert persons classifying GPS items that “typically commercially available GPS do not employ encryption or adaptive antenna and are classified as 7A994.” BIS did not receive any comments on this change, so BIS is implementing this change, as proposed, in this final rule.

(F) Addition of the Term “subject to the ITAR” to the EAR.

This final rule adds the term “subject to the ITAR” to § 772.1 (Definitions of terms as used in the EAR). This defined term is added to parallel the use of the term “subject to the EAR” that is commonly used in the EAR, along with simplifying many of the references to the export jurisdiction of the Department of State that are included in the EAR. The vast majority of these references to the export control jurisdiction of the Department of State are on the CCL. This final rule will therefore add the following definition of “subject to the ITAR” in § 772.1:

A term used in the EAR to describe those commodities, software, technology (e.g., technical data) and defense services over which the U.S. Department of State, Directorate of Defense Trade Controls (DDTC) exercises regulatory jurisdiction under the International Traffic in Arms Regulations (ITAR) (see 22 CFR 120–130).

This final rule makes conforming changes to the rest of the EAR, including several ECCNs and §§ 734.4 (*De minimis* U.S. content), 734.6 (Assistance available from BIS for determining licensing and other requirements), and 740.6 (Technology and software under restriction (TSR)), by adding “subject to the ITAR” where the export control jurisdiction of the Department of State is referenced. In addition to making the conforming change in § 734.6, this rule revises the references to the ITAR to clarify that, in order to determine whether an item is “subject to the ITAR,” you should review the ITAR’s United States Munitions List (see 22 CFR §§ 120.6 and 121.1). If the item is within the scope of a USML category, then the item is a defense article subject to the ITAR. If it is not, then it is not subject to the ITAR. The revised text also clarifies that you may also submit a request to the Department of State, Directorate of Defense Trade Controls, for a formal jurisdictional determination regarding

the commodity, software, technology, or activity at issue (see 22 CFR § 120.4). BIS did not receive any comments on this change, so BIS is implementing this change, as proposed, in this final rule.

(H) Addition of Paragraph To Clarify the Jurisdiction of Items Subject to the EAR When Sold, Leased or Loaned by the Department of Defense to a Foreign Country or International Organization Under the Foreign Military Sales (FMS) Program

This final rule adds a new paragraph (b)(1)(vi) to § 734.3, which identifies items subject to the EAR. This new paragraph was not proposed in the November 29 rule, but the change is being made in this final rule as a clarification to the addition of § 734.3(e) in the initial implementation final rule published on April 16, 2013. While not effective until October 15, 2013, § 734.3(e) specifies that items subject to the EAR may be exported, reexported, or transferred in country under licenses, agreements, or other approvals from the Department of State's Directorate of Defense Trade Controls pursuant to §§ 120.5(b) and 126.6(c) of the International Traffic in Arms Regulations (ITAR) (22 CFR 120.5(b) and 126.6(c)) or under actions made by the Department of State's Office of Regional Security and Arms Transfers.

New paragraph (b)(1)(vi) clarifies that items that would otherwise be subject to the EAR and that are sold, leased or loaned by the Department of Defense to a foreign country or international organization under the Foreign Military Sales (FMS) Program of the Arms Export Control Act, pursuant to a Letter of Offer and Acceptance (LOA) authorizing such transfers, are *not* "subject to the EAR" but rather, are subject to the authority of the Arms Export Control Act. New paragraph (b)(1)(vi) clarifies that the terms and conditions of the LOA would govern the export, reexport, or other transfer of the items. Lastly, because the heading for new paragraph (b)(1)(vi) refers to the Department of Defense (DoD) and Department of State, BIS is adding a cross reference from new paragraph (b)(1)(vi) to paragraph (b)(1)(i), along with a cross reference from (b)(1)(i) to (b)(1)(vi).

(I) Corrections and Minor Clarifications to Existing CCL Text and Proposed Text Included in the November 29 Proposed Rule

The November 29 rule also included minor corrections and clarifications to the CCL, such as to correct certain misspellings and typographical errors and make other minor updates to the CCL. BIS did not receive any comments

on these changes, so BIS is implementing these changes, as proposed, in this final rule for the following two ECCNs: 6C992 and 9B002.

In the public comments received in response to the November 29 rule, the public identified some additional corrections or minor clarifications that should be made to existing CCL text or to some of the proposed text included in the November 29 rule. BIS has accepted some of these suggested changes, so BIS is implementing these changes in this final rule for the following ECCNs: 1C002 (to correct a formatting error in 1C002.c.1.a where "10<sup>9</sup>" was incorrectly proposed as "10<sup>9</sup>"); 2B352 (to correct a formatting error in 2B352.d.2 where "(0.2 m<sup>2</sup>)" was incorrectly proposed as "(0.2 m2)"); 9E003 (to insert an omitted "Related Controls) paragraph number (2)"); and 1A002 (to remove an extra "and" that was not needed and modify the punctuation).

Commenter No. 8 suggested that the heading of 1A002 should also end in the word "therefor." BIS does not accept this change because the current entry is consistent with the Wassenaar Arrangement WA dual-use list entry 1.A.2. In addition, the term is not needed in the context of this entry.

*ECCN 5A991 (and similar changes to 5A001, 6A008 and 7A005).* This rule changes the spelling of the word "antennae" in the "items" paragraph (f) of 5A991. This term should be spelled as "antennas" to reflect common American English usage in this ECCN. BIS also accepted Commenter No. 8's suggestion that a review should be conducted of the entire CCL to identify any additional places where this same issue occurs and standardize this usage. BIS identified five other references on the CCL where this correction needs to be made: ECCN 5A001.d and the Note to 5A001.d; ECCN 6A008 in the decontrol note for (PAR), 6A008.e; and ECCN 7A005 in the Note to 7A005.b. This final rule is implementing these additional five corrections to address this incorrect word usage on the CCL.

This final rule does not implement the related change to the "unit" paragraph of 5A001 because the "unit" paragraph will no longer be used in ECCNs under the simplified structure being implemented in this rule for calculating shipping tolerances under the EAR. As described below, this final rule removes all "unit" paragraphs from the CCL, so the proposed change to the "unit" paragraph of 5A001 is no longer required, along with any proposed changes to the "unit" paragraph that was included in the November 29 rule.

(2) Changes To Conform the CCL to the Multilateral Export Control Regime Control Lists and Previous Amendments to the EAR

This final rule is also making the following changes to conform the CCL to the multilateral export control regime control lists and to conform the CCL to the intent of past amendments to the EAR. These are cases where a previous amendment to the EAR was intended to effect a change, but the change was not implemented as intended, or where a conforming change should have been made to the CCL, but was inadvertently not made. In general, the public did not raise specific concerns regarding the changes described under this heading (2). The comments that were received highlighted additional specific examples that also warranted attention in the final rule: Commenter No. 8, as was discussed above under heading (1)(B) (*Clarifying the use of the terms "parts" and "components" on the CCL*), raised a concern that the proposed changes were not consistent with the multilateral export control regimes and that a regime change proposal would need to be approved before BIS implemented such changes to multilateral-based ECCNs, such as those controlled by the Wassenaar Arrangement. BIS does not agree with this comment for the reasons discussed above under heading (1)(B). BIS considered discussing these two comments here, but because the "parts" and "components" changes were described above under heading (1)(B), BIS decided to also include these two comments under the earlier discussion to group them with the other comments and BIS responses on the "parts" and "components" changes being implemented in this final rule.

(A) Conforming Changes for Limitations on Use of TSR for Wassenaar Very Sensitive List Items

In implementing its commitment to exercise vigilance in the licensing of items listed on the Wassenaar Very Sensitive List, the United States has limited the use of License Exception TSR to a list of specifically identified countries for certain ECCNs. These limitations are contained in the TSR paragraph in the License Exception section of nine ECCNs (i.e., ECCNs 1E001, 5D001, 5E001, 6D001, 6D003, 6E001, 6E002, 8D001 and 8E001) that control items on the Wassenaar Very Sensitive List and for which TSR has been authorized for some, or all of the ECCN.

The TSR paragraph limitation was introduced in 1998, upon

implementation of the Wassenaar Arrangement (63 FR 2452), with a list of sixteen destinations eligible for TSR for Wassenaar Very Sensitive List items. Approximately one year later, Japan was added to the TSR paragraph limitation (64 FR 10852). In 2008, Australia and Norway were added to the TSR paragraph in ECCN 1E001, with the explanation that their original exclusion had been an oversight. Australia and Norway were not added to the other TSR paragraphs with Wassenaar Very Sensitive List limitations, creating an inconsistency.

This final rule adopts a standardized list of countries under the EAR for the nine ECCNs. The use of this standardized list of countries simplifies the use of the TSR License Exception for these nine ECCNs and aid the public's understanding regarding which countries are eligible and not eligible to receive National Security (NS) controlled technology under these nine ECCNs. Commenter No. 7 supported the proposed change. BIS has recently determined that the thirty-six countries listed in License Exception Strategic Trade Authorization, Section 740.20(c)(1) of the EAR, are eligible for License Exception authorization for Wassenaar Very Sensitive List items. These 36 countries are: Argentina, Australia, Austria, Belgium, Bulgaria, Canada, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Latvia, Lithuania, Luxembourg, Netherlands, New Zealand, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, South Korea, Spain, Sweden, Switzerland, Turkey, and the United Kingdom. This final rule revises the list of countries in the TSR paragraph for the nine ECCNs to state "those countries listed in § 740.20(c)(1) (License Exception STA)." The 17 countries (19 countries in 1E001) that were previously identified as being eligible for License Exception TSR under these ECCNs were a subset of the 36 STA-eligible countries. Therefore, this final rule adds the remaining 19 countries, except for 1E001 where this final rule adds the remaining 17 countries, as eligible countries to receive this type of technology through application of License Exception TSR under these ECCNs.

#### (B) ECCN Changes To Conform to the Multilateral Export Control Regimes

Commenters No. 5 and 7 noted they supported what they said was the "BIS" effort to conform the CCL to multilateral export control regime control lists. Commenter No. 7 also noted they appreciated all the changes to make CCL

language consistent with the MTCR, but they requested confirmation that their understanding of the intent and scope of the following proposed changes in the November 29 rule is correct: "missiles" is replaced with rockets, missiles and UAVs to ensure Category 1 and 2 UAVs are captured; only UAV range is specified in 1A101 and 9D105 to capture Category 1 and 2 MTCR items; UAV and payload are specified in 1D103 to only capture Category 1 subsystems; and UAVs are not included in 7E104 because the MTCR Annex is specific to optimization of rocket system trajectory, and does not include a control related to UAVs. Commenter No. 7's description of the intent and scope of these changes from the November 29 rule is correct. BIS received no other comments regarding these proposed changes, so BIS is implementing these changes, as proposed, in this final rule.

**ECCN 1A101.** This final rule amends 1A101 by replacing the term "missiles" in the heading with the phrase "rockets, missiles, or unmanned aerial vehicles capable of achieving a "range" equal to or greater than 300 km" to conform to the Missile Technology Control Regime (MTCR) Annex. BIS did not receive any comments on this change, so BIS is implementing this change, as proposed, in this final rule.

**ECCN 1D103.** This final rule amends 1D103 by replacing the term "missiles" in the heading with the phrase "rockets, missiles, or unmanned aerial vehicles capable of delivering at least a 500 kg payload to a "range" equal to or greater than 300 km" to conform to the MTCR Annex. BIS did not receive any comments on this change, so BIS is implementing this change, as proposed, in this final rule.

**ECCN 1E001.** This final rule amends 1E001 by removing ECCN 1A008 from the heading and NS controls paragraph. This change is made to conform to the Wassenaar Arrangement List of Dual-Use Goods and Technologies that does not extend to technology for 1A008. This change was not proposed in the November 29 rule, but was identified by BIS as an additional change that needed to be implemented to conform to the Wassenaar Arrangement. Therefore, BIS is implementing these changes in this final rule.

**ECCNs 2E001 and 2E002.** Commenter No. 6 suggested expanding the scope of the exclusion in the headings in 2E001 and 2E002 by adding ECCN 2B999 to the list of commodities controlled in 2B that are not within the scope of 2E001 and 2E002. To support their position, this commenter noted that 2E001 and 2E002 control "technology" for all isostatic presses, regardless of

capability. They further noted that even commercial MIG welders and industrial sewage pumps (e.g., ECCNs 2B999.d and 2B999.j) are thus controlled. Commenter No. 6 asserted that given 2E001 and 2E002 are generally associated with high levels of control, there may be confusion when "production" "technology" for a MIG welder is classified 2E001, but the commodity is classified under an AT-only control. BIS agrees with Commenter No. 6 and is implementing these two changes in this final rule. The change being implemented in the final rule will exclude technology for 2B999, but the overall impact on the number of licenses received by BIS is expected to be minimal.

**ECCN 5D101.** This final rule amends 5D101 by removing the term "items" from the heading and adding the term "equipment" in its place. This rule will make this change to be consistent with the MTCR Annex. BIS did not receive any comments on this change, so BIS is implementing this change, as proposed, in this final rule.

**ECCNs 6A002 and 6A003.** This final rule amends 6A002 and 6A003 by correcting a spelling error in the headings of these two ECCNs to remove the term "therefore" and replace it with "therefor." These changes are being made to conform to the Wassenaar Arrangement List of Dual-Use Goods and Technologies that uses the term "therefor" for both of these entries. These two changes were not proposed in the November 29 rule, but were identified by BIS as additional changes that needed to be implemented to conform to the Wassenaar Arrangement. Therefore, BIS is implementing these changes in this final rule.

**ECCN 6D102.** This final rule amends 6D102 by removing the term "goods" from the heading and adding the term "equipment" in its place. This rule makes this change to be consistent with the MTCR Annex. BIS did not receive any comments on this change, so BIS is implementing this change, as proposed, in this final rule.

**ECCN 6D994.** This final rule removes 6D994 to conform to a previous amendment to the EAR that imposed a control for these same items under 6D003.c. BIS's intention when 6D994 was added to the CCL was to impose a control on this software until a control could be approved at the Wassenaar Arrangement and implemented in the EAR. When the final rule to add this software to 6D003.c was published, the intention was to remove 6D994. However, this entry was inadvertently retained at the time 6D003.c was added to the CCL, which may have caused

confusion for exporters trying to classify this type of software because the software meets the description of two software ECCNs. To address this oversight, this final rule removes 6D994 from the CCL, leaving 6D003.c as the control ECCN. BIS did not receive any comments on this change, so BIS is implementing this change, as proposed, in this final rule.

*ECCN 7D101.* This final rule amends 7D101 by revising the heading to include 7A117 in the list of ECCNs for which 7D101 controls the software. 7A117 is a reference to a USML control based on the MTCR Annex. 7D101 controls the software of certain commodities controlled for MT reasons. This change is made to conform to the MTCR Annex. BIS did not receive any comments on this change, so BIS is implementing this change, as proposed, in this final rule.

*ECCN 7E104.* This final rule amends 7E104 by replacing the term “missiles” in the heading with the phrase “rockets or missiles capable of achieving a “range” equal to or greater than 300 km” to conform to the MTCR Annex. BIS did not receive any comments on this change, so BIS is implementing this change, as proposed, in this final rule.

*ECCN 9A107.* This final rule amends 9A107 by revising the heading to replace the word “engines” with the word “motors.” This change is made to conform to the MTCR Annex. BIS did not receive any comments on this change, so BIS is implementing this change, as proposed, in this final rule.

*ECCN 9A110.* This final rule amends 9A110 by revising the heading to include 9A109 in the list of ECCNs for which 9A110 controls the composite structures, laminates and manufactures thereof. 9A109 is a reference to a USML control based on the MTCR Annex. 9A110 controls the software of certain commodities controlled for MT reasons. This rule also amends 9A110 by replacing the defined term “missiles” with the phrase “rockets, missiles, or unmanned aerial vehicles capable of achieving a “range” equal to or greater than 300 km.” These changes are made to conform to the MTCR Annex. BIS did not receive any comments on these changes, so BIS is implementing this change, as proposed, in this final rule.

*ECCN 9A118.* This final rule amends 9A118 by inserting the phrase “missiles, and unmanned aerial vehicles capable of achieving a “range” “equal to or greater than 300 km” into the heading to conform to the MTCR Annex. Commenter No. 7 identified a typographical error in 9A118 where the word “of” was used, but the word “to” was intended. BIS accepts this change

and is correcting the error in this final rule, so the parameter correctly reads, “capable of achieving a range equal to or greater than 300 km.”

*ECCNs 9B001, 9B002, 9B003 and 9B004.* Commenter No. 6 noted that the relationship between these four ECCNs and ECCN 9A001 could be made clearer as it relates to the MT controlled portions of these four ECCNs. This commenter noted that, as currently written, the equipment described in these four ECCNs is controlled for MT reasons if it is applicable to any engine whose characteristics are described in 9A001. However, this commenter suggested that rather than referencing 9A101 obliquely through reference to 9A001 in the MT control(s) paragraphs in 9B001, 9B002, 9B003, and 9B004, BIS should add the following sentence to the MT control(s) paragraph in these four ECCNs: “MT applies only to equipment for engines that meet the characteristics described in 9A101.” BIS agrees that revising the MT control(s) paragraph in these four ECCNs would be helpful, but BIS decided to use different control text than to what was proposed by Commenter No. 6. BIS will revise the MT control(s) paragraph in these four ECCNs to indicate that the MT control applies to equipment for engines controlled under 9A001 for MT reasons and for engines controlled under 9A101. These changes are being implemented in this final rule.

*ECCN 9B115.* This final rule amends 9B115 by revising the heading to include 9A103 in the list of ECCNs for which 9B115 controls the “production equipment.” 9A103 is a reference to a USML control based on the MTCR Annex. 9B115 controls the “production equipment” of certain commodities controlled for MT reasons. This change is made to conform to the MTCR Annex. BIS did not receive any comments on this change, so BIS is implementing this change, as proposed, in this final rule.

*ECCN 9B116.* This final rule amends 9B116 by revising the heading to include 9A103 in the list of ECCNs for which 9B116 controls the “production equipment.” 9A103 is a reference to a USML control based on the MTCR Annex. 9B116 controls the “production equipment” of certain commodities controlled for MT reasons. This change is made to conform to the MTCR Annex. BIS did not receive any comments on this change, so BIS is implementing this change, as proposed, in this final rule.

*ECCN 9D103.* This final rule amends 9D103 by revising the heading to include ECCNs 9A009, 9A107 and 9A109, and to expand the reference to 9A105 from 9A105.a to the entire ECCN in the list of ECCNs for which 9D103

controls certain “software.” ECCNs 9A009, 9A105, 9A107, and 9A109 are references to USML controls based on the MTCR Annex. 9D103 is a reference to a USML control based on the MTCR Annex. This change is made to conform to the MTCR Annex. BIS did not receive any comments on this change, so BIS is implementing this change, as proposed, in this final rule.

*ECCN 9D104.* This final rule amends 9D104 by revising the heading to include ECCNs 9A006, 9A007, 9A008, 9A009, 9A010, 9A115, 9A116, and 9A106.e in the list of ECCNs for which 9D104 controls the “software.” 9A006, 9A007, 9A008, 9A009, 9A010, 9A115 and 9A116 are references to USML controls based on the MTCR Annex. 9A106.e is controlled on the CCL for MT reasons. 9D104 controls the “software” of certain commodities controlled for MT reasons. This change is made to conform to the MTCR Annex. BIS did not receive any comments on this change, so BIS is implementing this change, as proposed, in this final rule.

*ECCN 9D105.* This final rule amends 9D105 by replacing the term “missiles” in the heading with the phrase “rockets, missiles, or unmanned aerial vehicles capable of achieving a “range” equal to or greater than 300 km” to conform to the MTCR Annex. BIS did not receive any comments on this change, so BIS is implementing this change, as proposed, in this final rule.

### *(3) Structural Changes To Improve the Clarity of the CCL*

ECCNs on the CCL follow the same basic paragraph structure, although not all ECCNs contain the same paragraphs. The common paragraph structure is intended to allow the public to quickly review ECCNs and to identify relevant paragraphs in each ECCN. This final rule is implementing changes to the standard section headings that are used in most ECCNs on the CCL. These changes affect most of the ECCNs on the CCL, but are being implemented through instructions instead of setting out each revision in the regulatory text. BIS is making the changes in this manner to save on the cost of implementing these structural changes. BIS’s decision also took into account that the changes are not ECCN specific and are more focused on how the ECCN information is being communicated to the public. Each of the structural changes this rule implements improves the clarity of the CCL and is further described below. Commenter No. 6 noted that the clarification and background in the November 29 proposed rule on the placement of the phrase “(see List of Items Controlled)”

is greatly appreciated, as is the addition of the phrase “as follows (see List of Items Controlled)” where necessary. Commenter No. 8 questioned the use of “as follows” because they believed it was redundant in ECCNs that also use “(see List of Items Controlled)” at the end of the ECCN. BIS agrees that the use of the phrase “as follows” in this case is redundant. BIS is, however, not accepting this change in the final rule because “as follows” is used on the Wassenaar Arrangement’s control lists and because “(see List of Items Controlled)” is a CCL convention.

Commenter No. 7 noted that they supported the structural changes, such as explicit references to Part 740, License Exceptions, references to Country Chart, and adding Reporting Requirements section to affected ECCNs. This commenter noted that these structural changes will increase understanding of license exceptions and the standardized structure will make it easier for exporters to use and comply with EAR. BIS agrees. Receiving no other comments on these changes, BIS implements these changes, as proposed, in this final rule.

BIS also implements in this final rule these same structural changes to the new ECCNs added in the April 16 (initial implementation) rule and the July 8, 2013 final rule, *Revisions to the Export Administration Regulations: Military Vehicles; Vessels of War; Submersible Vessels, Oceanographic Equipment; Related Items; and Auxiliary and Miscellaneous Items that the President Determines No Longer Warrant Control under the United States Munitions List* (July 8 (implementation) rule) (78 FR 22660). These are not corrections to the initial implementation rule and the July 8 (implementation) rule, but rather are conforming changes being made as a result of the changes included in this final rule. This final rule also includes clarifications to the April 16 (initial implementation) rule that are not limited to conforming changes with this final rule, but those are described below under (6) *Clarifications to the April 16 (initial implementation) rule*.

Although the November 29 proposed rule was published before the initial implementation rule and the July 8 (implementation) rule, those final rules were published without the structural changes described here. At the time of publication of those final rules, their new “600 series” ECCNs were consistent with the existing structure of the CCL. This final rule makes these structural changes to the ECCNs added in those two rules and adopts them for

all subsequent rules that add new ECCNs described here.

This final rule also includes clarifications to the April 16 (initial implementation) rule that are not limited to conforming changes with this final rule. These changes are described below under the heading “(6) *Clarifications to the April 16 (initial implementation) rule*.”

#### (A) Revision of License Exceptions Section Heading

This final rule revises the License Exceptions section heading to add greater specificity. Specifically, this rule revises the section heading by changing it from “License Exceptions” to the more specific section heading of “List-Based License Exceptions (See Part 740 for a description of all license exceptions).” This rule also adds a parenthetical after the revised section heading to provide a cross reference to the license exceptions part of the EAR. This rule adds this cross reference because a definitive determination of whether a license exception may be used for a specific ECCN can only be made after also reviewing the applicable license exception provisions in part 740 of the EAR. BIS did not receive any comments on this change, so BIS is implementing this change, as proposed, in this final rule.

This final rule also makes this change to the following ECCNs: 9A610, 9A619, 9B610, 9B619, 9C610, 9C619, 9D610, 9D619, 9E610, and 9E619, as added in the April 16 (initial implementation) rule (78 FR 22718), which goes into effect on October 15, 2013. In addition, this final rule makes this change to the following ECCNs: 0A606, 0A617, 0B606, 0B617, 0C606, 0C617, 0D606, 0D617, 0E606, 0E617, 8A609, 8A620, 8B609, 8B620, 8C609, 8D609, 8D620, 8E609, and 8E620, as added July 8 (implementation) rule (78 FR 40892), which goes into effect on January 6, 2014.

#### (B) Removal of the License Exception STA Paragraphs

In order to implement the changes described above under (A) *Revision of License Exceptions section heading*, this final rule is also removing the License Exception STA paragraph in the License Exceptions section of the following seventy-nine ECCNs: 0A606, 0A617, 0B606, 0B617, 0C606, 0C617, 0D606, 0D617, 0E606, 0E617, 1A002, 1C001, 1C007, 1C010, 1C012, 1D002, 1E001, 1E002, 2D001, 2E001, 2E002, 3A002, 3B001, 3D001, 3E001, 4A001, 4D001, 4E001, 5A001, 5B001, 5D001, 5E001, 6A001, 6A002, 6A003, 6A004, 6A006, 6A008, 6B008, 6D001, 6D003,

6E001, 6E002, 7D003, 7E001, 7E002, 8A001, 8A002, 8A609, 8A620, 8B609, 8B620, 8C609, 8D001, 8D002, 8E001, 8E002, 8D609, 8D620, 8E609, 8E620, 9A610, 9A619, 9B001, 9B610, 9B619, 9C610, 9C619, 9D001, 9D002, 9D004, 9D610, 9D619, 9E001, 9E002, 9E003, 9E610, and 9E619. This rule moves the text of those License Exception STA paragraphs to a new section titled “Special Conditions for STA.” This rule is creating this new section immediately following the proposed “List-Based License Exceptions (See Part 740 for a description of all license exceptions)” instruction because the License Exception STA paragraphs do not perform the same function as the other list-based license exception paragraphs. This rule is not implementing any changes to the regulatory text included in the current License Exception STA paragraphs of these ECCNs. These STA changes include the thirty “600 series” ECCNs referenced above (0A606, 0A617, 0B606, 0B617, 0C606, 0C617, 0D606, 0D617, 0E606, 0E617, 8A609, 8A620, 8B609, 8B620, 8C609, 8D609, 8D620, 8E609, 8E620, 9A610, 9A619, 9B610, 9B619, 9C610, 9C619, 9D610, 9D619, 9E610 and 9E619) that were not included in the November 29 proposed rule, but are now included because ten of these ECCNs were published in the initial implementation rule and will be in the EAR on the effective date of this final rule, and the other twenty have been published in the July 8 (implementation) rule. The July 8 (implementation) rule is not effective until January 6, 2014, but the changes being implemented in this rule will align these twenty “600 series” ECCNs with structural changes being made to the ECCN headings when that rule does become effective. The changes implemented in this rule are limited to adding a new section heading and moving the existing License Exception STA paragraphs in these seventy-nine ECCNs to the new STA section heading. BIS did not receive any comments on this change, so BIS is implementing this change, as proposed, in this final rule.

#### (C) Adding a Cross-Reference After Country Chart

This final rule is revising the “Country Chart” paragraph heading in the License Requirements section to add a parenthetical to indicate where the public can find the Country Chart. The revised Country Chart paragraph heading will now read “Country Chart (See Supp. No. 1 to part 738).” Not all ECCNs include a Country Chart paragraph and a small number of ECCNs do not rely on the Commerce Country Chart for determining destination-based



license requirements. Most ECCNs, however, are structured to refer to the information contained in the Country Chart paragraph in Supplement No. 1 to part 738 to identify destination-based license requirements. The changes in this rule will clarify that for the ECCNs that use this structure, exporters, reexporters and transferors need to refer to the Country Chart in Supplement No. 1 to part 738 to determine destination-based license requirements. For experienced exporters, reexporters, and transferors, this structure is well understood. The new cross references are primarily intended for those exporters, reexporters, and transferors who are new to the EAR and who may not as readily understand the relationship between this standard ECCN paragraph and Supplement No. 1 to part 738. The new parenthetical phrase at the end of the Country Chart paragraph will make the relationship explicit. BIS did not receive any comments on this change, so BIS is implementing this change, as proposed, in this final rule.

This final rule also makes this change to the following ECCNs: 9A610, 9A619, 9B610, 9B619, 9C610, 9C619, 9D610, 9D619, 9E610, and 9E619, as added in the April 16 (initial implementation) rule (78 FR 22718), which goes into effect on October 15, 2013. In addition, this final rule also makes this change to the following ECCNs: 0A606, 0A617, 0B606, 0B617, 0C606, 0C617, 0D606, 0D617, 0E606, 0E617, 8A609, 8A620, 8B609, 8B620, 8C609, 8D609, 8D620, 8E609, and 8E620, as added July 8 (implementation) rule (78 FR 40892), which goes into effect on January 6, 2014.

(D) Adding a New “Reporting Requirements” Section to Certain ECCNs

Some ECCNs include references to reporting requirements, which are typically found either in License Requirement notes or in notes to the “items” paragraphs in the List of Items Controlled section. BIS has adopted a standardized paragraph structure for ECCNs, as much as possible, to assist the public in classifying items. A standardized paragraph structure helps the public classify items by putting the information contained in an ECCN into a useable and easily recognizable format. The current reporting requirements, which are found in various sections and paragraphs of the individual ECCNs, deviate from this type of standardized structure. To address this issue, this final rule is adding a new section heading called Reporting Requirements where the

existing reporting requirements found in ECCNs will be consolidated. This rule is not making any changes to the scope of current reporting requirements. This standardized structure will aid in compliance with the reporting requirements and assist exporters in more quickly and easily identifying ECCNs subject to reporting requirements. The rule is adding the new Reporting Requirements section heading immediately before the License Exceptions section.

To implement this change in Supplement No. 1 to part 774 (the Commerce Control List), this final rule removes the “License Requirements Notes” paragraphs in the License Requirements section in the following forty-three ECCNs: 1A002, 1C007, 1C010, 1D002, 1E001, 1E002, 2B003, 2D001, 2E001, 2E002, 3A002, 3B001, 3D001, 3E001, 4A001, 4E001, 5A001, 5B001, 5D001, 5E001, 6A001, 6A002, 6A003, 6A004, 6A006, 6A008, 6B008, 6D001, 6D003, 6E001, 6E002, 8A001, 8A002, 8D001, 8D002, 8E001, 8E002, 9B001, 9D001, 9D002, 9E001, 9E002 and 9E003. In forty-two of these ECCNs and in six additional ECCNs: 1C001, 4D001, 7D002, 7D003, 7E001, 7E002, this rule adds the new section entitled “REPORTING REQUIREMENTS See § 743.1 of the EAR for reporting requirements for exports under License Exceptions, Special Comprehensive Licenses, and Validated End-User authorizations” after the License Requirements section in each of these respective ECCNs. BIS is adding the “REPORTING REQUIREMENTS” paragraph to ECCNs 1C001, 4D001, 7D002, 7D003, 7E001 and 7E002 to alert exporters that reporting requirements were imposed on these ECCNs in the April 16 (initial implementation) rule through the changes to § 743.1 and the addition of the Wassenaar Arrangement Sensitive and Very Sensitive Lists as Supplements Nos. 6 and 7 to Part 774. In ECCN 6A003, this rule adds a Reporting Requirement section with a more detailed statement describing the specific reporting requirement applicable to that ECCN. This rule also changes the new Reporting Requirements section to ensure that the text conforms to the listing of authorizations in § 743.1 that require reporting to BIS. Lastly, this rule removes the License Requirement Note in 3B001, but does not add a Reporting Requirements section because 3B001 is not identified in § 743.1, so the reference is no longer needed.

Commenter No. 8 requested that additional explanation be provided regarding the role of other License Requirements Notes on the CCL and

whether such notes should be renamed to better reflect their role in those ECCNs. This commenter noted that unlike other elements of an ECCN, the EAR does not address what significance exporters should give such notes when interpreting an ECCN. This commenter noted that it would stand to reason that these notes are commentary relevant to “License Requirements” section. That section, however, addresses reasons why export of an item might require a license, whereas notes often purport to address substantive scope of an ECCN. BIS does not believe any additional renaming of the License Requirements Notes is needed at this time, but BIS will continue to review this issue as an additional option for making the CCL clearer. At this time, the License Requirements Notes tend to have an ECCN-specific meaning, typically describing in greater detail the scope of the ECCN or the license requirements applicable to a specific ECCN.

Commenter No. 8 also provided the example of the License Requirement Note 1 to 1C351, which states that certain medical products containing most ECCN 1C351 toxins are excluded from 1C351, to illustrate his concern and request for guidance. Commenter No. 8 asserted that this creates the impression 1C351 would control medical products containing some toxins listed in that ECCN, or possibly even other items covered by 1C351. The “items” paragraph of 1C351, however, covers only stand-alone viruses, bacteria, toxins and fungi. The EAR requires that all items controlled under a given ECCN be set out in a positive list in the “items” paragraph, but ECCN 1C351’s “items” paragraph does not identify any item that contains a toxin, virus, etc., contrary to the implication created by License Requirement Note 1. The commenter also contended that BIS takes the position that ECCN 1C351 does control items containing such ECCN 1C351 items. In addition to the general response above on the comment for renaming the License Requirements Notes, BIS provides this specific guidance on the meaning of the License Requirement Note in 1C351. The License Requirement Note is explicit regarding what is excluded from 1C351 and what is classified as 1C991 by specifying in the last sentence of the License Requirement Note that “vaccines, immunotoxins, certain medical products, and diagnostic and food testing kits excluded from the scope of this entry are controlled under ECCN 1C991.” Other products may be 1C351, such as tissue samples that have pathogens. However, if this person or

any other person has a question regarding the classification of a particular material or the applicability of a License Requirements Note, he or she may submit a commodity classification request to BIS using the SNAP-R online submission system. BIS did not receive any other comments on this change, so BIS is implementing it, as proposed, in this final rule.

(E) *Section 738.2(d)(2)(Reading an ECCN)*. Commenter No. 8 noted that the explanations in the November 29 proposed rule of the relationship between the heading of an ECCN and its “items” paragraph, and the significance of the placement of the phrase “(see List of Items Controlled)” in the heading, are at odds with the instructions on reading an ECCN in § 738.2(d)(2) of the EAR. Section 738.2(d)(2) states that the “items” paragraph in the List of Items Controlled section is the list of items controlled under that ECCN and that if the header is a complete list, the “items” paragraph consists solely of a note directing the reader to review the heading.

BIS accepts this comment and revises § 738.2(d)(2) of the EAR to address the commenter’s concerns, and adds new paragraphs (d)(2)(iv)(C)(1), (2), and (3) to provide examples of the three different uses of the phrase “(see List of Items Controlled)” in ECCN headings. Understanding the relationship between the heading and the “items” paragraph is important when classifying items that are “subject to the EAR” on the CCL and these examples will assist the public’s understanding of these provisions of the EAR. These revisions reflect that the ECCN heading is a list of the items controlled in the ECCN and that the “items” paragraph in the List of Items Controlled section will completely describe portions of the ECCN heading subject to control if the phrase “(see List of Items Controlled)” is in the heading. If the phrase “(see List of Items Controlled)” does not appear in the heading, the heading is complete. An example of such a heading is ECCN 4E980 “[t]echnology” for the “development,” “production” or “use” of commodities controlled by 4A980. ECCNs 0A982, 3A292, 5D101, 8D001, and 9A002 are other examples where the heading is the exclusive description of the items classified under those respective ECCNs.

If the phrase “(see List of Items Controlled)” appears at the end of the heading, the “items” paragraph in the List of Items Controlled section is a complete, exclusive description of the items controlled under that ECCN and the heading is merely for reference purposes. An example of an ECCN

where all of the heading text precedes the phrase “(see List of Items Controlled)” is ECCN 8A002 Marine systems, equipment, “parts” and “components,” as follows (see List of Items Controlled). ECCNs 1A001, 3A001, 6A001, 7A004, and 9A012 are other examples where all of the heading text precedes the phrase “(see List of Items Controlled).”

If the phrase “(see List of Items Controlled)” appears in the middle of the heading, the “items” paragraph in the List of Items Controlled section is a description of the items controlled under that ECCN for the portion of the heading that preceded the phrase. However, any portion of the heading that follows the phrase “(see List of Items Controlled)” is to be read in addition to the “items” paragraph. An example of such a heading is ECCN 2B992 Non-“numerically controlled” machine tools for generating optical quality surfaces, (see List of Items Controlled) and “specially designed” “parts” and “components” therefor. ECCNs 1A006, 3B992, 4A001, 6A006, and 7A001 are other examples where the phrase “(see List of Items Controlled)” appears in the middle of the ECCN heading. BIS has identified seven additional ECCNs that require the phrase “(see List of Items Controlled)” in the ECCN headings: 1C350, 1C355, 1C992, 2A991, 3B992, 5A992, and 9A004. In each of these ECCNs, the heading is not a complete description of the items controlled under that ECCN and the “items” paragraph of the List of Items Controlled section details the items controlled. Therefore, BIS implements the changes suggested by the commenter in this final rule.

(F) Addition of Guidance on the Use of Quotation Marks on the CCL

In addition to the changes described below for § 774.1, this final rule also revises this section to add a new paragraph (d) entitled *Conventions related to the use of quotation marks on the CCL*. This new paragraph provides guidance on the use of quotation marks on the CCL. This guidance is not a substantive change to the CCL and is limited to providing guidance on BIS’s current practice as it relates to the use of quotation marks on the CCL. BIS did not propose this in the November 29 proposed rule, but identified this as an additional non-substantive clarification that could be made to the CCL. Therefore, BIS is implementing this change in this final rule.

As background for this new guidance, part 772 includes definitions for terms used in the EAR. Throughout the EAR, but most prevalent in the CCL, BIS uses

the convention of double quotes to identify terms that are defined in part 772. If a term on the CCL uses double quotes, it means it is a defined term in part 772. However, the absence of double quotes does not mean that a term used on the CCL is not defined in part 772. Because the CCL includes many terms that are defined in part 772, BIS’s practice is to use double quotes for certain defined terms and when it is needed for consistency with multilateral export control regime based entries, such as many derived from control lists, in particular for the Wassenaar Arrangement that also uses the double quotes convention. However, because of the large number of defined terms used on the CCL and a desire to avoid hindering readability by placing quotes around too many terms used in particular ECCNs, BIS’s practice is to not add double quotes around certain terms, such as items and commodities.

The CCL also includes a convention regarding the use of single quotes. Single quotes on the CCL identify a term as a defined term in the context of a particular ECCN. However, even within BIS or other parts of the U.S. Government these conventions as they relate to the use of quotes can sometimes become more complex than needed. As a longer term project, BIS intends to conduct a review on the use of quotation marks on the CCL and in the larger EAR to determine if a simpler approach could be developed, such as possibly eliminating the use of double quotation marks to avoid the incorrect negative inference that the only defined terms are those with double quotation marks. The opposite end of the spectrum would be to add quotes around all defined terms, but that would hinder the readability of the CCL.

The use of quotation marks on the CCL is intended to be an aid to alert the reader to terms used on the CCL that are defined in part 772. In this sense the quotes are helpful, but a good compliance practice is to familiarize yourself with part 772 and the terms that are defined there, and when reviewing a control parameter on the CCL that uses a term that is not in quotes to be aware it may be defined in part 772.

(4) *Removal of Fourteen ECCNs Subject to the Exclusive Jurisdiction of the Nuclear Regulatory Commission (NRC)*

(A) Removal of Fourteen ECCNs

In the November 29 proposed rule, BIS proposed removing fourteen ECCNs to eliminate certain cross-references to controls that are under the exclusive jurisdiction of other agencies. The

current CCL includes forty-nine ECCNs that refer to items that are subject to the exclusive jurisdiction of the Department of Energy (DOE), the NRC, or the Department of State. They constitute approximately 10% of the total number of ECCNs on the CCL. Of the forty-nine ECCNs, fourteen are subject to the export licensing authority of the NRC at 10 CFR part 110. This final rule is removing these fourteen ECCNs from the CCL. The fourteen ECCNs are 0A001, 0B001, 0B002, 0B003, 0B004, 0B005, 0B006, 0C001, 0C002, 0C004, 0C005, 0C006, 0C201 and 1C012. These ECCNs are Nuclear Trigger List items, so the jurisdiction of these items is already established under U.S. export controls and, as explained below, there is no need to include this additional cross reference from the CCL to the controls maintained by the Nuclear Regulatory Commission.

BIS's original purpose for including these ECCNs on the CCL was to supplement § 734.3 (*Items subject to the EAR*) under paragraph (b)(1), which describes items that are not subject to the EAR because they are subject to the exclusive jurisdiction of another agency of the U.S. Government, and to supplement the jurisdiction information for the other U.S. Government agencies found in Supplement No. 3 to part 730 (*Other U.S. Government Departments and Agencies with Export Control Responsibilities*). BIS also included these ECCNs to better align the CCL with the European Union's control lists that are primarily based on the multilateral export control regimes. However, by including references to other agencies' controls in specific ECCNs there is the potential that such ECCN references will become out of date if the other agencies update their respective regulations and the corresponding changes are not made in the EAR in a timely manner.

For example, on September 7, 2011 (76 FR 55278), the National Nuclear Security Administration, Department of Energy (DOE), published a notice of proposed rulemaking that proposed various amendments to regulations concerning unclassified assistance to foreign atomic energy activities. These proposed revisions were intended to reduce uncertainties for industry users concerning which foreign nuclear related activities by U.S. persons are "generally authorized" under the regulation and which activities require a "specific authorization" from the Secretary of Energy. However, if the ECCNs on the CCL that currently refer to DOE and the NRC controls are not updated, the uncertainties for exporters, reexporters and transferors would

increase because of inconsistencies among the regulations. This rule only removes the fourteen ECCNs that refer to NRC controls. The ECCN that refers to DOE export controls is ECCN 0E001, and that ECCN is not being removed at this time because it also includes certain portions of the entry that are "subject to the ITAR." However, to avoid uncertainties for exporters, reexporters and transferors as noted in the example above, BIS will endeavor to remove cross references to ECCNs that refer to DOE and NRC controls to avoid inconsistencies among regulations. Given that the NRC respective regulations are controlling in this area and these ECCNs are only acting as a cross reference, BIS proposed the removal of these ECCNs in the November 29 rule.

Although BIS proposed to remove the cross-references, BIS has determined there still is utility in including general cross references to other agencies' controls, including after the review of the comments received in response to the November 29 rule. Thus, this final rule includes a general cross reference at the beginning of the CCL in a revised § 774.1 (Introduction) that contains those ECCNs that have been reserved and are subject to the exclusive jurisdiction of another agency of the U.S. Government. In addition, the related control paragraphs of ECCNs contain cross references to controls of other agencies to the extent that such controls are similar to or related to the controls of certain ECCNs.

The remaining thirty-five of the forty-nine ECCNs refer to items that are "subject to the ITAR," which is maintained by the Department of State. Given the ongoing review of the United States Munitions List (USML) that is being conducted under the ECR Initiative, it is premature to remove or revise these thirty-five ECCNs. In addition, given the number of cross references, in particular in Categories 7 and 9 of the CCL, to these thirty-five ECCNs, BIS determined that removing the ECCNs that are "subject to the ITAR" should be addressed once the review of the USML has been completed. Therefore, BIS is not implementing any additional changes in this final rule for those remaining 35 ECCNs.

BIS received two comments on these proposed changes in the November 29 rule. One commenter supported and one commenter opposed the changes. Commenter No. 7 supported the removal of the fourteen ECCNs, stating that these changes will avoid regulatory confusion and eliminate the need for BIS to continually update controls

administered by a different agency. BIS agrees. Commenter No. 3 opposed the removal of these fourteen ECCNs, stating that the removal of the fourteen ECCNs would not result in clarity but rather in complexity. Commenter No. 3 included a number of reasons supporting their position and also included suggested alternatives. BIS reviewed these comments and responds to these comments below. BIS's analysis also included conducting analysis of data in the Automated Export System (AES) for these fourteen ECCNs to further evaluate these changes. The analysis of the AES data in particular highlighted for BIS and the NRC that these cross references have not been reported properly in AES in certain cases, such as EAR license exceptions or No License Required (NLR) designations being reported for some of these fourteen ECCNs that are subject to the NRC. BIS is working with the U.S. Census Bureau and the NRC at this time to create a change in AES that will create a fatal error for AES filers who try to use any type of EAR authorization or NLR designation for these fourteen ECCNs that are subject to the exclusive jurisdiction of the NRC and that are being removed from the CCL in this final rule. BIS addresses the comments received below, but the review of the AES data also played an important role in informing BIS's decision to move forward with the implementation of the removal of these fourteen ECCNs as proposed in the November 29 rule with minor modifications based on the review of the public comments.

Commenter No. 3 indicated the removal of the fourteen ECCNs leaves exporters without valid ECCNs and no viable alternative is offered. Commenter No. 3 noted the proposed replacement list in § 774.1 of the EAR is little more than a difficult-to-find and difficult-to-use footnote. BIS understands that certain exporters are more comfortable with using the CCL than the NRC's control list, but the fact remains these items are not subject to the EAR. Therefore, although these fourteen ECCNs alert the public that these items are subject to the exclusive jurisdiction of the NRC, exporters still must review the NRC's control list and regulations to determine their responsibilities under the NRC regulations. There is and can be no easy substitute for reviewing the NRC's control list. The new CCL Order of Review that was added to the EAR in the initial implementation final rule published on April 16, 2013 further clarified this issue in terms of the proposed order of review of the CCL. If the item is not subject to the EAR

because it is subject to the exclusive jurisdiction of another U.S. Government export control agency, you should exit the EAR and consult the other agency's controls. Other parts of the EAR, such as Supplement No. 3 to part 730 referenced above and § 734.3(b), also address this issue. BIS has made some changes to § 774.1 to make those references more useful as a historical reference to these fourteen ECCNs and to also act as a better cross reference to the multilateral export control regime entries that applied to these fourteen ECCNs at the time of their removal.

Commenter No. 3 also noted the negative impact on Customs and Border Protection (CBP) because CBP cannot rely on those fourteen ECCNs anymore. The commenter noted that the NRC's regulations under 10 CFR part 110 do not use the standard ECCN format, so Customs cannot directly relate ECCNs on the shipping document to NRC export controls. The commenter noted if these fourteen ECCNs are removed as proposed in the November 29 rule, Customs officers would need to refer to an old version of the CCL or possibly to the European Union (EU) control list. BIS does not agree with this comment. CBP does not and should not rely on the CCL for items that are subject to the exclusive jurisdiction of another agency of the U.S. Government. For items described in these fourteen ECCN cross references or any other item that is subject to the exclusive jurisdiction of the NRC, CBP evaluates whether the item is subject to the exclusive jurisdiction of the NRC and whether it is being exported in accordance with the NRC's regulations. The EAR does not enter into their analysis. If there is any question regarding the jurisdiction or classification of the item or whether it is being exported in accordance with the NRC regulations, CBP would follow up directly with the NRC, similar to what is done under the EAR for items that are subject to the EAR. As noted above, the NRC's list and regulations control the transaction; therefore, CBP would refer directly to the NRC's list.

Commenter No. 3, who opposes the change, also noted that if the fourteen NRC ECCNs were removed from CCL, an exporter could erroneously choose to use no ECCN, to invent a non-standard ECCN, or to use the (now questionably-documented) former CCL ECCN. As BIS noted in response to the previous comment, the exporter should use the classification for the item based on the NRC's control list. The exporter should also use the applicable NRC authorization or designation when entering data in AES. Under no circumstances should an EAR

authorization or NLR designation be used in AES for an item that is subject to the exclusive jurisdiction of the NRC. As noted above, BIS and the NRC are working with the U.S. Census Bureau to create a fatal error, which is expected to be implemented in 2014, to prevent filers from being able to reference EAR authorizations or the NLR designation.

Commenter No. 3 also noted the proposed language for some ECCNs is cumbersome, awkward and confusing. Commenter No. 3 offered ECCN 3A233 as an example, stating the proposed language is cumbersome and awkward, requiring 40 words (including two defined terms) to describe an exclusion that the current language accomplishes in six words. On a related issue this commenter stated that the proposed changes do not prevent cross-references from becoming out of date, and therefore might not reduce maintenance. In the existing CCL, the NRC ECCNs are clearly partitioned from the BIS ECCNs, but the proposed rule would blur the distinction, in some cases by adding Heading Notes (e.g., 3A225) and in other cases modifying the chapeau itself (e.g., 3A233). The commenter noted that both approaches incorporate more tightly into the CCL the NRC control language that BIS wishes to remove. The commenter asserted that the probable outcome of this proposal would increase rather than decrease BIS maintenance. As a result of BIS's review of these comments, BIS has made changes in the final rule. BIS will not be implementing the Heading Notes. In other places where a large amount of text was needed, BIS has removed the detailed description of the NRC controls in ECCNs that previously referenced one or more of the fourteen ECCNs being removed. This final rule instead includes a general reminder that items that are subject to the exclusive jurisdiction of the NRC are not subject to the scope of the particular ECCN in question. For example, 3A233, which was identified by the commenter as overly complex and ambiguous as proposed for revision in the November 29 rule, is simplified in this final rule as described in the next paragraph, along with similar changes being made on the CCL for those conforming changes to the fourteen ECCNs being removed in this final rule.

The changes in this final rule to 3A233 clarify the mass spectrometers controlled under this ECCN do not include "items that are subject to the export licensing authority of the Nuclear Regulatory Commission (see 10 CFR part 110)." This concept is already specified in other parts of the EAR, including the new CCL Order of Review

referenced above, but BIS believes this simplified approach will address the concern noted by the commenter, while still alerting the public that certain items related to 3A233 may be subject to the NRC's regulations. BIS is making changes to similar ECCNs where conforming changes are being made, in particular to those ECCNs where new heading notes were proposed. BIS will continue to evaluate the best approach for referencing the NRC's controls and in the future may simply add such information to the "related controls" paragraphs of these ECCNs that are subject to the EAR. However, for purposes of the changes being implemented in this final rule, BIS has determined this modified approach best achieves the objectives of the rule to remove these fourteen ECCNs and to make appropriate conforming changes to the CCL ECCNs where needed, while not re-creating the need to update the CCL to track with changes to the NRC regulations. The commenter correctly noted this was one of the rationales provided for the November 29 changes. BIS agrees with the commenter that a slightly revised approach is needed in this final rule to achieve those objectives.

Commenter No. 3 also noted that timely maintenance of the NRC ECCNs might not be needed. This commenter believed the existing structure of the CCL provides clear and adequate notice to exporters that certain items are subject to the export licensing jurisdiction of the NRC. Therefore, timely maintenance of fourteen NRC ECCNs in the CCL is not required. For the reasons noted above, BIS does not agree with this comment; NRC's regulations would control the transaction, not the CCL, regardless of whether the commenter believes the CCL is an easier list to review. The commenter may wish to contact the NRC and make suggestions for how the NRC control list could be reconfigured to make it more user friendly and more consistent with the structure used by the multilateral export control regimes. The premise that CCL entries are controlling or that the CCL entries can be relied on is incorrect. This analytical approach demonstrates an incorrect overreliance on the CCL for items that are not subject to the EAR, and further reinforces BIS's decision to remove these fourteen ECCNs.

Commenter No. 3 also noted that because the Nuclear Trigger List rarely changes, it is not difficult to stay current with it. BIS agrees that the Nuclear Trigger List rarely changes, but given the importance of exporters making a correct determination regarding the

export control jurisdiction for an item, and the fact that there is a real possibility of the NRC control list and the CCL entries' becoming inconsistent due to ill-timed updating, BIS has determined that the best approach is to create a clean break between the CCL and the NRC regarding items that are subject to the exclusive jurisdiction of the NRC.

Commenter No. 3 also noted the NRC rule example cited in the November 29 proposed rule did not change the Nuclear Trigger List. The cited NRC rule only clarified when a license was required. This commenter is correct, but based on the commenter's earlier comments about relying on the CCL and the fact that it appears from the AES data that certain exporters may not be referring at all to the NRC regulations and simply relying on one of those fourteen ECCNs and using an EAR authorization or NLR designation, any change to the NRC regulations in particular regarding license requirements is still relevant. In addition, there are other examples where the current NRC controls may have greater or less specificity than what is currently reflected on the CCL, which again speaks to the importance of exporters' reviewing the actual NRC control lists instead of relying on the CCL to perform that function for them. This commenter also suggested that ECCN 0B002 contains an error and does not match the Nuclear Trigger List.

BIS reviewed ECCN 0B002 and concluded that the current 0B002 is consistent with the multilateral control list. However, this example provides further support for the decision to remove the fourteen ECCNs so that all descriptions of NRC controls will be in NRC regulations.

BIS provides this paragraph to provide additional background on the reference above to the Nuclear Trigger List and how that fits in with the U.S. export control system. The Nuclear Suppliers Group controls two groups of items. The Part 1 Annex, which is often referred to as the Trigger List, controls those items that are uniquely nuclear, such as nuclear reactors and components; centrifuges and other enrichment equipment; nuclear materials such as uranium and plutonium; heavy water facilities, etc. These and other related items are controlled by the NRC under 10 CFR Part 110. The related Part 1 technology is controlled by the Department of Energy under 10 CFR Part 810. The Part 2 or Dual Use annex, covers those items that have both a nuclear and non-nuclear end use such as machine tools, pressure transducers, mass

spectrometers, etc. and are under the licensing jurisdiction of the Department of Commerce. The International Atomic Energy Agency (IAEA) publishes both annexes under INFCIRC/254/Part1 and INFCIRC/254/Part 2. They may also be viewed on the Nuclear Suppliers Group Web site.

Commenter No. 3 also noted that the complexity of text could potentially also create burden for U.S. companies in the event that foreign export control authorities were to request clarification on whether the scope of, for example, U.S. ECCN 3A233 is equivalent to the scope of their national ECCN 3A233. BIS does not see this as a burden and also does not see this as the type of information that should be expected to be provided by a U.S. company. The U.S. Government is available to answer any questions from foreign parties, including other regime member governments, about how U.S. export control lists correspond with multilateral export control regime control lists. Therefore, if a U.S. company receives such a request, they may simply direct those foreign parties to contact the applicable agency of the U.S. Government, in this case the NRC, for resolution.

Commenter No. 3 noted that alignment with the EU control list remains a worthwhile goal. The commenter noted that the November 29 proposed rule did not seek to explain why this goal is no longer worthwhile. BIS has added in this final rule references to the multilateral export control regimes' control list to partially address this comment. The U.S. export control system implements U.S. Government commitments to the multilateral export control regimes in each of the respective agency control lists as applicable for the particular regimes. The removal of these fourteen ECCNs does not change the commitment of the U.S. Government to control such items that are reflected in the NRC control list. For the reasons noted above, though, not removing these fourteen ECCNs on the CCL may cause ambiguity regarding the proper export control jurisdiction between the CCL and the NRC's control lists. For that reason, this final rule removes those entries and replaces them with more general cross references to the NRC's control lists.

Commenter No. 3 noted that the removal of these ECCNs could set an undesirable precedent. This commenter believed U.S. action to split what had hitherto been a single control list into multiple lists could establish a precedent for other countries to do likewise—resulting in more complexity in global export control system. BIS

does not agree the removal sets a bad precedent for other countries. Each country that is a member of the multilateral export control regimes implements those multilateral agreements into its own export control system, including determining what types of agency structure (single agency or multiple agencies) and type of control list (single control list or multiple control lists) is most appropriate under its respective national export controls. The importance is placed on implementing U.S. Government multilateral regime commitments, which the U.S. Government has done. This includes the removal of these fourteen ECCNs that, although the cross-references to the NRC controls are being removed from the CCL, are still controlled under the NRC. Therefore, the U.S. Government is meeting its obligations to the Nuclear Suppliers Group and other regimes as applicable, so BIS does not agree that the removal of these fourteen ECCNs will set a bad precedent.

Commenter No. 3 noted that these removals are contrary to the "single control list" goal of export control reform. BIS does not agree. The NRC and DOE regulations are not currently part of the single list objective of the ECR Initiative, so there is no inconsistency with this ECR objective.

Commenter No. 3 also offered two options for BIS to consider instead of removing these fourteen ECCNs, along with various proposed conforming changes to other ECCNs. The first option was retaining these ECCNs because it creates an easy way to identify and classify these items. The commenter asserted that retention of the fourteen NRC ECCNs on the CCL would provide a natural method for U.S. exporters to use an ECCN that is automatically and instantaneously recognized by all parties (exporter, importer, licensing officer, or enforcement officer) worldwide. For the reason discussed above in this section under (4)(A), BIS does not accept this approach.

The second option was to retain the fourteen ECCNs, but limit them to the headings with a cross reference back to the NRC. Under this alternative, the regulations would not remove the fourteen ECCN chapeaux within the CCL, but instead would delete the various subparagraphs of those ECCNs, and for "List of Items Controlled" indicate "refer to NRC at 10 CFR 110." Simultaneously (so as to preclude the scenario described in option 1, above), the commenter suggested that BIS undertake joint BIS/NRC action to update the NRC control list to use the standard ECCN format. As noted above,

BIS has simplified the cross references to these fourteen ECCNs that were removed in the ECCNs that are retained on the CCL based, in part, on this comment. However, for the reasons noted above, BIS believes removing the fourteen ECCNs is the best way to achieve the policy objectives identified, so BIS does not accept this change.

(B) Changes to the CCL To Conform to the Removal of These Fourteen ECCNs

In addition to removing the fourteen ECCNs, this final rule also makes conforming changes to eleven ECCNs that would be retained on the CCL. The ECCNs that are revised by this rule contain references to one or more of the fourteen ECCNs that are being removed.

The removal of the fourteen ECCNs should not affect the existing controls for items subject to the EAR. However, given the relationship between the fourteen ECCNs removed and the ten ECCNs where conforming changes were made, BIS noted in the November 29 proposed rule that it was particularly interested whether the proposed changes accurately capture the intent of the previous references (i.e., the references to the fourteen ECCNs that would be removed in the ten ECCNs that are retained on the CCL). These comments and BIS' responses are discussed above in this section.

The final rule makes conforming changes to the following eleven ECCNs: 1A290, 1C107, 1C240, 1C298, 3A225, 3A226, 3A227, 3A233, 3A999, 6A005, and 6A205. This rule's revisions consist of the following:

*ECCNs 3A225, 3A226, 3A227, 3A233, 6A005, and 6A205.* This final rule revises seven ECCN headings (1C240, 3A225, 3A226, 3A227, 3A233, 6A005, and 6A205). This rule takes this approach to minimize the number of changes that would need to be made, while still ensuring the headings reflect the intended scope of these six ECCNs.

On the CCL, these seven ECCN headings include references to some of the fourteen ECCNs that are being removed as a shorthand way of communicating the scope of items controlled. Therefore, the removal of fourteen ECCNs requires that a broader description be added to the headings of these seven ECCNs. In the November 29 rule, BIS indicated that if only one of the fourteen ECCNs that would be removed is referenced, then BIS believed that in most cases it is easy to incorporate the text of the removed ECCN into the heading of the seven ECCNs. However, there are certain ECCNs that reference one or more of the fourteen ECCNs that are being removed by this rule. In the cases where multiple

ECCNs are referenced, an effort to insert all the text into the headings as a conforming change would not be feasible. However, for other ECCNs, the November 29 rule proposed adding heading notes, which would provide more space to describe the substance of the ECCNs that would be removed from the respective headings. After further review, BIS determined a simpler approach could be taken that is also more consistent with the existing EAR by simply including text to alert the public those eleven ECCNs exclude items that are subject to the export licensing authority of the Nuclear Regulatory Commission (see 10 CFR part 110).

*ECCNs 1A290, 1C107 and 1E001.* This final rule revises three "related controls" paragraphs in ECCNs 1A290, 1C107 and 1E001. These changes revise references to one or more of the fourteen removed ECCNs in each of the three remaining ECCNs and replace them with a reference, in the related controls paragraph, to the NRC regulations. These changes will reduce the need for cross-referencing in the CCL to the fourteen removed ECCNs. The November 29 rule proposed to describe the NRC controls in the related controls paragraph. The November 29 rule described the approach being adopted as an alternative. BIS welcomed comments from the public regarding whether this alternate approach of simply using broad descriptors or some other approach not yet considered by BIS would be better than what was proposed. After reviewing the public comments, as discussed above, BIS decided to adopt this alternate approach consistent with the above described cross references to the fourteen removed ECCNs in ECCN headings.

*ECCN 1E001.* This final rule also revises 1E001 by removing the reference to 1C012 in the License Exception STA paragraph in the License Exceptions section. This ECCN is subject to the exclusive jurisdiction of another agency. Thus, License Exception STA could never be used as the authority to export an item described in 1C012. BIS did not receive any comments on this change, so this change is implemented, as proposed, in this final rule.

*ECCN 1C298.* This final rule revises one CCL note in ECCN 1C298 to remove references to one or more of the fourteen ECCNs that would be removed by this rule. BIS did not receive any comments on this change, so this change is implemented, as proposed, in this final rule.

(C) Adding a General Cross Reference to the Fourteen ECCNs That Would Be Removed

In § 774.1 (Introduction), this final rule redesignates the introductory text of the section as paragraph (a) with the heading "Scope of the control list," and adds a paragraph (b) with the heading "ECCN cross-references for items subject to the exclusive jurisdiction of another agency." The introductory text of paragraph (b) indicates that prior to the date of publication in the **Federal Register** of this final rule, the CCL contained fourteen ECCNs that were included as cross references on the CCL to the export control regulations administered by the NRC. Paragraph (b) identifies ECCNs formerly listed on the CCL that were subject to the jurisdiction of the NRC at 10 CFR part 110. This rule is adding a note to paragraph (b) to indicate that ECCNs 0D001 and 0E001 (ECCNs that are retained on the CCL) were subject to the jurisdiction of the NRC at 10 CFR part 110 or jurisdiction of the DOE at 10 CFR part 810, but also have certain portions that, as of the date of publication of this rule, were "subject to the ITAR." These ECCNs are retained on the CCL as a cross reference. For the reasons noted above, BIS will implement these changes, as proposed, in this final rule.

(5) Revisions to Shipping Tolerances and Removal of All "Unit" Paragraphs

BIS in this final rule is revising the way shipping tolerances are calculated and applied under the EAR. This rule revises § 750.11 (*Shipping tolerances*) to state that all items are licensed based on both quantity and value of the items. Quantity will be denominated in the unit of quantity that is in general commercial usage for the trade of each item. All licenses will be strictly limited by the quantity approved on the license and no shipping tolerance will be available to exceed that quantity. A shipping tolerance of ten percent will be available on the total approved value for all commodities subject to the EAR to account for price uncertainty and price inflation over the four year validity period of the license. Additionally, this rule removes the "Unit" paragraph from the List of Items Controlled section of every ECCN on the CCL. BIS will no longer differentiate between items based on unit for the availability of shipping tolerances, so all commodities will be licensed in the unit of quantity commonly used in the trade of that good. This final rule also makes conforming changes to paragraph (d)(2)(iii)(A) of § 738.2 (Commerce Control List (CCL) structure); § 738.4

(Determining whether a license is required); § 742.2 (*Proliferation of chemical and biological weapons*)(e); paragraph (e)(Quantity) and (f)(Units) of Supplement No. 1 to Part 748—BIS—748P, BIS—748P—A: Item Appendix, and BIS—748P—B: End-User Appendix; Multipurpose Application Instructions; and paragraphs (c)(1)(ii), (c)(1), (viii) and (f) of § 750.7 (*Issuance of Licenses*).

BIS is making these revisions to the EAR as a result of public comments received in response to the proposed rule and to a notice of inquiry (NOI), *Request for Public Comments on Shipping Tolerances for Export Licenses Issued by the Bureau of Industry and Security (BIS)*, that BIS published on July 5, 2012 (77 FR 39679). In the NOI, the public was requested to provide responses to the following three issues:

(1) If the current Export Administration Regulations (EAR) shipping tolerance rules should be maintained or if changes should be made that facilitate automatic calculation of the remaining license value;

(2) If the EAR shipping tolerance rules were changed, (i) should BIS continue to exclude certain Export Control Classification Numbers (ECCNs) from having an allowable shipping tolerance, and (ii) should the dollar value-based shipping tolerance be set at ten percent to match the Department of State rules; and

(3) Whether an automatic calculation of the dollar value-based shipping tolerance in AES (electronic decrementation) would assist exporters in maintaining compliance with the allowable shipping dollar value of the license.

BIS received 11 comments in response to the NOI. Most were supportive of automatic decrementation of the license value. One commenter noted that quantity is not automatically checked against the licensed amount under the current DDTC system or the BIS proposal, and that calculation of quantity overages presents a risk of violations. Two commenters noted that a single percentage for all commodities would be simpler and easier to calculate. Additional comments were outside the scope of the inquiry and addressed AES specific issues.

BIS received one comment in response to the November 29 proposed rule that related to unit paragraphs. The commenter identified several unit paragraphs that contained listings for types of items that are not controlled in that ECCN. This comment and the BIS response was also discussed above.

Based on the commenters' support for the automatic decrementation and the

desire for a single, simple shipping tolerance threshold across the EAR, BIS is undertaking this revision of the EAR. Automatic decrementation can only be calculated on the monetary value of the shipment, so to simplify and standardize the shipping tolerances, BIS is allowing shipping tolerances on value for all items. Additionally, BIS is no longer allowing any shipping tolerance to the quantity approved in the license. This change requires BIS to revise how shipping tolerances are calculated and when they are allowed.

Commodities on the CCL are currently assigned a unit of quantity in the "Unit" paragraph in the List of Items Controlled section of each ECCN. These units of quantity are number, dollar value, or area, weight or other measure. The commodities are licensed in this unit of quantity, meaning that a license for an item denominated in number authorizes shipments of the commodity until the number has been reached. For items licensed in number or area, weight or other measure, the exporter must estimate the per unit cost and the license contains a total dollar value authorized. For items denominated in value, the exporter must provide BIS the number in whatever unit of quantity is common in that trade and the license contains a quantity authorized.

Presently, shipping tolerances are available to allow exporters to legally exceed the quantity or value on the license in certain circumstances. Items denominated in number are eligible for a shipping tolerance of up to twenty-five percent of the value authorized on the license. Items denominated in area, weight or other measure are eligible for a shipping tolerance of up to twenty-five percent of the value and up to ten percent on the quantity authorized on the license. Items denominated in value are not eligible for any shipping tolerance on the value or the quantity authorized on the license.

To amend this existing structure, this final rule standardizes the unit of measure for all items as the number based on the unit of quantity commonly used in the trade of that good. This means that the applicant will identify the appropriate unit of quantity on the license application and the quantity of the commodity to be exported calculated in that unit of quantity. For the majority of commodities, this unit of quantity will be the number of individual items, as described in the ECCN. For example, if an applicant wishes to export integrated circuits controlled under ECCN 3A001, they will identify the number of individual integrated circuits they would like BIS to authorize for export.

Once the unit of quantity and number of items is established, the applicant will determine the per unit value of the item and will report that value to BIS. The applicant will then multiply the per unit value by the number sought to be exported to arrive at the total value of the license and report that to BIS in the license application. If the license is granted, the exporter will be limited to both the number and the value approved on the license.

This eliminates any distinction between commodities regarding the availability or calculation of shipping tolerances. This rule therefore also makes shipping tolerances available for all items up to ten percent of the value authorized on the license. Each license authorized by BIS will have both a number and a value. If the exporter has shipped the number of items approved on the license, but has not yet shipped the total value authorized, the license is exhausted and no more items may be shipped under that license. If, however, the exporter has shipped the total value of the license, but has not yet shipped the total number authorized, the exporter may continue to ship against the license until the total value shipped reaches 110% of the value authorized on the license, or the exporter reaches the number of items authorized on the license, whichever occurs first.

Shipping tolerances on value are allowed to accommodate inflation of the value of the commodities over the validity period of the license. BIS has determined that over the four year validity period that will be applicable to most licenses, a ten percent shipping tolerance is reasonable to accommodate potential inflation for the foreseeable future. If a shipping tolerance is not appropriate for a specific transaction, BIS may stipulate a different shipping tolerance on the license. It is the responsibility of the exporter to ensure compliance with all license conditions, including any shipping tolerance specified on the license.

By standardizing the unit for all items as the number based on the unit of quantity commonly used in the trade of that commodity, BIS has also removed the need to identify the unit in each ECCN. Therefore, this rule eliminated the "Unit" paragraph in the List of Items Controlled section of each ECCN. This will simplify the CCL and eliminate a point of confusion for many exporters.

Additionally, the removal of all "unit" paragraphs removes the need to make the revisions to the "unit" paragraphs that were described in the November 29 proposed rule. Therefore the proposed changes to ECCNs 2A292, 2B201, 2B206, 2B209, 2B290, 6A102,



6A203, 6A225, 6A226, 6A992, 6A994, 6A995, 6C992, 6C994, 9A106, and 9A120 will not be made, as was discussed earlier in the “parts” and “components” changes discussion of this final rule.

BIS recognizes that for items currently denominated in number, this rule will reduce the applicable shipping tolerance from twenty-five percent of the total authorized value to ten percent. To avoid unsettling exporter expectations on the use of existing authorizations and avoid confusion, the changes in shipping tolerances will only apply to licenses granted after this rule becomes effective. In addition, because a purchase order is not needed in order to apply for a license, applicants that have a desire or need for an additional tolerance once this rule becomes effective may simply request an additional quantity in the original license application. Therefore, BIS believes the impact on applicants will be minimal, but adopting this simplified shipping tolerance and removal of the “Units” paragraphs will make the CCL clearer. The changes implemented in the final rule will also be an important step in moving toward decrementing BIS licenses in AES, which based on the public comments received in response to the NOI, is something strongly supported by the public.

*(6) Clarifications to the April 16 (Initial Implementation) Rule*

BIS is making three clarifications to the April 16 (initial implementation) rule as a result of questions and comments from the public that identified unintended or inconsistent policy outcomes after the publication of the final rule. These changes are in addition to the conforming changes being made to the April 16, 2013 rule described above under “(3) Structural changes to improve the clarity of the CCL.” As noted above, the April 16 (initial implementation) rule revises the CCL by adding a structure and related provisions to control munitions items that the President has determined no longer warrant export control on the USML on the CCL, specifically certain aircraft, gas turbine engines, and related items. The initial implementation rule was published in conjunction with a Department of State document that revises the USML so that upon the effective date of both documents (October 15, 2013), the USML and CCL and corresponding regulatory structures will be complementary. The Department of Commerce and State will publish corrections to the April 16 final rules prior to October 15, 2013. The changes described here are minor clarifications

to correct unintended or inconsistent policy outcomes, or to make other minor clarifications to the April 16 (initial implementation) rule.

BIS conducted a significant amount of outreach to explain the initial implementation rule, including providing a number of opportunities for the public to submit questions to BIS about the changes that will become effective on October 15, 2013. As BIS has answered these questions, including conducting outreach to other parts of the U.S. Government and internally within BIS, BIS determined that there was a need to provide these clarifications to the initial implementation rule.

*(A) Clarification of de Minimis Exclusion for .y “600 series” Items To Ensure Consistent Treatment When Exported or Reexported as Stand-Alone Items and When Incorporated*

The initial implementation rule added a new paragraph (a)(6) to Section 734.4 (*De minimis U.S. content*). New paragraph (a)(6) excludes all “600 series” items from *de minimis* eligibility when destined to a D:5 Country in Supplement No. 1 to part 740. The “600 series” .y items are controlled for AT1, so these items are subject to a license requirement for the E:1 countries and for China because of the PRC military end-use control. The E:1 countries and China are also D:5 countries. Therefore, the exclusion from *de minimis* eligibility for .y items for the E:1 countries and China is consistent. The “600 series” .y items are subject to a license requirement if exported or reexported to these countries as discrete items and when incorporated with a foreign made item because .y items are not eligible for *de minimis* because of paragraph (a)(6).

For the other D:5 countries, however, there is an inconsistency, because “600 series” .y items are not subject to a license requirement when exported or reexported as discrete items. However, if any .y item is incorporated into a foreign made item, the foreign made item would become subject to the EAR when reexported or exported from abroad, because of the paragraph (a)(6) exclusion from *de minimis* for all “600 series” items for D:5 countries.

To ensure consistent treatment for .y items, this final rule revises paragraph (a)(6) to add a heading for paragraph (a)(6) (“600 series”) and add new paragraphs (a)(6)(i) and (a)(6)(ii). Paragraph (a)(6)(i) specifies there is no *de minimis* level for foreign-made items that incorporate U.S.-origin “600 series” items enumerated or otherwise described in paragraphs .a through .x of

a “600 series” ECCN when destined for a country listed in Country Group D:5.

To address the inconsistent treatment of the .y items discussed above, this final rule adds a new paragraph (a)(6)(ii) to address the exclusion for “600 series” .y items. This new paragraph will specify there is no *de minimis* level for foreign-made items that incorporate U.S.-origin “600 series” .y items when destined for a country listed in Country Group E:1 or for the People’s Republic of China (PRC). BIS decided to take this approach to address the inconsistent treatment because BIS, in consultation with its interagency partners, previously concluded that D:5 countries other than China and E:1 countries do not present a high enough diversion risk to warrant this approach for .y items, which are not as militarily significant as other “600 series” items (as noted in June 21, 2012 (transition) proposed rule).

*(B) Removal of Sentence No Longer Needed Because of the de Minimis Changes Included in the Initial Implementation Rule*

In § 740.10 (*License Exception Servicing and replacement of parts and equipment (RPL)*) in this final rule, BIS is removing the second sentence of paragraph (b)(2)(ii) because it is not needed in light of the *de minimis* changes included in the initial implementation rule. The second sentence in paragraph (b)(2)(ii) was originally proposed in the July 15 (framework) rule and was worded in the way it was because of the 10% *de minimis* rule that was originally proposed in that rule. Specifically, the second sentence for the “600 series” did not extend to parts, components, accessories, attachments and attachments contained in commodities that were made in a foreign country incorporating authorized U.S.-origin parts, components, accessories or attachments. However, after subsequent review of the public comments and further consideration, BIS adopted a simpler *de minimis* rule for the “600 series.” Because countries listed in D:5 are subject to a 0% *de minimis* rule for “600 series” items, except for .y items as described above, there is no longer a need for the second sentence in (b)(2)(ii). Therefore, in this final rule, BIS is removing the second sentence that was specific to the “600 series.” The requirements in (b)(2)(ii) that apply to non-“600 series” parts, components, accessories, and attachments will apply to the “600 series.”

(C) Clarification of What ECCNs Are Considered Controlled for AT-Only, for Purposes of “specially designed”

The April 16 (initial implementation) rule added a new definition of “specially designed.” This final rule adds a sentence to the end of Note 1 of “specially designed” definition to clarify which ECCNs are controlled for AT-only reasons for purposes of the “specially designed” definition. This sentence lists seventy-three ECCNs, which are the following ECCNs: 0A999, 1A995, 1A999, 1C990, 1C996, 1C998, 1D993, 1D999, 1E994, 1E998, 2A991, 2A994, 2A999, 2B991, 2B992, 2B993, 2B996, 2B997, 2B998, 2B999, 2D991, 2D992, 2D994, 3A991, 3A992, 3A999, 3B991, 3B992, 3C992, 3D991, 3E991, 4A994, 4D993, 4D994, 4E992, 4E993, 5A991, 5C991, 5D991, 5E991, 5A992, 5D992, 5E992, 6A991, 6A992, 6A993, 6A994, 6A995, 6A996, 6A997, 6A999, 6B995, 6C992, 6C994, 6D992, 6D993, 6E992, 6E993, 7B994, 7D994, 7E994, 8A992, 8D992, 8E992, 9A990, 9A992, 9B990, 9B991, 9D990, 9D991, 9E990, 9E991 and 9E993. ECCNs controlled for AT-only reasons are ECCNs where the reason for control in the License Requirements paragraph only includes AT, AT1 or AT2. In addition to the seventy-three ECCNs that include only an AT reason for control, there are eleven additional ECCNs on the CCL that are controlled predominantly for AT reasons on the CCL. These ECCNs include, in addition to the AT control, an RS control only for Iraq (0B999, 0D999, 1B999, 1C992, 1C995, 1C997, 1C999); a UN control (0B986 and 9A991); or an RS1 control (6A998.b and 7A994 for the QRS11). These eleven ECCNs are considered controlled for AT-only ECCNs (excluding for the RS1 controlled portions of 6A998 and 7A994) for purposes of the “specially designed” definition. This is because although they contain another reason for control, they are controlled predominantly for AT reasons.

This final rule adds a sentence to the end of Note 1 to identify these eleven additional ECCNs that are controlled predominantly for AT reasons are treated as ECCNs controlled only for AT reasons for purposes of “specially designed,” although two exclusions are made for the portions of ECCNs 6A998 and 7A994 that are controlled for RS1 reasons. The new sentence this final rule adds to Note 1 specifies ECCNs: 0B986, 0B999, 0D999, 1B999, 1C992, 1C995, 1C997, 1C999, 6A998 (except for 1.b), 7A994 (except for the QRS11) and 9A991 are treated as ECCNs controlled only for AT reasons for purposes of “specially designed.”

(D) Clarification on the Applicability of Paragraph (b)(3) and (b)(4) ‘releases’ From “specially designed” for ECCNs Controlled for AT-Only Reasons

This final rule also adds to the “specially designed” definition a new Note to paragraphs (b)(3) and (b)(4). This new note clarifies when paragraph (b)(3) and (b)(4) can be used to ‘release’ “parts,” “components,” “accessories,” “attachments,” or “software” for ECCNs that are controlled for AT-only reasons. Because the ‘release’ criteria of paragraphs (b)(3) and (b)(4) use “controlled for AT-only reasons,” the application of these paragraphs for ECCNs controlled for AT-only reasons that use “specially designed” is being clarified. BIS received two questions from the public on this aspect of the definition. BIS has provided guidance on how to interpret the applicability of paragraph (b)(3) and (b)(4) for ECCNs controlled for AT-only reasons. BIS considered posting guidance on this interpretation on the BIS Web site, but, for ease of use for the public and to ensure consistent application of the interpretation, BIS decided it was better to add this interpretation as a new “Note to paragraphs (b)(3) and (b)(4).” This is not a change in how BIS intended the definition to apply, but it does make this interpretation explicit for the public.

The new note being added in this final rule specifies that ECCNs controlled for AT-only reasons that use “specially designed” are eligible for ‘release’ under paragraphs (b)(3) and (b)(4). However, this new note clarifies that the criteria for ‘release’ under (b)(3) or (b)(4) must be met by another ECCN controlled for AT-only reasons or an EAR99 item in addition to the AT-only ECCN being reviewed for ‘release’ from “specially designed.”

The new note being added also includes three examples to assist understanding. The first two examples highlight when a “part” used in an ECCN controlled for AT-only reasons is eligible for ‘release.’ The first example states, if a single gasket is used in ECCN 9A990 tractors (9A990 includes a control on “specially designed” “parts”) and also pick-up trucks designated as EAR99 that are in “production,” the single gasket would be ‘released’ from “specially designed” on the basis of paragraph (b)(3). The second example being added to the new note in this final rule states that if the single gasket is or was used in 9A990 tractors and also 9A991.b aircraft (another AT-only ECCN) that are in “production,” the gasket would be ‘released’ from “specially designed” on the basis of

paragraph (b)(3). The newly added note includes a third example to highlight when paragraph (b)(3) would not be available by noting that if the single gasket is or was only used in the “production” of ECCN 9A990 tractors that are in “production,” then paragraph (b)(3) would not be available. Lastly, the note being added clarifies that the same concept applies for paragraph (b)(4).

(E) Clarification of the Definition of “end item” That Was Added in the Initial Implementation Final Rule

This final rule is revising the definition of “end item” that was added in § 772.1 (Definitions of terms as used in the EAR) to add the words “system” and “equipment” before the phrase “assembled commodity.” This change is not substantive and is limited to clarifying the intended scope of the definition of “end item” as it relates to the terms “system” and “equipment.”

(F) Clarification of the Definition of “equipment” That Was Added in the Initial Implementation Final Rule

This final rule is revising the definition of “equipment” that was added in § 772.1 to make three clarifications. First, this final rule clarifies the relationship between “equipment” and “end items” and “systems” by revising the phrase “operate together to perform a function of an end item or system” to add the phrase “as, or for” after “of” so it reads “operate together to perform a function of, as, or for an end item or system.” This change is not substantive and is limited to clarifying the intended scope of the definition of “end item” as it relates to the terms “system” and “equipment.” This change specifies a combination of “parts,” “components,” “accessories,” “attachments,” “firmware,” or “software” is a system considered “equipment” when that combination of commodities or software: Operate to perform a function “of” an end item or system; operate to perform a function “as” an end item or system; or operate to perform a function “for” another end item or system.

Second, this final rule is revising the definition of “equipment” to delete the word “specialized” before the word “function” because the word is not needed and has the potential to create ambiguity regarding what is “equipment.” BIS provides guidance here on the meaning of function to clarify what is intended with the use of the word function in the “equipment” definition. For purposes of the “equipment” definition, function means the control criteria specified in an ECCN entry, which in certain cases is limited

to the heading, and for those ECCNs that use an “items” paragraph, the function is the control criteria in the respective “items” paragraph that enumerates or otherwise describes the “equipment.” In certain cases the specialized function may be described in fairly broad terms, such as equipment for military end use. In other cases the control parameters that are included with the term “equipment” may be quite detailed. The “equipment” definition includes both of those types of entries. This guidance on the meaning of function also applies to the definition of “system” discussed below under (G) where the word “specialized” is also being removed for the same reason as in the “equipment” definition.

Third, this final rule is adding two sentences to the end of the “equipment” definition. The originally proposed “equipment” definition that was included in the proposed July 15 (framework) rule, stated that “equipment” is a subset of “end items.” However, this sentence was not included in the “equipment” definition included in the initial implementation final rule. The relationship between the broader term “end item” and “equipment” was discussed in the Background section of the initial implementation final rule on pages 78 FR 22692 and 22693. However, after further consideration and to address questions BIS has received on the relationship between these two terms, BIS has determined a sentence should be added to the “equipment” definition to clarify that “equipment” may be a subset of “end items,” when it meets the definition of an “end item,” ready for use with only the addition of ammunition, or fuel or energy source required to place it in an operating state. When “equipment” does not meet this definition, it is categorized as on the definition with which it does comply. This same type of concept also applies to the definition of “system.”

**(G) Clarification of the Definition of “system” That Was Added in the Initial Implementation Final Rule**

This final rule is revising the definition of “system,” which was added to § 772.1 in the initial implementation final rule, to delete the word “specialized” before the word “function” because the word is not needed and has the potential to create ambiguity regarding what is a “system.” This final rule is also removing the single quotes around function because the word is not defined in the “system” definition. Lastly, this final rule is adding a new Note 1 to the definition to reference industrial standards

established by INCOSE and NASA that provide examples for when commodities and software operate together to perform a function as a system.

**(H) Clarification of the Definition of “build-to-print technology” That Was Added in the Initial Implementation Final Rule**

This final rule is revising the definition of “build-to-print technology,” which was added to § 772.1 in the initial implementation final rule, to add the phrase “any of the following” in the introductory text of paragraph (1) to clarify the three criteria in paragraphs (1)(i)–(iii) use the disjunctive “or.” The use of “or” in paragraph (1) after paragraphs (1)(ii) already states this requirement, but the addition of the phrase “any of the following” in the introductory text of paragraph (1) will make it easier to understand. This final rule is also revising the definition to remove the phrase “the minimum” before the term “necessary” because it is not needed and has the potential to cause confusion given necessary is not a term that is qualified by degree. Technology is either necessary or not necessary, so there is no need to include the qualifying phrase “the minimum” before the term “technology.”

**(I) Initial Implementation Rule Conforming Changes to This Final Rule**

As noted above, in this final rule, BIS is also making conforming changes to the initial implementation rule, which are described under (3) *Structural changes to improve the clarity of the CCL*. These changes are described under heading (3) above because they are easier to understand when discussed in the context of those structural changes being made to the other ECCNs (non-“600 series” ECCNs) on the CCL.

**(J) ECCNs 9B610 and 9B619**

This final rule revises the Related Controls paragraph in ECCN 9B610 and adds new language to the Related Controls paragraph in ECCN 6B619. The revision to 9B610 adds “equipment” to the list of commodities that are controlled for the aircraft specified under VIII(h)(1). The new language in 9B619 identifies related controls for engines specified under XIX(f)(1). The intent is to clarify that all parts, components, accessories, attachments, and equipment (which includes development, production, operation, maintenance, inspection and test equipment) are controlled under the USML in either VIII(h)(1) or XIX(f)(1) for specified aircraft and engines,

respectively. ECCNs 9B610 and 9B619 continue to control the described parts, components, accessories, attachments, and equipment (which includes development, production, operation, maintenance, inspection and test equipment) not specified on the USML.

Although the Export Administration Act expired on August 20, 2001, the President, through Executive Order 13222 of August 17, 2001, 3 CFR, 2001 Comp., p. 783 (2002), as amended by Executive Order 13637 of March 8, 2013, 78 FR 16129 (March 13, 2013) and as extended by the Notice of August 8, 2013, 78, 2013, 78 FR 49107 (August 12, 2013), has continued the Export Administration Regulations in effect under the International Emergency Economic Powers Act. BIS continues to carry out the provisions of the Export Administration Act, as appropriate and to the extent permitted by law, pursuant to Executive Order 13222.

**Rulemaking Requirements**

1. Executive Orders 13563 and 12866 direct agencies to assess all costs and benefits of available regulatory alternatives and, if regulation is necessary, to select regulatory approaches that maximize net benefits (including potential economic, environmental, public health and safety effects, distribute impacts, and equity). Executive Order 13563 emphasizes the importance of quantifying both costs and benefits, of reducing costs, of harmonizing rules, and of promoting flexibility. This final rule has been designated a “significant regulatory action,” although not economically significant, under section 3(f) of Executive Order 12866. Accordingly, the rule has been reviewed by the Office of Management and Budget (OMB).

2. Notwithstanding any other provision of law, no person is required to respond to nor be subject to a penalty for failure to comply with a collection of information, subject to the requirements of the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*) (PRA), unless that collection of information displays a currently valid Office of Management and Budget (OMB) Control Number. This rule affects the following approved collection: Simplified Network Application Processing System (control number 0694–0088), which includes, among other things, license applications and carries a burden estimate of 43.8 minutes for a manual or electronic submission. Total burden hours associated with the PRA and OMB control number 0694–0088 are expected to decrease slightly as a result of this rule because of the removal of ECCN

8A918 and the clarification of the use of the terms “parts” and “components” on the CCL. The intent of the clarification of the use of the terms “parts” and “components” on the CCL is to maintain the current scope of controls, although in certain cases this greater specificity in how these terms are being used may result in a slight reduction in license applications received for those entries where “parts” is not being added and previously the undefined term components was used. In the context of these ECCNs, BIS, along with the other agencies that reviewed this rule, determined the intent is not to include “parts.” However, because previously a small number of license applications may have been received for commodities that would meet the “parts” definition that was added in the initial implementation final rule, BIS has determined this may result in a slight decrease in the number of license applications received.

3. This rule does not contain policies with Federalism implications as that term is defined under E.O. 13132.

4. The Regulatory Flexibility Act (RFA), as amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), 5 U.S.C. 601 *et seq.*, generally requires an agency to prepare a regulatory flexibility analysis for any rule subject to the notice and comment rulemaking requirements under the Administrative Procedure Act (5 U.S.C. 553) or any other statute, unless the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. Under section 605(b) of the RFA, however, if the head of an agency certifies that a rule will not have a significant economic impact on a substantial number of small entities, the statute does not require the agency to prepare a regulatory flexibility analysis. Pursuant to section 605(b), the Chief Counsel for Regulation, Department of Commerce, submitted a memorandum to the Chief Counsel for Advocacy, Small Business Administration, certifying that the November 29 proposed rule will not have a significant economic impact on a substantial number of small entities. A summary of the factual basis for the certification was provided in the November 29 proposed rule and is not repeated here. BIS did not receive any comments in response to the proposed rule regarding the economic impact of this rule or to the certification made by the Chief Counsel. As a result, a final regulatory flexibility analysis is not required and one was not prepared.

5. Section 3(D) of this rule adds a “REPORTING REQUIREMENTS”

paragraph to ECCNs 1C001, 4D001, 7D002, 7D003, 7E001 and 7E002. This addition to the Export Administration Regulations was not included in the November 29 proposed rule. The Department finds that there is good cause under 5 U.S.C. 553(b)(B) to waive the provisions of the Administrative Procedure Act requiring prior notice and the opportunity for public comment because they are either unnecessary or contrary to the public interest. This addition alerts exporters that reporting requirements were imposed on these ECCNs in the April 16 (initial implementation) rule through the changes to § 743.1 and the addition of the Wassenaar Arrangement Sensitive and Very Sensitive Lists as Supplements Nos. 6 and 7 to Part 774. This addition to this final rule does not create any new reporting requirements. Without the addition of these Report Requirements paragraphs to the EAR prior to the October 15, 2013 effective date of the April 16 (initial implementation) rule, exporters who review these ECCNs will not be aware of the need to review the revised § 743.1 and the Wassenaar Arrangement Sensitive and Very Sensitive Lists added as Supplements Nos. 6 and 7 to Part 774.

6. The revisions to the Export Administration Regulations described in Section 6 of this rule were not included in the November 29 proposed rule. The Department finds that there is good cause under 5 U.S.C. 553(b)(B) to waive the provisions of the Administrative Procedure Act requiring prior notice and the opportunity for public comment because they are either unnecessary or contrary to the public interest. The majority of these revisions are non-substantive, only clarifying the regulations and thus prior notice and the opportunity for public comment is unnecessary.

The revisions described in Section (6)(A) provide a clarification that “600 series” .y items are available for de minimis treatment when incorporated into foreign origin items destined for any country for which a license would not be required for direct shipment from the United States. In a standard de minimis analysis, only the U.S. origin content that would require a license for direct shipment from the United States to the destination of the foreign origin item is included toward the de minimis percentage. As “600 series” .y items do not require a license to D:5 countries, other than the E:1 countries and the People’s Republic of China, it would be contrary to the EAR to include the .y items in the calculation of foreign origin items destined to those countries.

Additionally, as all foreign origin items incorporating more than a de minimis level of “600 series” parts and components are, by definition, military items and controlled in 0A919 with an NS1 and RS1 reason for control, requiring worldwide licensing, foreign manufacturers will have an incentive to avoid sourcing U.S. origin .y items when the item would not otherwise exceed de minimis. Notice and public comment procedure for this revision is contrary to the public interest. If this revision is not effective on October 15, 2013 simultaneous with the April 16 (initial implementation) rule, foreign origin military items that incorporate “600 series” .y items will be subject to greater controls than the “600 series” .y items would be for direct shipment from the United States. This inconsistent result was not intended by BIS and would result in discouraging foreign manufacturers from sourcing U.S. origin “600 series” parts and components without any positive impact on national security. This would frustrate a major purpose of the Export Control Reform Initiative.

The revisions described in Section 6(C) correct an oversight in the term AT-only, as used in the “specially designed” definition, to allow certain ECCNs with additional narrow reasons for control to be considered within the paragraph (b)(3) release provision. When BIS published the rule implementing the definition for “specially designed,” BIS did not intend to exclude the eleven ECCNs identified above which are predominantly controlled only for AT reasons from the paragraph (b)(3) release in the “specially designed” definition. Excluding these eleven ECCNs from the paragraph (b)(3) release would cause, for example, parts common to a military aircraft controlled in ECCN 9A610 and a commercial airliner controlled in ECCN 9A991 to be “specially designed” for the military aircraft and therefore controlled in 9A610.x with an NS1 and RS1 reason for control, requiring worldwide licensing. In this final rule, BIS amends the language to correct the inadvertent error. Notice and public comment procedure for this revision is contrary to the public interest. If this revision is not effective on October 15, 2013 simultaneous with the April 16 (initial implementation) rule, the paragraph (b)(3) release of the “specially designed” definition will not operate as BIS intended and a significant amount of commercial trade may be subject to “600 series” controls.

List of Subjects

15 CFR Part 734

Administrative practice and procedure, Exports, Inventions and patents, Research science and technology.

15 CFR Part 738

Exports.

15 CFR Parts 740, 748 and 750

Administrative practice and procedure, Exports, Reporting and recordkeeping requirements.

15 CFR Part 742

Exports, Terrorism.

15 CFR Part 772

Exports.

15 CFR Part 774

Exports, Reporting and recordkeeping requirements.

Accordingly, parts 734, 738, 740, 742, 748, 750, 772, and 774 of the Export Administration Regulations (15 CFR parts 730–774) are amended as follows:

PART 734—[AMENDED]

1. The authority citation for 15 CFR part 734 continues to read as follows:

Authority: 50 U.S.C. app. 2401 et seq.; 50 U.S.C. 1701 et seq.; E.O. 12938, 59 FR 59099, 3 CFR, 1994 Comp., p. 950; E.O. 13020, 61 FR 54079, 3 CFR, 1996 Comp., p. 219; E.O. 13026, 61 FR 58767, 3 CFR, 1996 Comp., p. 228; E.O. 13222, 66 FR 44025, 3 CFR, 2001 Comp., p. 783; Notice of November 9, 2011, 76 FR 70319 (November 10, 2011); ; E.O. 13637, 78 FR 16129 (March 8, 2013); Notice of August 8, 2013, 78, 2013, 78 FR 49107 (August 12, 2013).

2. Section 734.3 is amended:

- a. By revising the introductory text of paragraph (b)(1)(i); and
b. By adding paragraph (b)(1)(vi) to read as follows:

§ 734.3 Items subject to the EAR.

\* \* \* \* \*

- (b) \* \* \*
(1) \* \* \*

(i) Department of State. The International Traffic in Arms Regulations (22 CFR parts 120–130) administered by the Directorate of Defense Trade Controls relate to defense articles and defense services on the U.S. Munitions List (22 CFR part 121). Section 38 of the Arms Export Control Act (22 U.S.C. 2778). (Also see paragraph (b)(1)(vi) of this section).

\* \* \* \* \*

(vi) Department of Defense (DoD) and Department of State Foreign Military Sales (FMS) Program. Items that are subject to the EAR that are sold, leased

or loaned by the Department of Defense to a foreign country or international organization under the FMS Program of the Arms Export Control Act pursuant to a Letter of Offer and Acceptance (LOA) authorizing such transfers are not “subject to the EAR,” but rather, are subject to the authority of the Arms Export Control Act.

\* \* \* \* \*

- 3. Section 734.4 is amended:
a. By revising the Note to paragraph (a)(3); and
b. By revising paragraph (a)(6) as added April 16, 2013, at 78 FR 22707, effective October 15, 2013 to read as follows:

§ 734.4 De minimis U.S. content.

\* \* \* \* \*

Note to Paragraph (a)(3): QRS11 Micromachined Angular Rate Sensors are “subject to the ITAR,” (see 22 CFR parts 120 through 130) except when the QRS11–00100–100/101 version of the sensor is integrated into and included as an integral part of a commercial primary or standby instrument system of the type described in ECCN 7A994, or aircraft of the type described in ECCN 9A991 that incorporates a commercial primary or standby instrument that has such a sensor integrated, or is exported solely for integration into such systems; or when the QRS11–00050–443/569 is integrated into a commercial automatic flight control system of the type described in ECCN 7A994, or aircraft of the type described in ECCN 9A991 that incorporates an automatic flight control system that has such a sensor integrated, or is exported solely for integration into such a system.

\* \* \* \* \*

(6) “600 series.”

(i) There is no de minimis level for foreign-made items that incorporate U.S.-origin “600 series” items enumerated or otherwise described in paragraphs .a through .x of a “600 series” ECCN when destined for a country listed in Country Group D:5 of Supplement No. 1 to part 740 of the EAR.

(ii) There is no de minimis level for foreign-made items that incorporate U.S.-origin “600 series” .y items when destined for a country listed in Country Group E:1 of Supplement No. 1 to part 740 of the EAR or for the People’s Republic of China (PRC).

4. Section 734.6 is amended by revising paragraph (a) to read as follows:

§ 734.6 Assistance available from BIS for determining licensing and other requirements.

(a) If you are not sure whether a commodity, software, technology, or activity “subject to the EAR” is subject to licensing or other requirements under

the EAR, you may ask BIS for an advisory opinion or a commodity classification determination. In order to determine whether an item is “subject to the ITAR,” you should review the ITAR’s United States Munitions List (see 22 CFR 120.3, 120.6 and 121.1). You may also submit a request to the Department of State, Directorate of Defense Trade Controls, for a formal jurisdictional determination regarding the commodity, software, technology, or activity at issue; or in ITAR terms, the defense article, technical data or defense service at issue (see 22 CFR 120.4).

\* \* \* \* \*

PART 738—[AMENDED]

5. The authority citation for 15 CFR part 738 continues to read as follows:

Authority: 50 U.S.C. app. 2401 et seq.; 50 U.S.C. 1701 et seq.; 10 U.S.C. 7420; 10 U.S.C. 7430(e); 22 U.S.C. 287c; 22 U.S.C. 3201 et seq.; 22 U.S.C. 6004; 30 U.S.C. 185(s), 185(u); 42 U.S.C. 2139a; 42 U.S.C. 6212; 43 U.S.C. 1354; 15 U.S.C. 1824a; 50 U.S.C. app. 5; 22 U.S.C. 7201 et seq.; 22 U.S.C. 7210; E.O. 13026, 61 FR 58767, 3 CFR, 1996 Comp., p. 228; E.O. 13222, 66 FR 44025, 3 CFR, 2001 Comp., p. 783; Notice of August 8, 2013, 78, 2013, 78 FR 49107 (August 12, 2013).

- 6. Section 738.2 is amended by:
(a) Revising the introductory text to paragraph (d)(2);
(b) Redesignating paragraphs (d)(2)(i) through (iii) as (d)(2)(ii) through (iv);
(c) Adding a new paragraph (d)(2)(i);
(d) Removing newly redesignated paragraph (d)(2)(iv)(A);
(e) Further redesignating newly redesignated paragraphs (d)(2)(iv)(B) through (D) as (d)(2)(iv)(A) through (C); and
(d) Revising newly redesignated paragraph (d)(2)(iv)(C) to read as follows:

§ 738.2 Commerce Control List (CCL) structure.

\* \* \* \* \*

(d) \* \* \*

(2) Reading an ECCN. An ECCN is made up of four sections, the “Heading,” “License Requirements,” “License Exceptions,” and “List of Items Controlled” sections. A brief description of each section and its use follows:

(i) Heading. A description of the items controlled is provided next to each ECCN. In certain ECCNs, the description is a summary and will direct you to “see List of Items Controlled” for a complete list of items classified under those respective ECCNs. The “Items” paragraph in the List of Items Controlled section will describe all of the items that the ECCN controls for the portions of

the heading that precede the “see List of Items Controlled” phrase. Portions of the heading that follow the phrase are complete descriptions of the items controlled by that portion of the heading. If “see List of Items Controlled” appears at the end of the heading, the “Items” paragraph in the List of Items Controlled section is the exclusive, complete list of the items the ECCN controls.

\* \* \* \* \*

(iii) \* \* \*

(C) *Items*. This paragraph describes the relationship between the “items” paragraph and ECCN headings and will assist your understanding as you classify items on the CCL. When the heading contains the phrase “see List of Items Controlled,” the portion of the heading preceding that phrase is only a summary of the items controlled by the ECCN and the “items” paragraph contains an exclusive list of items described in the heading. Paragraphs (d)(2)(iv)(C)(1), (2) and (3) of this section provide examples of the three different uses of the phrase “(see List of Items Controlled)” in ECCN headings. Each heading on the CCL uses one of these three structures. Understanding the relationship between the heading and the “items” paragraph is important when classifying items that are “subject to the EAR” on the CCL.

(1) “(See List of Items Controlled)” is at the end of the ECCN heading. An example of an ECCN where all of the heading text precedes the phrase “(see List of Items Controlled)” is ECCN 8A002 Marine systems, equipment, “parts” and “components,” as follows (see List of Items Controlled). ECCNs 1A001, 3A001, 6A001, 7A004 and 9A012 are other examples where all of the heading text precedes the phrase “(see List of Items Controlled).” In these types of headings, the items paragraphs must be reviewed to determine whether your item is contained within the heading and classified under that ECCN.

(2) “(See List of Items Controlled)” is in the middle of the ECCN heading. If the phrase “(see List of Items Controlled)” appears in the middle of the ECCN heading, then all portions of the heading that follow the phrase “(see List of Items Controlled)” will list items controlled in addition to the list in the “items” paragraph. An example of such a heading is ECCN 2B992 Non-“numerically controlled” machine tools for generating optical quality surfaces, (see List of Items Controlled) and “specially designed” “parts” and “components” therefor. Under the ECCN 2B992 example, the “items” paragraph must be reviewed to

determine whether your item is contained within the first part of the heading (“non-‘numerically controlled’ machine tools for generating optical quality surfaces”) and classified under 2B992. The second part of the ECCN 2B999 heading (“and ‘specially designed’ ‘parts’ and ‘components’ therefor”) contains the exclusive list described in the heading. ECCNs 1A006, 3B992, 4A001, 6A006 and 7A001 are other examples where the phrase “(see List of Items Controlled)” appears in the middle of the ECCN heading.

(3) ECCNs that do not use the phrase “(see List of Items controlled).” When all items classified in the ECCN are listed in the heading, a sentence is generally included in the “items” paragraph to direct you to the heading. An example of such a heading is ECCN 4E980 “Technology” for the “development,” “production” or “use” of commodities controlled by 4A980. ECCNs 0A982, 3A292, 5D101, 8D001 and 9A002 are other examples where the heading is the exclusive description of the items classified under those respective ECCNs.

\* \* \* \* \*

■ 7. Section 738.4 is amended by revising paragraph (b)(2) to read as follows:

**§ 738.4 Determining whether a license is required.**

\* \* \* \* \*

(b) \* \* \*

(2) Sample CCL entry.

**2A000 Entry heading.**

**License Requirements**

*Reason for Control:* NS, NP, AT

<i>Control(s)</i>	<i>Country chart</i>
NS applies to entire entry.	NS Column 2
NP applies to 2A000.b.	NP Column 1
AT applies to entire entry.	AT Column 1

**License Exceptions**

*LVS:* \$5,000

*GBS:* Yes

*CIV:* N/A

**List of Items Controlled**

*Related Definitions:* N/A

*Related Controls:* N/A

*Items:*

a. Having x.

b. Having z.

\* \* \* \* \*

**PART 740—[AMENDED]**

■ 8. The authority citation for 15 CFR part 740 continues to read as follows:

**Authority:** 50 U.S.C. app. 2401 *et seq.*; 50 U.S.C. 1701 *et seq.*; 22 U.S.C. 7201 *et seq.*; E.O. 13026, 61 FR 58767, 3 CFR, 1996 Comp., p. 228; E.O. 13222, 66 FR 44025, 3 CFR, 2001 Comp., p. 783; Notice of August 8, 2013, 78, 2013, 78 FR 49107 (August 12, 2013).

■ 9. Section 740.6 is amended by revising paragraph (a)(1)(iii) to read as follows:

**§ 740.6 Technology and software under restriction (TSR).**

(a) \* \* \*

(1) \* \* \*

(iii) If the direct product of the technology is a complete plant or any major components of a plant, export to Country Groups D:1 or E:1 of the direct product of the plant or major components thereof, if such foreign produced direct product is subject to national security controls as identified on the CCL or is “subject to the ITAR” (see 22 CFR parts 120 through 130).

\* \* \* \* \*

■ 10. Section 740.10 is amended by removing the second sentence to paragraph (a)(2)(ii) as revised April 16, 2013, at 78 FR 22712, effective October 15, 2013.

**PART 742—[AMENDED]**

■ 11. The authority citation for 15 CFR part 742 continues to read as follows:

**Authority:** 50 U.S.C. app. 2401 *et seq.*; 50 U.S.C. 1701 *et seq.*; 22 U.S.C. 3201 *et seq.*; 42 U.S.C. 2139a; 22 U.S.C. 7201 *et seq.*; 22 U.S.C. 7210; Sec. 1503, Pub. L. 108–11, 117 Stat. 559; E.O. 12058, 43 FR 20947, 3 CFR, 1978 Comp., p. 179; E.O. 12851, 58 FR 33181, 3 CFR, 1993 Comp., p. 608; E.O. 12938, 59 FR 59099, 3 CFR, 1994 Comp., p. 950; E.O. 13026, 61 FR 58767, 3 CFR, 1996 Comp., p. 228; E.O. 13222, 66 FR 44025, 3 CFR, 2001 Comp., p. 783; Presidential Determination 2003–23 of May 7, 2003, 68 FR 26459, May 16, 2003; Notice of November 1, 2012, 77 FR 66513 (November 5, 2012); Notice of August 8, 2013, 78, 2013, 78 FR 49107 (August 12, 2013).

■ 12. Section 742.2 is amended by revising paragraph (e) to read as follows:

**§ 742.2 Proliferation of chemical and biological weapons.**

\* \* \* \* \*

(e) *License application requirements and instructions.* Unique application and submission requirements for chemicals, medicinals, and pharmaceuticals are described in paragraph (a) of Supplement No. 2 to part 748 of the EAR.

**PART 748—[AMENDED]**

■ 13. The authority citation for 15 CFR part 748 continues to read as follows:

**Authority:** 50 U.S.C. app. 2401 *et seq.*; 50 U.S.C. 1701 *et seq.*; E.O. 13026, 61 FR 58767,

3 CFR, 1996 Comp., p. 228; E.O. 13222, 66 FR 44025, 3 CFR, 2001 Comp., p. 783; Notice of August 15, 2012, 77 FR 49699 (August 16, 2012).

■ 14. Supplement No. 1 to Part 748 is amended by revising paragraphs e and f of Block 22 to read as follows:

**Supplement No. 1 to Part 748—BIS—748P, BIS—748P—A; Item Appendix, and BIS—748P—B; End-User Appendix; Multipurpose Application Instructions**

\* \* \* \* \*

Block 22: \* \* \*

(e) Quantity. Identify the quantity to be exported or reexported, in terms of the unit commonly used in the trade.

(f) Units. The unit of quantity used in Block 22(e) must be entered on all license applications submitted to BIS. This Block may be left blank on license applications for technology only.

\* \* \* \* \*

**PART 750—[AMENDED]**

■ 15. The authority citation for 15 CFR part 750 continues to read as follows:

**Authority:** 50 U.S.C. app. 2401 *et seq.*; 50 U.S.C. 1701 *et seq.*; Sec. 1503, Pub. L. 108–11, 117 Stat. 559; E.O. 13026, 61 FR 58767, 3 CFR, 1996 Comp., p. 228; E.O. 13222, 66 FR 44025, 3 CFR, 2001 Comp., p. 783; Presidential Determination 2003–23 of May 7, 2003, 68 FR 26459, May 16, 2003; E.O. 13637, 78 FR 16129 (March 8, 2013); Notice of August 8, 2013, 78, 2013, 78 FR 49107 (August 12, 2013).

■ 16. Section 750.7 is amended by revising paragraphs (c)(1)(ii), (c)(1)(viii) and (f) to read as follows:

**§ 750.7 Issuance of licenses.**

\* \* \* \* \*

(c) \* \* \*

(1) \* \* \*

(ii) Increase in price if permitted under the shipping tolerances in § 750.11 of this part;

\* \* \* \* \*

(viii) Change in ECCN, where necessary only for the purpose of conforming to an official revision in the CCL; or wording of the item description. This does not cover an actual change in the item to be shipped, or an increase in the total price or quantity on the license.

\* \* \* \* \*

(f) *Quantity of commodities authorized.* Unlike software and technology, commodities will be approved with a quantity and dollar value limit. Any license resulting from a license application to export or reexport commodities will be licensed in terms of the specified unit of quantity commonly used in trade. A total dollar value for the commodity will be

authorized based on the per unit price of the commodity. Subject to the shipping tolerances authorized in § 750.11 of this part, the authorization is limited by both the quantity and value listed on the license.

\* \* \* \* \*

■ 17. Section 750.11 is revised to read as follows:

**§ 750.11 Shipping tolerances.**

Under some circumstances, you may use a license issued for the export of items from the United States to export more than the value shown on that license. This additional amount is called a shipping tolerance. This section tells you, as the licensee, when you may take advantage of a shipping tolerance and the amount of shipping tolerance you are permitted to use.

(a) If you have already shipped the full quantity of items approved on your license, you may not use this shipping tolerance provision. No further shipment may be made under the license.

(b) If you have not shipped the full quantity of items approved on the license, the value of all of your shipments under one license, up to the full quantity approved on the license, may exceed the total dollar value stated on that license by up to 10%, unless:

(1) Your license stipulates a specific shipping tolerance; or

(2) Your item is controlled for short supply reasons and a different tolerance has been established. (See part 754 of the EAR).

**PART 772—[AMENDED]**

■ 18. The authority citation for 15 CFR part 772 continues to read as follows:

**Authority:** 50 U.S.C. app. 2401 *et seq.*; 50 U.S.C. 1701 *et seq.*; E.O. 13222, 66 FR 44025, 3 CFR, 2001 Comp., p. 783; Notice of August 8, 2013, 78, 2013, 78 FR 49107 (August 12, 2013).

■ 19. Section 772.1 is amended:

■ a. By revising the definition of “build-to-print technology” as added April 16, 2013, at 78 FR 22727, effective October 15, 2013;

■ b. By revising the definition of “end item” as added April 16, 2013, at 78 FR 22728, effective October 15, 2013;

■ c. By revising the definition of “equipment” as added April 16, 2013, at 78 FR 22728, effective October 15, 2013;

■ d. By adding a definition for the term “subject to the ITAR;”

■ e. By amending the definition of “specially designed” as revised April 16, 2013, at 78 FR 22728–22729, effective October 15, 2013 to add one sentence at the end of Note 1 and to add a new Note to paragraphs (b)(3) and

(b)(4) after Note 3 to paragraph (b)(3); and

■ f. By revising the definition of “system” as added April 16, 2013, at 78 FR 22729, effective October 15, 2013 and to add a new Note, to read as follows:

**§ 772.1 Definitions of terms as used in the Export Administration Regulations (EAR).**

\* \* \* \* \*

*Build-to-Print technology.* (1) This is “production” “technology” that is sufficient for an inherently capable end user to produce or repair a commodity from engineering drawings without any of the following:

(i) Revealing “development”

“technology,” such as design methodology, engineering analysis, detailed process or manufacturing know-how;

(ii) Revealing the production engineering or process improvement aspect of the “technology;” or

(iii) Requiring assistance from the provider of the technology to produce or repair the commodity.

(2) Acceptance, test, or inspection criteria pertaining to the commodity at issue is included within the scope of “build-to-print technology” only if it is necessary to verify that the commodity is acceptable.

\* \* \* \* \*

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

\* \* \* \* \*

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

\* \* \* \* \*

*Subject to the ITAR.* A term used in the EAR to describe those commodities, software, technology (e.g., technical data) and defense services over which the U.S. Department of State, Directorate of Defense Trade Controls (DDTC) exercises regulatory jurisdiction under the International Traffic in Arms Regulations (ITAR) (see 22 CFR parts 120 through 130).

\* \* \* \* \*

Subject to the ITAR. A term used in the EAR to describe those commodities, software, technology (e.g., technical data) and defense services over which the U.S. Department of State, Directorate of Defense Trade Controls (DDTC) exercises regulatory jurisdiction under the International Traffic in Arms Regulations (ITAR) (see 22 CFR parts 120 through 130).

\* \* \* \* \*



*Specially designed.* \* \* \*

\* \* \* \* \*

(a) \* \* \*

\* \* \* \* \*

**Note 1:** \* \* \* For purposes of “specially designed,” ECCNs 0B986, 0B999, 0D999, 1B999, 1C992, 1C995, 1C997, 1C999, 6A998 (except for .b), 7A994 (except for the QRS11) and 9A991 are treated as ECCNs controlled exclusively for AT reasons.

\* \* \* \* \*

**Note to paragraphs (b)(3) and (b)(4):** ECCNs controlled for AT-only reasons that use “specially designed” are eligible for paragraphs (b)(3) and (b)(4). However, the criteria for release under (b)(3) or (b)(4) must be met by another ECCN controlled for AT-only reasons or an EAR99 item in addition to the AT-only ECCN being reviewed for release from “specially designed.” For example, if a single gasket is used in ECCN 9A990 tractors (9A990 includes a control on “specially designed” “parts”) and also pick-up trucks designated as EAR99 that are in “production”, the single gasket would be released from “specially designed” on the basis of paragraph (b)(3). Or if the single gasket is or was used in 9A990 tractors and also 9A991.b aircraft (another AT-only controlled ECCN), that are in “production,” the gasket would be released from “specially designed” on the basis of paragraph (b)(3). Alternatively, if the single gasket is or was only used in ECCN 9A990 tractors that are in “production,” then paragraph (b)(3) would not be available. This same concept applies for paragraph (b)(4).

\* \* \* \* \*

**System.** This is any combination of “end items,” “equipment,” “parts,” “components,” “accessories,” “attachments,” firmware, or “software” that operate together to perform a function.

**Note:** The industrial standards established by INCOSE and NASA provide examples for when commodities and software operate together to perform a function as a system. References to these standards are included in this note to provide additional examples for when commodities or software operate together to perform a function as a system. See the INCOSE standards for what constitutes a system at (<http://g2sebok.incose.org/app/mss/asset.cfm?ID=INCOSE%20G2SEBOK%202.00&ST=F>), and in the (INCOSE SE Handbook v3.1 2007; ISO/IEC 15288:2008). Also see the NASA standards for examples of what constitutes a system in the (NASA SE Handbook SP-2007-6105 Rev 1).

**PART 774—[AMENDED]**

■ 20. The authority citation for 15 CFR part 774 continues to read as follows:

**Authority:** 50 U.S.C. app. 2401 *et seq.*; 50 U.S.C. 1701 *et seq.*; 10 U.S.C. 7420; 10 U.S.C. 7430(e); 22 U.S.C. 287c, 22 U.S.C. 3201 *et seq.*; 22 U.S.C. 6004; 30 U.S.C. 185(s), 185(u); 42 U.S.C. 2139a; 42 U.S.C. 6212; 43 U.S.C.

1354; 15 U.S.C. 1824a; 50 U.S.C. app. 5; 22 U.S.C. 7201 *et seq.*; 22 U.S.C. 7210; E.O. 13026, 61 FR 58767, 3 CFR, 1996 Comp., p. 228; E.O. 13222, 66 FR 44025, 3 CFR, 2001 Comp., p. 783; Notice of August 8, 2013, 78, 2013, 78 FR 49107 (August 12, 2013).

■ 21. Revise § 774.1 to read as follows:

**§ 774.1 Introduction.**

(a) *Scope of the control list.* In this part, references to the EAR are references to 15 CFR chapter VII, subchapter C. The Bureau of Industry and Security (BIS) maintains the Commerce Control List (CCL) that includes “items”—i.e., “commodities,” “software,” and “technology”—subject to the authority of BIS. The CCL does not include items exclusively controlled for export by another department or agency of the U.S. Government, though in instances where other agencies administer controls over related items, entries in the CCL may contain a reference to such controls. In addition, those items “subject to the EAR” but not identified on the CCL are identified by the designator “EAR99.” See § 734.2(a) of the EAR for items that are “subject to the EAR.” EAR Part 738 contains an explanation of the organization of the CCL and its relationship to the Country Chart.

(b) *ECCN cross-references for items subject to exclusive jurisdiction of another agency.* (1) Prior to October 15, 2013, the CCL contained certain ECCNs that were only included as cross references to items subject to the export control regulations administered by the Nuclear Regulatory Commission.

(2) ECCNs formerly listed on the CCL that, as of October 15, 2013 were subject to the export licensing authority of the Nuclear Regulatory Commission at 10 CFR part 110 are: 0A001, 0B001, 0B002, 0B003, 0B004, 0B005, 0B006, 0C001, 0C002, 0C004, 0C005, 0C006, 0C201 and 1C012.

(3) Multilateral export control regime references are provided, as an additional point of historical reference.

**Note to paragraph (b):** As of October 15, 2013 ECCN 0D001 is subject to the export licensing authority of the Nuclear Regulatory Commission (see 10 CFR part 110), and ECCN 0E001 is subject to the export licensing authority of the Department of Energy (see 10 CFR part 810), but certain portions of these entries are also “subject to the ITAR” (see 22 CFR parts 120 through 130). These ECCNs are retained on the CCL as a cross reference.

(c) *Where to find the CCL?* The CCL is contained in Supplement No. 1 to this part, and Supplement No. 2 to this part contains the General Technology and Software Notes relevant to entries contained in the CCL.

(d) *Conventions related to the use of quotation marks on the CCL.* The use of

double quotation marks on the CCL is intended to be an aid to alert you to terms used on the CCL that are defined in part 772 (Definitions of Terms), or for purposes of ECCNs, where a definition is provided in the “related definitions” paragraph in the License Requirements section of ECCNs or sometimes in Notes and Technical Notes for particular ECCNs and that definition is specific to that particular ECCN. In this sense the quotes are helpful both in the use of single and double quotes, but a good compliance practice is to familiarize yourself with the defined terms in part 772, and when reviewing a control parameter on the CCL that uses a term that is not in quotes to be aware it may be defined in part 772. It is also a useful compliance practice to review the “Related Definitions” paragraph and Notes and Technical Notes to determine if the term is defined for purposes of a particular ECCN.

(1) *Use of double quotes.* If a term on the CCL uses double quotes it means there is a defined term in part 772. However, the absence of double quotes does not mean that a term used on the CCL is not defined in part 772. Because the CCL includes many terms that are defined in part 772, BIS’s practice is to use double quotes for certain key terms and to use double quotes when needed for consistency with multilateral export control regime based entries, such as many derived from control lists, in particular for the Wassenaar Arrangement that also uses the double quotes convention. However, because of the large number of defined terms used on the CCL and a desire to avoid hindering readability by placing quotes around too many words used in particular ECCNs, BIS’s practice is to not add double quotes around certain terms, such as items and commodities. This convention also applies to the use of double quotes within the Definition of Terms section under part 772.

(2) *Use of single quotes.* The CCL also includes a convention regarding the use of single quotes. Single quotes on the CCL identify a term as a defined term in the context of a particular ECCN. This convention also applies to the use of single quotes within the Definition of Terms section under part 772.

**Supplement No. 1 to Part 774— [Amended]**

■ 22. Supplement No. 1 to part 774 (the Commerce Control List) is amended by removing the following Export Control Classification Numbers (ECCNs): 0A001, 0B001, 0B002, 0B003, 0B004, 0B005, 0B006, 0C001, 0C002, 0C004, 0C005, 0C006, 0C201 and 1C012.

- 23. Supplement No. 1 to part 774 (the Commerce Control List) is amended by adding the new section heading “Special Conditions for STA” above the STA paragraph of the following Export Control Classification Numbers (ECCNs): 1A002, 1C001, 1C007, 1C010, 1D002, 1E001, 1E002, 2D001, 2E001, 2E002, 3A002, 3D001, 3E001, 4A001, 4D001, 4E001, 5A001, 5B001, 5D001, 5E001, 6A001, 6A002, 6A003, 6A004, 6A006, 6A008, 6B008, 6D001, 6D003, 6E001, 6E002, 7D003, 7D004, 7E001, 7E002, 7E004, 8A001, 8A002, 8D001, 8D002, 8E001, 8E002, 9B001, 9D001, 9D002, 9D004, 9E001, 9E002, and 9E003.
- 24. Supplement No. 1 to part 774 (the Commerce Control List) is amended by adding the new section heading “Special Conditions for STA” above the STA paragraph of the following Export Control Classification Numbers (ECCNs): 9A610, 9A619, 9B610, 9B619, 9C610, 9C619, 9D610, 9D619, 9E610 and 9E619, as added April 16, 2013, at 78 FR 22730–22734, effective October 15, 2013.
- 25. Supplement No. 1 to part 774 (the Commerce Control List) is amended by adding the new section heading “Special Conditions for STA” above the STA paragraph of the following Export Control Classification Numbers (ECCNs): 0A606, 0A617, 0B606, 0B617, 0C606, 0C617, 0D606, 0D617, 0E606, 0E617, 8A609, 8A620, 8B609, 8B620, 8C609, 8D609, 8D620, 8E609, and 8E620, as added July 8, 2013, at 78 FR 40912–40918, effective January 6, 2014;
- 26. Supplement No. 1 to part 774 (the Commerce Control List) is amended by removing the section headings “License Exceptions” from Export Control Classification Numbers (ECCNs) wherever they appear, and adding in place of those headings “List Based License Exceptions (See Part 740 for a description of all license exceptions).”
- 27. Supplement No. 1 to part 774 (the Commerce Control List) is amended by removing the section headings “License Exceptions” from Export Control Classification Numbers (ECCNs): 9A610, 9A619, 9B610, 9B619, 9C610, 9C619, 9D610, 9D619, 9E610, and 9E619, as added April 16, 2013, at 78 FR 22730–22734, effective October 15, 2013, and adding in place of those headings “List Based License Exceptions (See Part 740 for a description of all license exceptions).”
- 28. Supplement No. 1 to part 774 (the Commerce Control List) is amended by removing the section headings “License Exceptions” from Export Control Classification Numbers (ECCNs): 0A606, 0A617, 0B606, 0B617, 0C606, 0C617, 0D606, 0D617, 0E606, 0E617, 8A609, 8A620, 8B609, 8B620, 8C609, 8D609, 8D620, 8E609, and 8E620, as added July 8, 2013, at 78 FR 40912–40918, effective January 6, 2014, and adding in place of those headings “List Based License Exceptions (See Part 740 for a description of all license exceptions).”
- 29. Supplement No. 1 to part 774 (the Commerce Control List) is amended by removing the “Country Chart” table heading in the License Requirements section in each Export Control Classification Number (ECCN) where such paragraph appears and adding in its place the heading “Country Chart (See Supp. No. 1 to part 738).”
- 30. Supplement No. 1 to part 774 (the Commerce Control List) is amended by removing the “Country Chart” table heading in the License Requirements section from Export Control Classification Numbers (ECCNs): 9A610, 9A619, 9B610, 9B619, 9C610, 9C619, 9D610, 9D619, 9E610, and 9E619, as added April 16, 2013, at 78 FR 22730–22734, effective October 15, 2013, and adding in its place the heading “Country Chart (See Supp. No. 1 to part 738).”
- 31. Supplement No. 1 to part 774 (the Commerce Control List) is amended by removing the “Country Chart” table heading in the License Requirements section from Export Control Classification Numbers (ECCNs): 0A606, 0A617, 0B606, 0B617, 0C606, 0C617, 0D606, 0D617, 0E606, 0E617, 8A609, 8A620, 8B609, 8B620, 8C609, 8D609, 8D620, 8E609, and 8E620, as added July 8, 2013, at 78 FR 40912–40918, effective January 6, 2014, and adding in its place the heading “Country Chart (See Supp. No. 1 to part 738).”
- 32. Supplement No. 1 to part 774 (the Commerce Control List) is amended by adding quotes around the term specially designed wherever it appears.
- 33. Supplement No. 1 to part 774 (the Commerce Control List) is amended by adding quotes around the term accessories wherever it appears.
- 34. Supplement No. 1 to part 774 (the Commerce Control List) is amended by adding quotes around the term attachments wherever it appears.
- 35. Supplement No. 1 to part 774 (the Commerce Control List) is amended:
- a. By removing the “Unit” paragraph from the List of Items Controlled section in each Export Control Classification Number (ECCN) where such paragraph appears;
- b. By removing the “Unit” paragraph from the List of Items Controlled section in Export Control Classification Numbers (ECCNs): 9A610, 9A619, 9B610, 9B619, 9C610, 9C619, 9D610, 9D619, 9E610, and 9E619, as added April 16, 2013, at 78 FR 22730–22734, effective October 15, 2013; and
- c. By removing the “Unit” paragraph from the List of Items Controlled section in Export Control Classification Numbers (ECCNs): 0A606, 0A617, 0B606, 0B617, 0C606, 0C617, 0D606, 0D617, 0E606, 0E617, 8A609, 8A620, 8B609, 8B620, 8C609, 8D609, 8D620, 8E609, and 8E620, as added July 8, 2013, at 78 FR 40912–40918, effective January 6, 2014.
- 36. Supplement No. 1 to part 774 (the Commerce Control List) is amended:
- a. By removing the “License Requirements Note” paragraph in the License Requirements section in the following Export Control Classification Number (ECCNs): 1E001;
- b. By removing the “License Requirement Notes” paragraphs in the License Requirements section in the following Export Control Classification Numbers (ECCNs): 1A002, 1C007, 1C010, 1D002, 2B003, 2D001, 2E001, 2E002, 3A002, 3B001, 3D001, 4A001, 4E001, 5A001, 5B001, 5D001, 5E001, 6A001, 6A002, 6A004, 6A006, 6A008, 6B008, 6D001, 6D003, 6E001, 6E002, 8A001, 8A002, 8D001, 8D002, 8E001, 8E002, 9B001, 9D001, 9D002, 9E001, 9E002 and 9E003; and
- c. By removing the “License Requirement Note” paragraphs in the License Requirements section in the following Export Control Classification Numbers (ECCNs): 1E002 and 3E001.
- 37. Supplement No. 1 to part 774 (the Commerce Control List) is amended by adding the new section “REPORTING REQUIREMENTS See § 743.1 of the EAR for reporting requirements for exports under License Exceptions, Special Comprehensive Licenses, and Validated End-User authorizations” after the License Requirements section in the following Export Control Classification Numbers (ECCNs): 1A002, 1C001, 1C007, 1C010, 1D002, 1E001, 1E002, 2B003, 2D001, 2E001, 2E002, 3A002, 3D001, 3E001, 4A001, 4D001, 4E001, 5A001, 5B001, 5D001, 5E001, 6A001, 6A002, 6A004, 6A006, 6A008, 6B008, 6D001, 6D003, 6E001, 6E002, 7D002, 7D003, 7E001, 7E002, 8A001, 8A002, 8D001, 8D002, 8E001, 8E002, 9B001, 9D001, 9D002, 9E001, 9E002 and 9E003.
- 38. In Supplement No. 1 to part 774 (the Commerce Control List), Category 0—Nuclear Materials, Facilities & Equipment (and Miscellaneous Items), Export Control Classification Number (ECCN) 0A002 is amended by revising the heading to read as follows:

**0A002 Power generating or propulsion equipment “specially designed” for use with space, marine or mobile “nuclear reactors”.** (These items are “subject to the ITAR.” See 22 CFR parts 120 through 130.)

\* \* \* \* \*

■ 39. In Supplement No. 1 to part 774 (the Commerce Control List), Category 0—Nuclear Materials, Facilities & Equipment (and Miscellaneous Items), Export Control Classification Number (ECCN) 0A018 is amended by revising the heading to read as follows:

**0A018 Items on the Wassenaar Munitions List (see List of Items Controlled).**

\* \* \* \* \*

■ 40. In Supplement No. 1 to part 774 (the Commerce Control List), Category 0—Nuclear Materials, Facilities & Equipment (and Miscellaneous Items), Export Control Classification Number (ECCN) 0A979 is amended by revising the heading to read as follows:

**0A979 Police helmets and shields; and “specially designed” “components,” n.e.s.**

\* \* \* \* \*

■ 41. In Supplement No. 1 to part 774 (the Commerce Control List), Category 0—Nuclear Materials, Facilities & Equipment (and Miscellaneous Items), Export Control Classification Number (ECCN) 0A981 is amended by revising the heading to read as follows:

**0A981 Equipment designed for the execution of human beings as follows (see List of Items Controlled).**

\* \* \* \* \*

■ 42. In Supplement No. 1 to part 774 (the Commerce Control List), Category 0—Nuclear Materials, Facilities & Equipment (and Miscellaneous Items), Export Control Classification Number (ECCN) 0A982 is amended by revising the heading to read as follows:

**0A982 Law enforcement restraint devices, including leg irons, shackles, and handcuffs; straight jackets; stun cuffs; shock belts; shock sleeves; multipoint restraint devices such as restraint chairs; and “specially designed” “parts,” “components” and “accessories,” n.e.s.**

\* \* \* \* \*

■ 43. In Supplement No. 1 to part 774 (the Commerce Control List), Category 0—Nuclear Materials, Facilities & Equipment (and Miscellaneous Items), Export Control Classification Number (ECCN) 0A983 is amended by revising the heading to read as follows:

**0A983 “Specially designed” implements of torture, including thumbscrews, thumbcuffs, fingercuffs, spiked batons, and “specially designed” “parts,” “components” and “accessories,” n.e.s.**

\* \* \* \* \*

■ 44. In Supplement No. 1 to part 774 (the Commerce Control List), Category 0—Nuclear Materials, Facilities & Equipment (and Miscellaneous Items), Export Control Classification Number (ECCN) 0A984 is amended:

- a. By revising the first “CC” paragraph in the Control(s) paragraph of the License Requirements section; and
- b. By revising the “Related Controls” paragraph in the List of Items Controlled section to read as follows:

**0A984 Shotguns with barrel length 18 inches (45.72 cm) or over; receivers; barrels of 18 inches (45.72 cm) or longer but not longer than 24 inches (60.96 cm); complete trigger mechanisms; magazines and magazine extension tubes; complete breech mechanisms; buckshot shotgun shells; except equipment used exclusively to treat or tranquilize animals, and except arms designed solely for signal, flare, or saluting use.**

**License Requirements**

*Reason for Control:* \* \* \*

Control(s)	Country chart
* * *	* * *
CC applies to shotguns with a barrel length greater than or equal to 18 in. (45.72 cm), but less than 24 in. (60.96 cm), shotgun “components” controlled by this entry, and buckshot shotgun shells controlled by this entry, regardless of end-user.	CC Column 1
* * *	* * *

*Reason for Control:*  
*Control(s)*

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

*Related Controls:* This entry does not control shotguns with a barrel length of less than 18 inches (45.72 cm). These items are “subject to the ITAR” (see 22 CFR parts 120 through 130).

\* \* \* \* \*

■ 45. In Supplement No. 1 to part 774 (the Commerce Control List), Category 0—Nuclear Materials, Facilities & Equipment (and Miscellaneous Items), Export Control Classification Number (ECCN) 0A985 is amended by revising the heading to read as follows:

**0A985 Discharge type arms and devices to administer electric shock, for example, stun guns, shock batons, shock shields, electric cattle prods, immobilization guns and projectiles; except equipment used exclusively to treat or tranquilize animals, and except arms designed**

**solely for signal, flare, or saluting use; and “specially designed” “parts” and “components,” n.e.s.**

\* \* \* \* \*

■ 46. In Supplement No. 1 to part 774 (the Commerce Control List), Category 0—Nuclear Materials, Facilities & Equipment (and Miscellaneous Items), Export Control Classification Number (ECCN) 0A986 is amended by revising the heading to read as follows:

**0A986 Shotgun shells, except buckshot shotgun shells, “specially designed” “parts” and “components.”**

\* \* \* \* \*

■ 47. In Supplement No. 1 to part 774 (the Commerce Control List), Category 0—Nuclear Materials, Facilities & Equipment (and Miscellaneous Items), Export Control Classification Number (ECCN) 0A987 is amended by revising the heading to read as follows:

**0A987 Optical sighting devices for firearms (including shotguns controlled by 0A984); and “components” as follows (see List of Items Controlled).**

\* \* \* \* \*

■ 48. In Supplement No. 1 to part 774 (the Commerce Control List), Category 0—Nuclear Materials, Facilities & Equipment (and Miscellaneous Items), Export Control Classification Number (ECCN) 0D001 is amended:

- a. By revising the heading; and
- b. By revising the second Control(s) paragraph in the License Requirements section to read as follows:

**0D001 “Software” “specially designed” or modified for the “development,” “production” or “use” of commodities described in 0A001, 0A002, 0B (except 0B986 and 0B999), or 0C.**

**License Requirements**

*Reason for Control:*

*Control(s)*

\* \* \* \* \*

“Software” for items described in 0A002 is “subject to the ITAR” (see 22 CFR parts 120 through 130).

\* \* \* \* \*

■ 49. In Supplement No. 1 to part 774 (the Commerce Control List), Category 1—Special Materials and Related Equipment, Chemicals, “Microorganisms” and “Toxins,” Export Control Classification Number (ECCN) 1A001 is amended:

- a. By revising the heading; and
- b. By revising the “Related Controls” paragraph (1) in the List of Items Controlled section to read as follows:

**1A001 “Parts” and “components” made from fluorinated compounds, as follows (see List of Items Controlled).**

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

Related Controls: (1) Items specially designed or modified for missiles or for items on the U.S. Munitions List are "subject to the ITAR" (see 22 CFR parts 120 through 130, including USML Category XXI).

\* \* \* \* \*

■ 50. In Supplement No. 1 to part 774 (the Commerce Control List), Category 1—Special Materials and Related Equipment, Chemicals, "Microorganisms" and "Toxins," Export Control Classification Number (ECCN) 1A002 is amended by revising the "Related Controls" paragraph (3) in the List of Items Controlled section to read as follows:

1A002 "Composite" structures or laminates, having any of the following (see List of Items Controlled).

\* \* \* \* \*

List of Items Controlled

\* \* \* \* \*

Related Controls: \* \* \* (3) "Composite" structures "specially designed" for missile applications (including "specially designed" subsystems, "parts," and "components") are controlled by ECCN 9A110.

\* \* \* \* \*

■ 51. In Supplement No. 1 to part 774 (the Commerce Control List), Category 1—Special Materials and Related Equipment, Chemicals, "Microorganisms" and "Toxins," Export Control Classification Number (ECCN) 1A004 is amended:

- a. By revising the heading;
■ b. By revising "Related Controls" paragraph (4) in the List of Items Controlled section;
■ c. By revising the introductory text of "items" paragraphs a and c in the List of Items Controlled section; and
■ d. By revising Technical Notes "1" at the end of the List of Items Controlled section to read as follows:

1A004 Protective and detection equipment and "components," not "specially designed" for military use, as follows (see List of Items Controlled).

\* \* \* \* \*

List of Items Controlled

\* \* \* \* \*

Related Controls: \* \* \* (4) Chemical and biological protective and detection equipment specifically designed, developed, modified, configured, or adapted for military applications is "subject to the ITAR" (see 22 CFR parts 120 through 130, including USML Category XIV(f)), as is commercial equipment that incorporates "parts" or "components" controlled under that category except for domestic preparedness devices for individual protection that integrate "components" and "parts" identified in USML Category XIV(f)(4) when such "parts" or "components" are: (i) Integral to the device; (ii) inseparable from the device;

and (iii) incapable of replacement without compromising the effectiveness of the device, in which case the equipment is "subject to the EAR" under ECCN 1A004.

Related Definitions: \* \* \*

Items:

\* \* \* \* \*

a. Full face masks, filter canisters and decontamination equipment therefor, designed or modified for defense against any of the following, and "specially designed" "components" therefor:

\* \* \* \* \*

c. Detection systems, "specially designed" or modified for detection or identification of any of the following, and "specially designed" "components" therefor:

\* \* \* \* \*

Technical Notes:

1. 1A004 includes equipment, "components" that have been identified, successfully tested to national standards or otherwise proven effective, for the detection of or defense against radioactive materials "adapted for use in war," biological agents "adapted for use in war," chemical warfare agent, "simulants" or "riot control agents," even if such equipment or "components" are used in civil industries such as mining, quarrying, agriculture, pharmaceuticals, medical, veterinary, environmental, waste management, or the food industry.

\* \* \* \* \*

■ 52. In Supplement No. 1 to part 774 (the Commerce Control List), Category 1—Special Materials and Related Equipment, Chemicals, "Microorganisms" and "Toxins," Export Control Classification Number (ECCN) 1A005 is amended:

- a. By revising the heading;
■ b. By revising the "Related Controls" paragraph (1) in the List of Items Controlled section; and
■ c. By revising "items" paragraph a in the List of Items Controlled section to read as follows:

1A005 Body armor and "specially designed" "components" therefor, as follows (see List of Items Controlled).

\* \* \* \* \*

List of Items Controlled

\* \* \* \* \*

Related Controls: (1) Bulletproof and bullet resistant vests (body armor) NIJ levels III and IV, are "subject to the ITAR" (see 22 CFR parts 120 through 130, including USML Categories X(a) and XIII(e)). \* \* \*

Related Definitions: \* \* \*

Items:

a. Soft body armor not manufactured to military standards or specifications, or to their equivalents, and "specially designed" components therefor;

\* \* \* \* \*

■ 53. In Supplement No. 1 to part 774 (the Commerce Control List), Category 1—Special Materials and Related Equipment, Chemicals, "Microorganisms" and "Toxins," Export

Control Classification Number (ECCN) 1A006 is amended:

- a. By revising the heading; and
■ b. By revising the "Related Controls" paragraph in the List of Items Controlled section to read as follows:

1A006 Equipment, "specially designed" or modified for the disposal of improvised explosive devices, as follows (see List of Items Controlled), and "specially designed" "components" and "accessories" therefor.

\* \* \* \* \*

List of Items Controlled

\* \* \* \* \*

Related Controls: Equipment "specially designed" for military use for the disposal of improvised explosive devices is "subject to the ITAR" (see 22 CFR parts 120 through 130, including USML Category IV).

\* \* \* \* \*

■ 54. In Supplement No. 1 to part 774 (the Commerce Control List), Category 1—Special Materials and Related Equipment, Chemicals, "Microorganisms" and "Toxins," Export Control Classification Number (ECCN) 1A007 is amended by revising the "Related Controls" paragraph in the List of Items Controlled section to read as follows:

1A007 Equipment and devices, "specially designed" to initiate charges and devices containing energetic materials, by electrical means, as follows (see List of Items Controlled).

\* \* \* \* \*

List of Items Controlled

\* \* \* \* \*

Related Controls: (1) Equipment and devices "specially designed" for military use are "subject to the ITAR" (see 22 CFR parts 120 through 130). (2) This entry does not control detonators using only primary explosives, such as lead azide. (3) See also 3A229. (4) See 1E001 for "development" and "production" technology controls, and 1E201 for "use" technology controls.

\* \* \* \* \*

■ 55. In Supplement No. 1 to part 774 (the Commerce Control List), Category 1—Special Materials and Related Equipment, Chemicals, "Microorganisms" and "Toxins," Export Control Classification Number (ECCN) 1A008 is amended:

- a. By revising the heading;
■ b. By revising the introductory text of "Related Controls" paragraph (1) and the "Related Controls" paragraph (2) in the List of Items Controlled section; and
■ c. By revising the introductory text of "items" paragraph b in the List of Items Controlled section to read as follows:

1A008 Charges, devices and "components," as follows (see List of Items Controlled).

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

*Related Controls:* (1) All of the following are “subject to the ITAR” (see 22 CFR parts 120 through 130):

\* \* \* \* \*

(2) See also ECCNs 1C011, 1C018, 1C111, and 1C239 for additional controlled energetic materials. See ECCN 1E001 for the “development” or “production” “technology” for the commodities controlled by ECCN 1A008, but not for explosives or commodities that are “subject to the ITAR.”

\* \* \* \* \*

*Items:*

\* \* \* \* \*

b. Linear shaped cutting charges having all of the following, and “specially designed” “components” therefor:

\* \* \* \* \*

■ 56. In Supplement No. 1 to part 774 (the Commerce Control List), Category 1—Special Materials and Related Equipment, Chemicals, “Microorganisms” and “Toxins,” Export Control Classification Number (ECCN) 1A101 is amended:

- a. By revising the heading; and
- b. By revising the “Related Controls” paragraph in the List of Items Controlled to read as follows:

**1A101 Devices for reduced observables such as radar reflectivity, ultraviolet/infrared signatures and acoustic signatures, for applications usable in rockets, missiles, or unmanned aerial vehicles capable of achieving a “range” equal to or greater than 300 km or their complete subsystems.**

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

*Related Controls:* (1) See also 1C101. (2) For commodities that meet the definition of defense articles under 22 CFR 120.3 of the International Traffic in Arms Regulations (ITAR), which describes similar commodities “subject to the ITAR” (See 22 CFR parts 120 through 130, including USML Category XIII).

\* \* \* \* \*

■ 57. In Supplement No. 1 to part 774 (the Commerce Control List), Category 1—Special Materials and Related Equipment, Chemicals, “Microorganisms” and “Toxins,” Export Control Classification Number (ECCN) 1A102 is amended by revising the heading to read as follows:

**1A102 Resaturated pyrolyzed carbon-carbon “parts” and “components” designed for rockets, missiles, or unmanned aerial vehicles capable of achieving a “range” equal to or greater than 300 km. (These items are “subject to the ITAR.” See 22 CFR parts 120 through 130.)**

\* \* \* \* \*

■ 58. In Supplement No. 1 to part 774 (the Commerce Control List), Category 1—Special Materials and Related Equipment, Chemicals, “Microorganisms” and “Toxins,” Export Control Classification Number (ECCN) 1A290 is amended by revising the “Related Controls” paragraphs (1) and (3) in the List of Items Controlled section to read as follows:

**1A290 Depleted uranium (any uranium containing less than 0.711% of the isotope U-235) in shipments of more than 1,000 kilograms in the form of shielding contained in X-ray units, radiographic exposure or teletherapy devices, radioactive thermoelectric generators, or packaging for the transportation of radioactive materials.**

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

*Related Controls:* (1) This entry does not control depleted uranium in fabricated forms for use in munitions. See 22 CFR part 121 for depleted uranium “subject to the ITAR” \* \* \* (3) “Natural uranium” or “depleted uranium” or thorium in the form of metal, alloy, chemical compound or concentrate and any other material containing one or more of the foregoing are subject to the export licensing authority of the Nuclear Regulatory Commission (see 10 CFR part 110).

\* \* \* \* \*

■ 59. In Supplement No. 1 to part 774 (the Commerce Control List), Category 1—Special Materials and Related Equipment, Chemicals, “Microorganisms” and “Toxins,” Export Control Classification Number (ECCN) 1A985 is amended by revising the “Related Controls” paragraph in the List of Items Controlled section to read as follows:

**1A985 Fingerprinting powders, dyes, and inks.**

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

*Related Controls:* See 3A981.

\* \* \* \* \*

■ 60. In Supplement No. 1 to part 774 (the Commerce Control List), Category 1—Special Materials and Related Equipment, Chemicals, “Microorganisms” and “Toxins,” Export Control Classification Number (ECCN) 1A995 is amended by revising the heading to read as follows:

**1A995 Protective and detection equipment not “specially designed” for military use and not controlled by ECCN 1A004 or ECCN 2B351, as follows (see List of Items Controlled), and “parts” and “components” not “specially designed”**

**for military use and not controlled by ECCN 1A004 or ECCN 2B351 therefor.**

\* \* \* \* \*

■ 61. In Supplement No. 1 to part 774 (the Commerce Control List), Category 1—Special Materials and Related Equipment, Chemicals, “Microorganisms” and “Toxins,” Export Control Classification Number (ECCN) 1B001 is amended:

- a. By revising the heading; and
- b. By revising “items” paragraph f.2 in the List of Items Controlled section to read as follows:

**1B001 Equipment for the production or inspection of “composite” structures or laminates controlled by 1A002 or “fibrous or filamentary materials” controlled by 1C010, as follows (see List of Items Controlled), and “specially designed” “components” and “accessories” therefor.**

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

*Items:*

\* \* \* \* \*

f.2. Numerically controlled ultrasonic testing machines of which the motions for positioning transmitters or receivers are simultaneously coordinated and programmed in four or more axes to follow the three dimensional contours of the “part” or “component” under inspection;

\* \* \* \* \*

■ 62. In Supplement No. 1 to part 774 (the Commerce Control List), Category 1—Special Materials and Related Equipment, Chemicals, “Microorganisms” and “Toxins,” Export Control Classification Number (ECCN) 1B003 is amended:

- a. By revising “Related Controls” paragraph in the List of Items Controlled section; and
- b. By revising “items” paragraph c in the List of Items Controlled section to read as follows:

**1B003 Tools, dies, molds or fixtures, for “superplastic forming” or “diffusion bonding” titanium, aluminum or their alloys, “specially designed” for the manufacture of any of the following (see List of Items Controlled).**

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

*Related Controls:* For “specially designed” production equipment of systems, subsystems, and “parts” and “components” controlled by 9A005 to 9A009, 9A011, 9A101, 9A105 to 9A109, 9A111, and 9A116 to 9A120 usable in “missiles,” see 9B115.

\* \* \* \* \*

*Items:*

\* \* \* \* \*

c. "Specially designed" "parts" and "components" for structures specified by 1B003.a or for engines specified by 1B003.b.

63. In Supplement No. 1 to part 774 (the Commerce Control List), Category 1—Special Materials and Related Equipment, Chemicals, "Microorganisms" and "Toxins," Export Control Classification Number (ECCN) 1B018 is amended by revising the heading to read as follows:

1B018 Items on the Wassenaar Arrangement Munitions List (see List of Items Controlled).

64. In Supplement No. 1 to part 774 (the Commerce Control List), Category 1—Special Materials and Related Equipment, Chemicals, "Microorganisms" and "Toxins," Export Control Classification Number (ECCN) 1B101 is amended:

- a. By revising the heading; and
b. By revising "Related Definitions" paragraph in the List of Items Controlled section to read as follows:

1B101 Equipment, other than that controlled by 1B001, for the "production" of structural composites, fibers, preregs or preforms, usable for rockets, missiles, or unmanned aerial vehicles capable of achieving a "range" equal to or greater than 300 km and their subsystems, as follows (see List of Items Controlled); and "specially designed" "parts," "components" and "accessories" therefor.

List of Items Controlled

Related Definitions: Examples of "parts," "components" and accessories for the machines controlled by this entry are molds, mandrels, dies, fixtures and tooling for the preform pressing, curing, casting, sintering or bonding of composite structures, laminates and manufactures thereof.

65. In Supplement No. 1 to part 774 (the Commerce Control List), Category 1—Special Materials and Related Equipment, Chemicals, "Microorganisms" and "Toxins," Export Control Classification Number (ECCN) 1B102 is amended:

- a. By revising the heading; and
b. By revising the introductory text of "items" paragraph b in List of Items Controlled section to read as follows:

1B102 Metal powder "production equipment," other than that specified in 1B002, and "parts" and "components" as follows (see List of Items Controlled).

List of Items Controlled

Items:

b. "Specially designed" "parts" and "components" for "production equipment" specified in 1B002 or 1B102.a.

66. In Supplement No. 1 to part 774 (the Commerce Control List), Category 1—Special Materials and Related Equipment, Chemicals, "Microorganisms" and "Toxins," Export Control Classification Number (ECCN) 1B115 is amended by revising the heading to read as follows:

1B115 Equipment, other than that controlled in 1B002 or 1B102, for the "production" of propellant or propellant constituents (see List of Items Controlled), and "specially designed" "parts" and "components" therefor.

67. In Supplement No. 1 to part 774 (the Commerce Control List), Category 1—Special Materials and Related Equipment, Chemicals, "Microorganisms" and "Toxins," Export Control Classification Number (ECCN) 1B117 is amended:

- a. By revising the heading; and
b. By revising the "Related Controls" paragraph in the List of Items Controlled section to read as follows:

1B117 Batch mixers with provision for mixing under vacuum in the range from zero to 13.326 kPa and with temperature control capability of the mixing chamber and having all of the following characteristics (see List of Items Controlled), and "specially designed" "parts" and "components" therefor.

List of Items Controlled

Related Controls: See 1B115, 1B118, and 1B119.

68. In Supplement No. 1 to part 774 (the Commerce Control List), Category 1—Special Materials and Related Equipment, Chemicals, "Microorganisms" and "Toxins," Export Control Classification Number (ECCN) 1B118 is amended:

- a. By revising the heading; and
b. By revising the "Related Controls" paragraph in the List of Items Controlled section to read as follows:

1B118 Continuous mixers with provision for mixing under vacuum in the range from zero to 13.326 kPa and with temperature control capability of the mixing chamber and having any of the following characteristics (see List of Items Controlled), and "specially designed" "parts" and "components" therefor.

List of Items Controlled

Related Controls: See 1B115, 1B117, and 1B119.

69. In Supplement No. 1 to part 774 (the Commerce Control List), Category 1—Special Materials and Related Equipment, Chemicals, "Microorganisms" and "Toxins," Export Control Classification Number (ECCN) 1B119 is amended:

- a. By revising the heading; and
b. By revising the "Related Controls" paragraph in the List of Items Controlled section to read as follows:

1B119 Fluid energy mills usable for grinding or milling propellant or propellant constituents specified in 1C011.a, 1C011.b or 1C111, or on the U.S. Munitions List, and "specially designed" "parts" and "components" therefor.

List of Items Controlled

Related Controls: See 1B115, 1B117 and 1B118.

70. In Supplement No. 1 to part 774 (the Commerce Control List), Category 1—Special Materials and Related Equipment, Chemicals, "Microorganisms" and "Toxins," Export Control Classification Number (ECCN) 1B225 is amended by revising the "Related Controls" paragraph in the List of Items Controlled section to read as follows:

1B225 Electrolytic cells for fluorine production with a production capacity greater than 250 g of fluorine per hour.

List of Items Controlled

Related Controls: (1) See ECCNs 1E001 ("development" and "production") and 1E201 ("use") for technology for items controlled by this entry. (2) See ECCN 1B999 for specific processing equipment, n.e.s.

71. In Supplement No. 1 to part 774 (the Commerce Control List), Category 1—Special Materials and Related Equipment, Chemicals, "Microorganisms" and "Toxins," Export Control Classification Number (ECCN) 1C002 is amended by revising "items" paragraph c.1.a in the List of Items Controlled section to read as follows:

1C002 Metal alloys, metal alloy powder and alloyed materials, as follows (see List of Items Controlled).

**List of Items Controlled**

\* \* \* \* \*

*Items:*

\* \* \* \* \*

c.1.a. Nickel alloys (Ni-Al-X, Ni-X-Al) qualified for turbine engine “parts” or “components,” i.e. with less than 3 non-metallic particles (introduced during the manufacturing process) larger than 100 µm in 10<sup>9</sup> alloy particles;

\* \* \* \* \*

■ 72. In Supplement No. 1 to part 774 (the Commerce Control List), Category 1—Special Materials and Related Equipment, Chemicals, “Microorganisms” and “Toxins,” Export Control Classification Number (ECCN) 1C011 is amended by revising the introductory text of the “Related Controls” paragraph (2) in the List of Items Controlled section to read as follows:

**1C011 Metals and compounds, as follows (see List of Items Controlled).**

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

*Related Controls:* \* \* \* (2) All of the following are “subject to the ITAR” (see 22 CFR parts 120 through 130): \* \* \*

\* \* \* \* \*

■ 73. In Supplement No. 1 to part 774 (the Commerce Control List), Category 1—Special Materials and Related Equipment, Chemicals, “Microorganisms” and “Toxins,” Export Control Classification Number (ECCN) 1C101 is amended by revising the “Related Controls” paragraph (3) in the List of Items Controlled section to read as follows:

**1C101 Materials for Reduced Observables such as Radar Reflectivity, Ultraviolet/Infrared Signatures and Acoustic Signatures (i.e., Stealth Technology), Other than Those Controlled by 1C001, for applications usable in rockets, missiles, or unmanned aerial vehicles capable of achieving a “range” equal to or greater than 300 km, and their subsystems.**

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

*Related Controls:* \* \* \* (3) For commodities that meet the definition of defense articles under 22 CFR 120.3 of the International Traffic in Arms Regulations (ITAR), which describes similar commodities “subject to the ITAR” (See 22 CFR parts 120 through 130, including USML Category XIII).

\* \* \* \* \*

■ 74. In Supplement No. 1 to part 774 (the Commerce Control List), Category 1—Special Materials and Related Equipment, Chemicals, “Microorganisms” and “Toxins,” Export

Control Classification Number (ECCN) 1C102 is amended by revising the heading to read as follows:

**1C102 Resaturated pyrolyzed carbon-carbon materials designed for space launch vehicles specified in 9A004 or sounding rockets specified in 9A104. (These items are “subject to the ITAR.” See 22 CFR parts 120 through 130.)**

\* \* \* \* \*

■ 75. In Supplement No. 1 to part 774 (the Commerce Control List), Category 1—Special Materials and Related Equipment, Chemicals, “Microorganisms” and “Toxins,” Export Control Classification Number (ECCN) 1C107 is amended by revising the “Related Controls” paragraph in the List of Items Controlled section to read as follows:

**1C107 Graphite and ceramic materials, other than those controlled by 1C007, which can be machined to any of the following products as follows (see List of Items Controlled).**

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

*Related Controls:* (1) See also 1C004, 1C007, and 1C298. (2) For commodities that meet the definition of defense articles under 22 CFR 120.3 of the ITAR, which describes similar commodities “subject to the ITAR” (See 22 CFR parts 120 through 130, including USML Category XIII). (3) “Special fissile materials” and “other fissile materials”; except, four “effective grams” or less when contained in a sensing component in instruments are subject to the export licensing authority of the Nuclear Regulatory Commission (see 10 CFR part 110).

\* \* \* \* \*

■ 76. In Supplement No. 1 to part 774 (the Commerce Control List), Category 1—Special Materials and Related Equipment, Chemicals, “Microorganisms” and “Toxins,” Export Control Classification Number (ECCN) 1C111 is amended by revising the “Related Controls” paragraphs (1) and (2) in the List of Items Controlled section to read as follows:

**1C111 Propellants and constituent chemicals for propellants, other than those specified in 1C011, as follows (see List of Items Controlled).**

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

*Related Controls:* (1) Butacene, as defined by C111.c.1, and some HTPB are “subject to the ITAR.” (See 22 CFR parts 120 through 130, including USML Category V, other ferrocene derivatives). (2) See 1C018 for controls on oxidizers that are composed of fluorine and one or more of the following—other halogens, oxygen, or nitrogen. Solid

oxidizer substances are “subject to the ITAR” (see 22 CFR parts 120 through 130, including USML Category V). \* \* \*

\* \* \* \* \*

■ 77. In Supplement No. 1 to part 774 (the Commerce Control List), Category 1—Special Materials and Related Equipment, Chemicals, “Microorganisms” and “Toxins,” Export Control Classification Number (ECCN) 1C117 is amended:

■ a. By revising the heading; and  
 ■ b. By revising the “Related Controls” paragraph in the List of Items Controlled section to read as follows:

**1C117 Materials for the fabrication of missile “parts” or “components” for rockets or missiles capable of achieving a “range” equal to or greater than 300 km, as follows (see List of Items Controlled).**

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

*Related Controls:* See 1C226.

\* \* \* \* \*

■ 78. In Supplement No. 1 to part 774 (the Commerce Control List), Category 1—Special Materials and Related Equipment, Chemicals, “Microorganisms” and “Toxins,” Export Control Classification Number (ECCN) 1C233 is amended by revising the “Related Controls” paragraph in the List of Items Controlled section to read as follows:

**1C233 Lithium enriched in the lithium-6 (<sup>6</sup>Li) isotope to greater than its natural isotopic abundance, and products or devices containing enriched lithium, as follows: elemental lithium, alloys, compounds, mixtures containing lithium, manufactures thereof, and waste or scrap of any of the foregoing.**

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

*Related Controls:* (1) See ECCNs 1E001 (“development” and “production”) and 1E201 (“use”) for technology for items controlled by this entry. (2) See ECCN 1B233 for lithium isotope separation facilities or plants, and equipment therefor. (3) Certain facilities or plants for the separation of lithium isotopes are subject to the export licensing authority of the Nuclear Regulatory Commission (see 10 CFR part 110).

\* \* \* \* \*

■ 79. In Supplement No. 1 to part 774 (the Commerce Control List), Category 1—Special Materials and Related Equipment, Chemicals, “Microorganisms” and “Toxins,” Export Control Classification Number (ECCN) 1C239 is amended by revising the “Related Controls” paragraph (3) in the



List of Items Controlled section to read as follows:

1C239 High explosives, other than those controlled by the U.S. Munitions List, or substances or mixtures containing more than 2% by weight thereof, with a crystal density greater than 1.8 g/cm<sup>3</sup> and having a detonation velocity greater than 8,000 m/s.

\* \* \* \* \*

List of Items Controlled

\* \* \* \* \*

Related Controls: \* \* \* (3) High explosives for military use are "subject to the ITAR" (see 22 CFR part 121.12).

\* \* \* \* \*

80. In Supplement No. 1 to part 774 (the Commerce Control List), Category 1—Special Materials and Related Equipment, Chemicals, "Microorganisms" and "Toxins," Export Control Classification Number (ECCN) 1C240 is amended by revising the heading to read as follows:

1C240 Nickel powder or porous nickel metal, other than nickel powder or porous nickel metal, specially prepared for the manufacture of gaseous diffusion barriers subject to the export licensing authority of the Nuclear Regulatory Commission (see 10 CFR part 110), as follows (see List of Items Controlled).

\* \* \* \* \*

81. In Supplement No. 1 to part 774 (the Commerce Control List), Category 1—Special Materials and Related Equipment, Chemicals, "Microorganisms" and "Toxins," Export Control Classification Number (ECCN) 1C298 is amended:

a. By revising the License Requirement Note paragraph in the License Requirements section; and b. By revising the Related Controls paragraph in the List of Items Controlled section to read as follows:

1C298 Graphite with a boron content of less than 5 parts per million and a density greater than 1.5 grams per cubic centimeter that is intended for use other than in a nuclear reactor.

License Requirements

\* \* \* \* \*

License Requirement Note: Some graphite intended for use in a nuclear reactor is subject to the export licensing authority of the Nuclear Regulatory Commission (see 10 CFR part 110).

\* \* \* \* \*

List of Items Controlled

\* \* \* \* \*

Related Controls: (1) See also 1C107. (2) Graphite having a purity level of less than 5 parts per million "boron equivalent" as measured according to ASTM standard C-1233-98 and intended for use in a nuclear reactor is subject to the export licensing

authority of the Nuclear Regulatory Commission (see 10 CFR part 110).

\* \* \* \* \*

82. In Supplement No. 1 to part 774 (the Commerce Control List), Category 1—Special Materials and Related Equipment, Chemicals, "Microorganisms" and "Toxins," Export Control Classification Number (ECCN) 1C350 is amended:

a. By revising the heading; b. By revising "Note to Mixtures" paragraph b and "Technical Notes" paragraph 1 in the License Requirements section; and b. By revising the "Related Controls" paragraph in the List of Items Controlled section to read as follows:

1C350 Chemicals that may be used as precursors for toxic chemical agents (see List of Items Controlled).

License Requirements

\* \* \* \* \*

Licenses Requirements Notes:

\* \* \* \* \*

2. \* \* \*

\* \* \* \* \*

Notes to Mixtures: \* \* \*

\* \* \* \* \*

b. Percent Weight Calculation. When calculating the percentage, by weight, of ingredients in a chemical mixture, include all ingredients of the mixture, including those that act as solvents.

\* \* \* \* \*

Technical Notes: \* \* \*

1. For purposes of this entry, a "mixture" is defined as a solid, liquid or gaseous product made up of two or more ingredients that do not react together under normal storage conditions.

\* \* \* \* \*

List of Items Controlled

\* \* \* \* \*

Related Controls: See USML Category XIV(c) for related chemicals "subject to the ITAR" (see 22 CFR parts 120 through 130).

\* \* \* \* \*

83. In Supplement No. 1 to part 774 (the Commerce Control List), Category 1—Special Materials and Related Equipment, Chemicals, "Microorganisms" and "Toxins," Export Control Classification Number (ECCN) 1C351 is amended by revising the "Related Controls" paragraph (1) and (3) in the List of Items Controlled section to read as follows:

1C351 Human and zoonotic pathogens and "toxins," as follows (see List of Items Controlled).

\* \* \* \* \*

List of Items Controlled

\* \* \* \* \*

Related Controls: (1) Certain forms of ricin and saxitoxin in 1C351.d.11. and d.12 are

CWC Schedule 1 chemicals (see § 742.18 of the EAR). The U.S. Government must provide advance notification and annual reports to the OPCW of all exports of Schedule 1 chemicals. See § 745.1 of the EAR for notification procedures. See 22 CFR part 121, Category XIV and § 121.7 for CWC Schedule 1 chemicals that are "subject to the ITAR."

\* \* \* (3) See 22 CFR part 121, Category XIV(b), for modified biological agents and biologically derived substances that are "subject to the ITAR."

\* \* \* \* \*

84. In Supplement No. 1 to part 774 (the Commerce Control List), Category 1—Special Materials and Related Equipment, Chemicals, "Microorganisms" and "Toxins," Export Control Classification Number (ECCN) 1C355 is amended:

a. By revising the heading; and b. By revising "Note to Mixtures" paragraph b and "Technical Notes" in the License Requirements section to read as follows:

1C355 Chemical Weapons Convention (CWC) Schedule 2 and 3 chemicals and families of chemicals not controlled by ECCN 1C350 or "subject to the ITAR" (see 22 CFR parts 120 through 130) (see List of Items Controlled).

License Requirements

\* \* \* \* \*

Licenses Requirements Notes:

\* \* \* \* \*

1. \* \* \*

\* \* \* \* \*

Notes to Mixtures: \* \* \*

\* \* \* \* \*

b. Percent Weight Calculation. When calculating the percentage, by weight, of ingredients in a chemical mixture, include all ingredients of the mixture, including those that act as solvents.

\* \* \* \* \*

Technical Notes: For purposes of this entry, a "mixture" is defined as a solid, liquid or gaseous product made up of two or more ingredients that do not react together under normal storage conditions.

\* \* \* \* \*

85. In Supplement No. 1 to part 774 (the Commerce Control List), Category 1—Special Materials and Related Equipment, Chemicals, "Microorganisms" and "Toxins," Export Control Classification Number (ECCN) 1C992 is amended:

a. By revising the heading; and b. By revising the "Related Definitions" paragraphs (1), (3) and (4) in the List of Items Controlled section to read as follows:

1C992 Commercial charges and devices containing energetic materials, n.e.s. and nitrogen trifluoride in a gaseous state (see List of Items Controlled).

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

*Related Definitions:* (1) Items controlled by this entry 1C992 are those materials not “subject to the ITAR” (see 22 CFR parts 120 through 130) or controlled by ECCN 1C018. \* \* \* (3) The individual USML controlled energetic materials, even when compounded with other materials, remain “subject to the ITAR” when not incorporated into explosive devices or charges controlled by this entry. (4) Commercial prefabricated slurries and emulsions containing greater than 35% of USML controlled energetic materials are “subject to the ITAR” (see 22 CFR parts 120 through 130). \* \* \*

\* \* \* \* \*

■ 86. In Supplement No. 1 to part 774 (the Commerce Control List), Category 1—Special Materials and Related Equipment, Chemicals, “Microorganisms” and “Toxins,” Export Control Classification Number (ECCN) 1C996 is amended by revising the heading to read as follows:

**1C996 Hydraulic fluids containing synthetic hydrocarbon oils, not controlled by 1C006, having all the following characteristics (see List of Items Controlled).**

\* \* \* \* \*

■ 87. In Supplement No. 1 to part 774 (the Commerce Control List), Category 1—Special Materials and Related Equipment, Chemicals, “Microorganisms” and “Toxins,” Export Control Classification Number (ECCN) 1D002 is amended by revising the “Related Controls” paragraph in the List of Items Controlled to read as follows:

**1D002 “Software” for the “development” of organic “matrix,” metal “matrix” or carbon “matrix” laminates or “composites”.**

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

*Related Controls:* “Software” for items controlled by 1A102 are “subject to the ITAR” (see 22 CFR parts 120 through 130).

\* \* \* \* \*

■ 88. In Supplement No. 1 to part 774 (the Commerce Control List), Category 1—Special Materials and Related Equipment, Chemicals, “Microorganisms” and “Toxins,” Export Control Classification Number (ECCN) 1D103 is amended:

■ a. By revising the heading; and  
 ■ b. By revising the “Related Controls” paragraph (2) in the List of Items Controlled section to read as follows:

**1D103 “Software” “specially designed” for reduced observables such as radar reflectivity, ultraviolet/infrared signatures and acoustic signatures, for applications usable in rockets, missiles,**

**or unmanned aerial vehicles capable of delivering at least a 500 kg payload to a “range” equal to or greater than 300 km and their complete subsystems.**

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

*Related Controls:* \* \* \* (2) For software that meets the definition of defense articles under 22 CFR 120.3 of the International Traffic in Arms Regulations (ITAR), which describes similar software that are “subject to the ITAR” (see 22 CFR parts 120 through 130, including USML Category XIII).

\* \* \* \* \*

■ 89. In Supplement No. 1 to part 774 (the Commerce Control List), Category 1—Special Materials and Related Equipment, Chemicals, “Microorganisms” and “Toxins,” Export Control Classification Number (ECCN) 1D993 is amended by revising the heading to read as follows:

**1D993 “Software” “specially designed” for the “development,” “production” or “use” of materials controlled by 1C210.b, or 1C990.**

\* \* \* \* \*

■ 90. In Supplement No. 1 to part 774 (the Commerce Control List), Category 1—Special Materials and Related Equipment, Chemicals, “Microorganisms” and “Toxins,” Export Control Classification Number (ECCN) 1E001 is amended:

■ a. By revising the heading;  
 ■ b. By removing “1A008,” from the first entry in the License Requirements table;  
 ■ c. By revising the License Exception TSR paragraph (2) introductory text in the License Exceptions section;  
 ■ d. By revising the Special Conditions for License Exception STA section; and  
 ■ e. By revising the “Related Controls” paragraph (4) in the List of Items Controlled section to read as follows:

**1E001 “Technology” according to the General Technology Note for the “Development” or “Production” of items controlled by 1A001.b, 1A001.c, 1A002, 1A003, 1A004, 1A005, 1A006.b, 1A007, 1A101, 1B (except 1B999), or 1C (except 1C355, 1C980 to 1C984, 1C988, 1C990, 1C991, 1C995 to 1C999).**

\* \* \* \* \*

**License Exceptions**

\* \* \* \* \*

*TSR:* \* \* \*  
 (2) Exports and reexports to destinations outside of those countries listed in Country Group A:5 (See Supplement No. 1 to part 740 of the EAR) of “technology” for the “development” or production” of the following:

\* \* \* \* \*

*STA:* License Exception STA may not be used to ship or transmit “technology”

according to the General Technology Note for the “development” or “production” of equipment and materials specified by ECCNs 1A002, 1C001, 1C007.c or d, or 1C010.c or d to any of the eight destinations listed in § 740.20(c)(2) of the EAR.

**List of Items Controlled**

\* \* \* \* \*

*Related Controls:* \* \* \* (4) “Technology” for items described in ECCN 1A102 is “subject to the ITAR” (see 22 CFR parts 120 through 130).

\* \* \* \* \*

■ 91. In Supplement No. 1 to part 774 (the Commerce Control List), Category 1—Special Materials and Related Equipment, Chemicals, “Microorganisms” and “Toxins,” Export Control Classification Number (ECCN) 1E101 is amended by revising the “Related Controls” paragraph in the List of Items Controlled section to read as follows:

**1E101 “Technology,” in accordance with the General Technology Note, for the “use” of commodities and software controlled by 1A101, 1A102, 1B001, 1B101, 1B102, 1B115 to 1B119, 1C001, 1C007, 1C011, 1C101, 1C107, 1C111, 1C116, 1C117, 1C118, 1D001, 1D101, or 1D103.**

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

*Related Controls:* “Technology” for items controlled by 1A102 is “subject to the ITAR” (see 22 CFR parts 120 through 130).

\* \* \* \* \*

■ 92. In Supplement No. 1 to part 774 (the Commerce Control List), Category 2—Materials Processing, Export Control Classification Number (ECCN) 2A001 is amended:

■ a. By revising the heading;  
 ■ b. By revising the “Related Controls” paragraph (2) in the List of Items Controlled section; and  
 ■ c. By redesignating Note to the “items” paragraph (a) in the List of Items Control section as Note 2 and adding a new Note 1 to read as follows:

**2A001 Anti-friction bearings and bearing systems, as follows, (see List of Items Controlled) and “components” therefor.**

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

*Related Controls:* \* \* \* (2) Quiet running bearings are “subject to the ITAR” (see 22 CFR parts 120 through 130).

\* \* \* \* \*

*Items:*

**Note 1:** A001.a includes ball bearing and roller elements “specially designed” for the items specified therein.

\* \* \* \* \*

■ 93. In Supplement No. 1 to part 774 (the Commerce Control List), Category 2—Materials Processing, Export Control Classification Number (ECCN) 2A226 is amended by revising the “Related Controls” paragraph (2) in the List of Items Controlled section to read as follows:

**2A226 Valves having all of the following characteristics (see List of Items Controlled).**

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

*Related Controls:* \* \* \* (2) Also see ECCNs 2A292, 2B350.g and 2B999. \* \* \*

\* \* \* \* \*

■ 94. In Supplement No. 1 to part 774 (the Commerce Control List), Category 2—Materials Processing, Export Control Classification Number (ECCN) 2A291 is amended:

- a. By revising the heading;
- b. By revising the “Related Controls” paragraph (5) in the List of Items Controlled section; and
- c. By revising the “items” paragraph d in the List of Items Controlled section to read as follows:

**2A291 Equipment, except items controlled by 2A290, related to nuclear material handling and processing and to nuclear reactors, and “parts,” “components” and “accessories” therefor (see List of Items Controlled).**

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

*Related Controls:* \* \* \* (5) Nuclear radiation detection and measurement devices “specially designed” or modified for military purposes are “subject to the ITAR” (see 22 CFR parts 120 through 130).

\* \* \* \* \*

*Items:*

\* \* \* \* \*

d. Commodities, “parts,” “components” and accessories “specially designed” or prepared for use with nuclear plants (e.g., snubbers, airlocks, pumps, reactor fuel charging and discharging equipment, containment equipment such as hydrogen recombiner and penetration seals, and reactor and fuel inspection equipment, including ultrasonic or eddy current test equipment).

\* \* \* \* \*

■ 95. In Supplement No. 1 to part 774 (the Commerce Control List), Category 2—Materials Processing, Export Control Classification Number (ECCN) 2A292 is amended by revising the “Related Controls” paragraph (3) in the List of Items Controlled section to read as follows:

**2A292 Piping, fittings and valves made of, or lined with, stainless steel, copper-nickel alloy or other alloy steel**

containing 10% or more nickel and/or chromium.

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

*Related Controls:* \* \* \* (3) Also see ECCNs 2A226, 2B350 and 2B999. \* \* \*

\* \* \* \* \*

■ 96. In Supplement No. 1 to part 774 (the Commerce Control List), Category 2—Materials Processing, Export Control Classification Number (ECCN) 2A983 is amended by revising the heading to read as follows:

**2A983 Explosives or detonator detection equipment, both bulk and trace based, consisting of an automated device, or combination of devices for automated decision making to detect the presence of different types of explosives, explosive residue, or detonators; and “parts” and “components,” n.e.s.**

\* \* \* \* \*

■ 97. In Supplement No. 1 to part 774 (the Commerce Control List), Category 2—Materials Processing, Export Control Classification Number (ECCN) 2A984 is amended:

- a. By revising the heading; and
- b. By revising the “Related Controls” paragraph (1) in the List of Items Controlled section to read as follows:

**2A984 Concealed object detection equipment operating in the frequency range from 30 GHz to 3000 GHz and having a spatial resolution of 0.5 milliradian up to and including 1 milliradian at a standoff distance of 100 meters; and “parts” and “components,” n.e.s.**

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

*Related Controls:* (1) Concealed object detection equipment operating in the frequency range from 30 GHz to 3000 GHz and having a spatial resolution less than 0.5 milliradian (a lower milliradian number means a more accurate image resolution) at a standoff distance of 100 meters is “subject to the ITAR” (see 22 CFR parts 120 through 130). \* \* \*

\* \* \* \* \*

■ 98. In Supplement No. 1 to part 774 (the Commerce Control List), Category 2—Materials Processing, Export Control Classification Number (ECCN) 2A991 is amended:

- a. By revising the heading;
- b. By revising the “Related Controls” paragraph (2) in the List of Items Controlled section; and
- c. By revising the introductory text of paragraph a, and paragraphs a.2, and b.1 of the “items” paragraph in the List of Items Controlled section to read as follows:

**2A991 Bearings and bearing systems not controlled by 2A001 (see List of Items Controlled).**

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

*Related Controls:* \* \* \* (2) Quiet running bearings are “subject to the ITAR” (see 22 CFR parts 120 through 130).

\* \* \* \* \*

*Items:*

a. Ball bearings or Solid ball bearings, having tolerances specified by the manufacturer in accordance with ABEC 7, ABEC 7P, or ABEC 7T or ISO Standard Class 4 or better (or equivalents) and having any of the following characteristics.

\* \* \* \* \*

a.2. With lubricating elements or “part” or “component” modifications that, according to the manufacturer’s specifications, are “specially designed” to enable the bearings to operate at speeds exceeding 2.3 million DN.

\* \* \* \* \*

b. \* \* \*

b.1. With lubricating elements or “part” or “component” modifications that, according to the manufacturer’s specifications, are “specially designed” to enable the bearings to operate at speeds exceeding 2.3 million DN; or

\* \* \* \* \*

■ 99. In Supplement No. 1 to part 774 (the Commerce Control List), Category 2—Materials Processing, Export Control Classification Number (ECCN) 2A994 is amended:

- a. By revising the heading; and
- b. By revising the “related definitions” paragraph in the List of Items Controlled section to read as follows:

**2A994 Portable electric generators and “specially designed” “parts” and “components.”**

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

*Related Definitions:* ‘Portable electric generators’—The generators that are in 2A994 are portable—5,000 lbs or less on wheels or transportable in a 2½ ton truck without a “special set up requirement.

\* \* \* \* \*

■ 100. In Supplement No. 1 to part 774 (the Commerce Control List), Category 2—Materials Processing, Export Control Classification Number (ECCN) 2B001 is amended by revising the parenthetical phrase following sentence (2) of the second entry in the License Requirements table to read as follows:

**2B001 Machine tools and any combination thereof, for removing (or cutting) metals, ceramics or “composites,” which, according to the manufacturer’s technical specifications, can be equipped with electronic devices for**

“numerical control”, as follows (see List of Items Controlled).

**License Requirements**

*Reason for Control:* \* \* \*

Control(s)	Country chart
* * *	* * *
NP applies to 2B001.a, .b, .c, and .d, EXCEPT: * * * (2) * * * (Machines may have drilling and/or milling capabilities for machining “parts” or “components” with diameters less than 42 mm); * * *	NP Column 1
* * *	* * *
* * *	* * *

■ 101. In Supplement No. 1 to part 774 (the Commerce Control List), Category 2—Materials Processing, Export Control Classification Number (ECCN) 2B003 is amended by adding quotes around the term components in the heading.

■ 102. In Supplement No. 1 to part 774 (the Commerce Control List), Category 2—Materials Processing, Export Control Classification Number (ECCN) 2B004 is amended by adding quotes around the term components in the heading.

■ 103. In Supplement No. 1 to part 774 (the Commerce Control List), Category 2—Materials Processing, Export Control Classification Number (ECCN) 2B005 is amended by revising the heading to read as follows:

**2B005 Equipment “specially designed” for the deposition, processing and in-process control of inorganic overlays, coatings and surface modifications, as follows, for non-electronic substrates, by processes shown in the Table and associated Notes following 2E003.f (see List of Items Controlled), and “specially designed” automated handling, positioning, manipulation and control “components” therefor.**

\* \* \* \* \*

■ 104. In Supplement No. 1 to part 774 (the Commerce Control List), Category 2—Materials Processing, Export Control Classification Number (ECCN) 2B105 is amended by revising the “Related Controls” paragraph (3) in the List of Items Controlled section to read as follows:

**2B105 Chemical vapor deposition (CVD) furnaces, other than those controlled by 2B005.a, designed or modified for the densification of carbon-carbon composites.**

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

*Related Controls:* \* \* \* (3) Also see ECCNs 2B005, 2B117, 2B226 and 2B227.

\* \* \* \* \*

■ 105. In Supplement No. 1 to part 774 (the Commerce Control List), Category 2—Materials Processing, Export Control Classification Number (ECCN) 2B109 is amended:

- a. By revising the heading; and
- b. By revising “Technical Notes” paragraph (2) in the “items” paragraph in the List of Items Controlled section to read as follows:

**2B109 Flow-forming machines, other than those controlled by 2B009, and “specially designed” “parts” and “components” therefor (see List of Items Controlled).**

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

*Items:*

\* \* \* \* \*

**Technical Notes:**

\* \* \* \* \*

2. *2B109 does not control machines that are not usable in the “production” of propulsion “parts,” “components” and equipment (e.g., motor cases) for systems in 9A005, 9A007.a, or 9A105.a.*

■ 106. In Supplement No. 1 to part 774 (the Commerce Control List), Category 2—Materials Processing, Export Control Classification Number (ECCN) 2B116 is amended:

- a. By revising the heading; and
- b. By revising the “Related Controls” paragraph (3) in the List of Items Controlled section to read as follows:

**2B116 Vibration test systems and equipment, usable for rockets, missiles, or unmanned aerial vehicles capable of achieving a “range” equal to or greater than 300 km and their subsystems, and “parts” and “components” therefor, as follows (see List of Items Controlled).**

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

*Related Controls:* \* \* \* (3) Also see ECCNs 9B106 and 9B990.

\* \* \* \* \*

■ 107. In Supplement No. 1 to part 774 (the Commerce Control List), Category 2—Materials Processing, Export Control Classification Number (ECCN) 2B201 is amended:

- a. By revising the heading; and
- b. By revising the Note to paragraph a in the “items” paragraph in the List of Items Controlled section to read as follows:

**2B201 Machine tools, other than those controlled by 2B001, for removing or cutting metals, ceramics or “composites,” which, according to manufacturer’s technical specifications,**

**can be equipped with electronic devices for simultaneous “contouring control” in two or more axes, as follows (see List of Items Controlled).**

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

*Items:*

a. \* \* \*

**Note:** Item 2B201.a. does not control bar machines (Swissturn), limited to machining only bar feed thru, if maximum bar diameter is equal to or less than 42 mm and there is no capability of mounting chucks. Machines may have drilling and/or milling capabilities for machining “parts” or “components” with diameters less than 42 mm.

\* \* \* \* \*

■ 108. In Supplement No. 1 to part 774 (the Commerce Control List), Category 2—Materials Processing, Export Control Classification Number (ECCN) 2B229 is amended by revising the introductory text to “items” paragraph b in the List of Items Controlled section to read as follows:

**2B229 Centrifugal multiplane balancing machines, fixed or portable, horizontal or vertical, as follows (see List of Items Controlled).**

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

*Items:*

\* \* \* \* \*

b. Centrifugal balancing machines designed for balancing hollow cylindrical rotor “parts” or “components” and having all of the following characteristics:

\* \* \* \* \*

■ 109. In Supplement No. 1 to part 774 (the Commerce Control List), Category 2—Materials Processing, Export Control Classification Number (ECCN) 2B350 is amended:

■ a. By revising the “Related Controls” paragraph in the List of Items Controlled section;

■ b. By revising the “Related Definitions” paragraph in the List of Items Controlled section; and

■ c. By adding a note at the end of the “items” paragraph, after the Technical Notes, in the List of Items Controlled section to read as follows:

**2B350 Chemical manufacturing facilities and equipment, except valves controlled by 2A226 or 2A292, as follows (see List of Items Controlled).**

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

*Related Controls:* See also ECCNs 2A226, 2A292, 2A293, 2B231 and 2B999.

*Related Definitions:* For purposes of this entry the term “chemical warfare agents” include those agents “subject to the ITAR” (see 22 CFR parts 120 through 130).

Items:

\* \* \* \* \*

Note: See Categories V and XIV of the United States Munitions List for all chemicals that are "subject to the ITAR" (see 22 CFR parts 120 through 130).

110. In Supplement No. 1 to part 774 (the Commerce Control List), Category 2—Materials Processing, Export Control Classification Number (ECCN) 2B351 is amended:

- a. By revising the heading; and
b. By revising "Related Controls" paragraph in the List of Items Controlled section to read as follows:

2B351 Toxic gas monitoring systems and their dedicated detecting "parts" and "components" (i.e., detectors, sensor devices, and replaceable sensor cartridges), as follows, except those systems and detectors controlled by ECCN 1A004.c (see List of Items Controlled).

\* \* \* \* \*

List of Items Controlled

\* \* \* \* \*

Related Controls: See ECCN 2D351 for "software" for toxic gas monitoring systems and their dedicated detecting "parts" and "components" controlled by this ECCN. Also see ECCN 1A004, which controls chemical detection systems and "specially designed" "parts" and "components" therefor that are "specially designed" or modified for detection or identification of chemical warfare agents, but not "specially designed" for military use, and ECCN 1A995, which controls certain detection equipment, "parts" and "components" not controlled by ECCN 1A004 or by this ECCN.

\* \* \* \* \*

111. In Supplement No. 1 to part 774 (the Commerce Control List), Category 2—Materials Processing, Export Control Classification Number (ECCN) 2B352 is amended:

- a. By revising "Related Controls" paragraph in the List of Items Controlled section;
b. By revising "items" paragraphs c.3, d.1.b.2, d.2 and h in the List of Items Controlled section; and
c. By revising "Technical Notes" paragraph 2 at the end of the "items" paragraph in the List of Items Controlled section to read as follows:

2B352 Equipment capable of use in handling biological materials, as follows (see List of Items Controlled).

\* \* \* \* \*

List of Items Controlled

\* \* \* \* \*

Related Controls: See ECCNs 1A004 and 1A995 for protective equipment that is not covered by this entry. Also see ECCN 9A120 for controls on certain "UAV" systems designed or modified to dispense

an aerosol and capable of carrying elements of a payload in the form of a particulate or liquid, other than fuel "parts" or "components" of such vehicles, of a volume greater than 20 liters.

\* \* \* \* \*

Items:

\* \* \* \* \*

c.3. "Parts" or "components" of polished stainless steel or titanium; and

\* \* \* \* \*

d.1.b.2. Using disposable or single-use filtration "parts" or "components".

\* \* \* \* \*

d.2. Cross (tangential) flow filtration "parts" or "components" (e.g., modules, elements, cassettes, cartridges, units or plates) with filtration area equal to or greater than 0.2 square meters (0.2 m2) for each "part" or "component" and designed for use in cross (tangential) flow filtration equipment controlled by 2B352.d.1.

\* \* \* \* \*

h. Spraying or fogging systems and "parts" and "components" therefor, as follows:

\* \* \* \* \*

Technical Notes:

\* \* \* \* \*

2. This ECCN does not control spraying or fogging systems, "parts" and "components," as specified in 2B352.h., that are demonstrated not to be capable of delivering biological agents in the form of infectious aerosols.

\* \* \* \* \*

112. In Supplement No. 1 to part 774 (the Commerce Control List), Category 2—Materials Processing, Export Control Classification Number (ECCN) 2B991 is amended by revising the heading to read as follows:

2B991 Numerical control units for machine tools and "numerically controlled" machine tools, n.e.s. (see List of Items Controlled).

\* \* \* \* \*

113. In Supplement No. 1 to part 774 (the Commerce Control List), Category 2—Materials Processing, Export Control Classification Number (ECCN) 2B992 is amended by revising the heading to read as follows:

2B992 Non-"numerically controlled" machine tools for generating optical quality surfaces, (see List of Items Controlled) and "specially designed" "parts" and "components" therefor.

\* \* \* \* \*

114. In Supplement No. 1 to part 774 (the Commerce Control List), Category 2—Materials Processing, Export Control Classification Number (ECCN) 2B996 is amended by revising the heading to read as follows:

2B996 Dimensional inspection or measuring systems or equipment not

controlled by 2B006 or 2B206, as follows (see List of Items Controlled).

\* \* \* \* \*

115. In Supplement No. 1 to part 774 (the Commerce Control List), Category 2—Materials Processing, Export Control Classification Number (ECCN) 2B998 is amended:

- a. By revising the heading; and
b. By revising "items" paragraph c in the List of Items Controlled section to read as follows:

2B998 Assemblies, circuit boards or inserts "specially designed" for machine tools controlled by 2B991, or for equipment controlled by 2B993, 2B996 or 2B997.

\* \* \* \* \*

List of Items Controlled

\* \* \* \* \*

Items:

\* \* \* \* \*

c. "Specially designed" printed circuit boards with mounted "parts" or "components" capable of upgrading, according to the manufacturer's specifications, "numerical control" units, machine tools or feed-back devices to or above the levels specified in ECCNs 2B991, 2B993, 2B996, 2B997, or 2B998.

\* \* \* \* \*

116. In Supplement No. 1 to part 774 (the Commerce Control List), Category 2—Materials Processing, Export Control Classification Number (ECCN) 2B999 is amended by adding a note to "items" paragraph g in the List of Items Controlled section to read as follows:

2B999 Specific processing equipment, n.e.s., as follows (see List of Items Controlled).

\* \* \* \* \*

Note: Fittings are considered part of "piping" for purposes of 2B999.g.

\* \* \* \* \*

117. In Supplement No. 1 to part 774 (the Commerce Control List), Category 2—Materials Processing, Export Control Classification Number (ECCN) 2D351 is amended by revising the heading to read as follows:

2D351 Dedicated "software" for toxic gas monitoring systems and their dedicated detecting "parts" and "components" controlled by ECCN 2B351.

\* \* \* \* \*

118. In Supplement No. 1 to part 774 (the Commerce Control List), Category 2—Materials Processing, Export Control Classification Number (ECCN) 2D984 is amended by revising the "Related Controls" paragraph (1) in the List of Items Controlled section to read as follows:

2D984 "Software" "required" for the "development," "production" or "use"

**of concealed object detection equipment controlled by 2A984.**

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

*Related Controls:* (1) “Software” “required” for the “development,” “production” or “use” of concealed object detection equipment operating in the frequency range from 30 GHz to 3000 GHz and having a spatial resolution less than 0.5 milliradian (a lower milliradian number means a more accurate image resolution) at a standoff distance of 100 meters is “subject to the ITAR” (see 22 CFR parts 120 through 130). \* \* \*

\* \* \* \* \*

■ 119. In Supplement No. 1 to part 774 (the Commerce Control List), Category 2—Materials Processing, Export Control Classification Number (ECCN) 2E001 is amended by revising the heading to read as follows:

**2E001 “Technology” according to the General Technology Note for the “development” of equipment or “software” controlled by 2A (except 2A983, 2A984, 2A991, or 2A994), 2B (except 2B991, 2B993, 2B996, 2B997, 2B998, or 2B999), or 2D (except 2D983, 2D984, 2D991, 2D992, or 2D994).**

\* \* \* \* \*

■ 120. In Supplement No. 1 to part 774 (the Commerce Control List), Category 2—Materials Processing, Export Control Classification Number (ECCN) 2E002 is amended by revising the heading to read as follows:

**2E002 “Technology” according to the General Technology Note for the “production” of equipment controlled by 2A (except 2A983, 2A984, 2A991, or 2A994) or 2B (except 2B991, 2B993, 2B996, 2B997, 2B998, or 2B999).**

\* \* \* \* \*

■ 121. In Supplement No. 1 to part 774 (the Commerce Control List), Category 2—Materials Processing, Export Control Classification Number (ECCN) 2E984 is amended by revising the “Related Controls” paragraph (1) in the List of Items Controlled section to read as follows:

**2E984 “Technology” “required” for the “development,” “production” or “use” of equipment controlled by 2A984 or “required” for the “development” of “software” controlled by 2D984.**

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

*Related Controls:* (1) “Technology” “required” for the “development,” “production” or “use” of concealed object detection equipment operating in the frequency range from 30 GHz to 3000 GHz and having a spatial resolution less than 0.5 milliradian (a lower milliradian number means a more accurate image

resolution) at a standoff distance of 100 meters or “required” for the “development” of “software” “required” for the “development,” “production” or “use” of concealed object detection equipment operating in the frequency range from 30 GHz to 3000 GHz and having a spatial resolution less than 0.5 milliradian at a standoff distance of 100 meters is “subject to the ITAR” (see 22 CFR parts 120 through 130). \* \* \*

\* \* \* \* \*

■ 122. In Supplement No. 1 to part 774 (the Commerce Control List), Category 3—Electronics is amended by adding quotes around the term components in “Note 1” that immediately follows the Category 3 (Systems, Equipment and Components) heading.

■ 123. In Supplement No. 1 to part 774 (the Commerce Control List), Category 3—Electronics, Export Control Classification Number (ECCN) 3A001 is amended:

- a. By revising the heading;
- b. By revising the “Related Controls” paragraph (1), the introductory text of paragraph (2), and paragraph (2)(c) in the List of Items Controlled section; and
- c. By revising the introductory text to “items” paragraphs c and d in the List of Items Controlled section to read as follows:

**3A001 Electronic components and “specially designed” “components” therefor, as follows (see List of Items Controlled).**

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

*Related Controls:* (1) The following commodities are “subject to the ITAR” when “space qualified” and operating at frequencies higher than 31.8 GHz: helix tubes (traveling wave tubes (TWT)) defined in 3A001.b.1.a.4.c; microwave solid state amplifiers defined in 3A001.b.4.b traveling wave tube amplifiers (TWTA) defined in 3A001.b.8; and derivatives thereof; (2) The following commodities are also “subject to the ITAR (see 22 CFR parts 120 through 130):” \* \* \* (c) All specifically designed or modified systems or subsystems, “parts,” “components,” accessories, attachments, and associated equipment controlled by Category XV (e) of the USML. See also 3A101, 3A201, and 3A991. \* \* \*

*Items:*

\* \* \* \* \*

c. Acoustic wave devices as follows and “specially designed” “components” therefor:

\* \* \* \* \*

d. Electronic devices and circuits containing “components,” manufactured from “superconductive” materials, “specially designed” for operation at temperatures below the “critical temperature” of at least one of the “superconductive” constituents and having any of the following:

\* \* \* \* \*

■ 124. In Supplement No. 1 to part 774 (the Commerce Control List), Category 3—Electronics, Export Control Classification Number (ECCN) 3A002 is amended by revising the first sentence in “Related Controls” paragraph in the List of Items Controlled section to read as follows:

**3A002 General purpose electronic equipment and “accessories” therefor, as follows (see List of Items Controlled).**

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

*Related Controls:* “Space-qualified” atomic frequency standards defined in 3A002.g.1 are “subject to the ITAR” (see 22 CFR parts 120 through 130, including USML Category XV). \* \* \*

\* \* \* \* \*

■ 125. In Supplement No. 1 to part 774 (the Commerce Control List), Category 3—Electronics, Export Control Classification Number (ECCN) 3A003 is amended by adding quotes around the term components in the heading.

■ 126. In Supplement No. 1 to part 774 (the Commerce Control List), Category 3—Electronics, Export Control Classification Number (ECCN) 3A101 is amended:

- a. By revising the heading; and
- b. By revising “Related Controls” paragraph in the List of Items Controlled section to read as follows:

**3A101 Electronic equipment, devices, “parts” and “components,” other than those controlled by 3A001, as follows (see List of Items Controlled).**

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

*Related Controls:* Items controlled in 3A101.a are “subject to the ITAR” (see 22 CFR parts 120 through 130).

\* \* \* \* \*

■ 127. In Supplement No. 1 to part 774 (the Commerce Control List), Category 3—Electronics, Export Control Classification Number (ECCN) 3A201 is amended:

- a. By revising the heading;
- b. By revising the Note to “items” paragraph c in the List of Items Controlled section to read as follows:

**3A201 Electronic “parts” and “components,” other than those controlled by 3A001, as follows (see List of Items Controlled).**

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

*Items:*

\* \* \* \* \*

c. \* \* \*

**Note:** 3A201.c does not control accelerators that are “parts” or “components” of devices

designed for purposes other than electron beam or X-ray radiation (electron microscopy, for example) nor those designed for medical purposes.

\* \* \* \* \*

■ 128. In Supplement No. 1 to part 774 (the Commerce Control List), Category 3—Electronics, Export Control Classification Number (ECCN) 3A225 is amended by revising the heading to read as follows:

**3A225 Frequency changers (also known as converters or inverters) or generators, having all of the following characteristics (see List of Items Controlled), excluding items that are subject to the export licensing authority of the Nuclear Regulatory Commission (see 10 CFR part 110).**

\* \* \* \* \*

■ 129. In Supplement No. 1 to part 774 (the Commerce Control List), Category 3—Electronics, Export Control Classification Number (ECCN) 3A226 is amended by revising the heading to read as follows:

**3A226 High-power direct current power supplies having both of the following characteristics (see List of Items Controlled), excluding items that are subject to the export licensing authority of the Nuclear Regulatory Commission (see 10 CFR part 110).**

\* \* \* \* \*

■ 130. In Supplement No. 1 to part 774 (the Commerce Control List), Category 3—Electronics, Export Control Classification Number (ECCN) 3A227 is amended by revising the heading to read as follows:

**3A227 High-voltage direct current power supplies, having both of the following characteristics (see List of Items Controlled), excluding items that are subject to the export licensing authority of the Nuclear Regulatory Commission (see 10 CFR part 110).**

\* \* \* \* \*

■ 131. In Supplement No. 1 to part 774 (the Commerce Control List), Category 3—Electronics, Export Control Classification Number (ECCN) 3A229 is amended by revising the “Related Controls” paragraph (2) in the List of Items Controlled section to read as follows:

**3A229 Firing sets and equivalent high-current pulse generators (for detonators controlled by 3A232), as follows (see List of Items Controlled).**

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

*Related Controls:* \* \* \* (2) High explosives and related equipment for military use are “subject to the ITAR” (see 22 CFR parts 120 through 130).

\* \* \* \* \*

■ 132. In Supplement No. 1 to part 774 (the Commerce Control List), Category 3—Electronics, Export Control Classification Number (ECCN) 3A230 is amended by revising the “Related Controls” paragraph in the List of Items Controlled section to read as follows:

**3A230 High-speed pulse generators having both of the following characteristics (see List of Items Controlled).**

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

*Related Controls:* (1) See ECCNs 3E001 (“development” and “production”) and 3E201 (“use”) for technology for items controlled under this entry. (2) See ECCNs 3A002.d.1, 3A992.a and 3A999.d.

\* \* \* \* \*

■ 133. In Supplement No. 1 to part 774 (the Commerce Control List), Category 3—Electronics, Export Control Classification Number (ECCN) 3A232 is amended by revising the “Related Controls” paragraph (3) in the List of Items Controlled section to read as follows:

**3A232 Detonators and multipoint initiation systems, as follows (see List of Items Controlled).**

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

*Related Controls:* \* \* \* (3) High explosives and related equipment for military use are “subject to the ITAR” (see 22 CFR parts 120 through 130).

\* \* \* \* \*

■ 134. In Supplement No. 1 to part 774 (the Commerce Control List), Category 3—Electronics, Export Control Classification Number (ECCN) 3A233 is amended by revising the heading to read as follows:

**3A233 Mass spectrometers, capable of measuring ions of 230 atomic mass units or greater and having a resolution of better than 2 parts in 230, and ion sources therefor, excluding items that are subject to the export licensing authority of the Nuclear Regulatory Commission (see 10 CFR part 110).**

\* \* \* \* \*

■ 135. In Supplement No. 1 to part 774 (the Commerce Control List), Category 3—Electronics, Export Control Classification Number (ECCN) 3A292 is amended:

- a. By revising the heading; and
- b. By revising the introductory text to the Note at the end of the “items” paragraph in the List of Items Controlled section to read as follows:

**3A292 Oscilloscopes and transient recorders other than those controlled by**

**3A002.a.5, and “specially designed” “parts” and “components” therefor.**

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

*Items:*

\* \* \* \* \*

**Note:** “Specially designed” “parts” and “components” controlled by this item are the following, for analog oscilloscopes:

\* \* \* \* \*

■ 136. In Supplement No. 1 to part 774 (the Commerce Control List), Category 3—Electronics, Export Control Classification Number (ECCN) 3A980 is amended by revising the heading to read as follows:

**3A980 Voice print identification and analysis equipment and “specially designed” “components” therefor, n.e.s.**

\* \* \* \* \*

■ 137. In Supplement No. 1 to part 774 (the Commerce Control List), Category 3—Electronics, Export Control Classification Number (ECCN) 3A981 is amended by revising the heading to read as follows:

**3A981 Polygraphs (except biomedical recorders designed for use in medical facilities for monitoring biological and neurophysical responses); fingerprint analyzers, cameras and equipment, n.e.s.; automated fingerprint and identification retrieval systems, n.e.s.; psychological stress analysis equipment; electronic monitoring restraint devices; and “specially designed” “components” and “accessories” therefor, n.e.s.**

\* \* \* \* \*

■ 138. In Supplement No. 1 to part 774 (the Commerce Control List), Category 3—Electronics, Export Control Classification Number (ECCN) 3A982 is amended by revising the heading to read as follows:

**3A982 Microwave or millimeter wave components that operate at frequencies below those controlled by 3A001 as follows (see List of Items Controlled).**

\* \* \* \* \*

■ 139. In Supplement No. 1 to part 774 (the Commerce Control List), Category 3—Electronics, Export Control Classification Number (ECCN) 3A991 is amended:

- a. By revising the heading; and
- b. By revising the introductory text to the “items” paragraph l in the List of Items Controlled section to read as follows:

**3A991 Electronic devices, and “components” not controlled by 3A001.**

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*



Items:

\* \* \* \* \*

l. Circuits or systems for electromagnetic energy storage, containing "components" manufactured from "superconductive" materials "specially designed" for operation at temperatures below the "critical temperature" of at least one of their "superconductive" constituents, having all of the following:

\* \* \* \* \*

■ 140. In Supplement No. 1 to part 774 (the Commerce Control List), Category 3—Electronics, Export Control Classification Number (ECCN) 3A999 is amended:

- a. By revising the "Related Controls" paragraph in the List of Items Controlled section; and
- b. By revising "items" paragraph c in the List of Items Controls section to read as follows:

**3A999 Specific processing equipment, n.e.s., as follows (see List of Items Controlled).**

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

*Related Controls:* (1) See also 3A225 (for frequency changers capable of operating in the frequency range of 600 Hz and above), and 3A233. (2) Certain auxiliary systems, equipment, "parts" and "components" for isotope separation plants, made of or protected by UF<sub>6</sub> resistant materials are subject to the export licensing authority of the Nuclear Regulatory Commission (see 10 CFR part 110).

\* \* \* \* \*

Items:

\* \* \* \* \*

c. All flash x-ray machines, and "parts" or "components" of pulsed power systems designed thereof, including Marx generators, high power pulse shaping networks, high voltage capacitors, and triggers;

\* \* \* \* \*

■ 141. In Supplement No. 1 to part 774 (the Commerce Control List), Category 3—Electronics, Export Control Classification Number (ECCN) 3B001 is amended by adding quotes around the term components in the heading.

■ 142. In Supplement No. 1 to part 774 (the Commerce Control List), Category 3—Electronics, Export Control Classification Number (ECCN) 3B002 is amended by adding quotes around the term components in the heading.

■ 143. In Supplement No. 1 to part 774 (the Commerce Control List), Category 3—Electronics, Export Control Classification Number (ECCN) 3B991 is amended:

- a. By revising the heading; and
- b. By revising "items" paragraph a and the introductory text of "items" paragraphs b.1 and b.2 in the List of

Items Controlled section to read as follows:

**3B991 Equipment not controlled by 3B001 for the manufacture of electronic "parts," "components" and materials (see List of Items Controlled), and "specially designed" "parts," "components" and "accessories" therefor.**

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

Items:

\* \* \* \* \*

a. Equipment "specially designed" for the manufacture of electron tubes, optical elements and "specially designed" "parts" and "components" therefor controlled by 3A001 or 3A991;

\* \* \* \* \*

b.1. Equipment for the processing of materials for the manufacture of devices, "parts" and "components" as specified in the heading of 3B991.b, as follows:

\* \* \* \* \*

b.2. Masks, mask "substrates," mask-making equipment and image transfer equipment for the manufacture of devices, "parts" and "components" as specified in the heading of 3B991, as follows:

\* \* \* \* \*

■ 144. In Supplement No. 1 to part 774 (the Commerce Control List), Category 3—Electronics, Export Control Classification Number (ECCN) 3B992 is amended:

- a. By revising the heading;
- b. By revising "items" paragraph a in the List of Items Controlled section; and
- c. By revising paragraph 3 of the "Notes" to "items" paragraph b.4.b in the List of Items Controlled section to read as follows:

**3B992 Equipment not controlled by 3B002 for the inspection or testing of electronic "components" and materials, (see List of Items Controlled) and "specially designed" "parts," "components" and "accessories" therefor.**

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

Items:

\* \* \* \* \*

a. Equipment "specially designed" for the inspection or testing of electron tubes, optical elements and "specially designed" "parts" and "components" therefor controlled by 3A001 or 3A991;

\* \* \* \* \*

**Notes:** \* \* \*

\* \* \* \* \*

3. Electronic "parts," "components," "assemblies" and integrated circuits not controlled by 3A001 or 3A991 provided such test equipment does not incorporate computing facilities with "user accessible programmability".

■ 145. In Supplement No. 1 to part 774 (the Commerce Control List), Category 3—Electronics, Export Control Classification Number (ECCN) 3D001 is amended by revising the introductory text of "Related Controls" paragraph in the List of Items Controlled section to read as follows:

**3D001 "Software" "specially designed" for the "development" or "production" of equipment controlled by 3A001.b to 3A002.g or 3B (except 3B991 and 3B992).**

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

*Related Controls:* "Software" "specially designed" for the "development" or "production" of the following equipment is "subject to the ITAR" (see 22 CFR parts 120 through 130): \* \* \*

\* \* \* \* \*

■ 146. In Supplement No. 1 to part 774 (the Commerce Control List), Category 3—Electronics, Export Control Classification Number (ECCN) 3D980 is amended by revising the heading to read as follows:

**3D980 "Software" "specially designed" for the "development," "production" or "use" of commodities controlled by 3A980 and 3A981.**

\* \* \* \* \*

■ 147. In Supplement No. 1 to part 774 (the Commerce Control List), Category 3—Electronics, Export Control Classification Number (ECCN) 3D991 is amended by revising the heading to read as follows:

**3D991 "Software" "specially designed" for the "development," "production" or "use" of electronic devices, "parts" or "components" controlled by 3A991, general purpose electronic equipment controlled by 3A992, or manufacturing and test equipment controlled by 3B991 and 3B992; or "software" "specially designed" for the "use" of equipment controlled by 3B001.g and .h.**

\* \* \* \* \*

■ 148. In Supplement No. 1 to part 774 (the Commerce Control List), Category 3—Electronics, Export Control Classification Number (ECCN) 3E001 is amended:

- a. By revising the introductory text of "Related Controls" paragraph (2) in the List of Items Controlled section; and
- b. By revising "Note 1" at the end of the "items" paragraph in the List of Items Controlled to read as follows:

**3E001 "Technology" according to the General Technology Note for the "development" or "production" of equipment or materials controlled by 3A (except 3A292, 3A980, 3A981, 3A991**

3A992, or 3A999), 3B (except 3B991 or 3B992) or 3C (except 3C992).

\* \* \* \* \*

List of Items Controlled

\* \* \* \* \*

Related Controls: \* \* \* (2) "Technology" according to the General Technology Note for the "development" or "production" of the following commodities is "subject to the ITAR" (see 22 CFR parts 120 through 130): \* \* \*

\* \* \* \* \*

Items:

\* \* \* \* \*

Note 1: 3E001 does not control "technology" for the "production" of equipment or "components" controlled by 3A003.

\* \* \* \* \*

149. In Supplement No. 1 to part 774 (the Commerce Control List), Category 3—Electronics, Export Control Classification Number (ECCN) 3E003 is amended by revising "Related Controls" paragraph (1) in the List of Items Controlled section to read as follows:

3E003 Other "technology" for the "development" or "production" of the following (see List of Items Controlled).

\* \* \* \* \*

List of Items Controlled

\* \* \* \* \*

Related Controls: (1) Technology for the "development" or "production" of "space qualified" electronic vacuum tubes operating at frequencies of 31.8 GHz or higher, described in 3E003.g, is "subject to the ITAR" (see 22 CFR parts 120 through 130); \* \* \*

\* \* \* \* \*

150. In Supplement No. 1 to part 774 (the Commerce Control List), Category 3—Electronics, Export Control Classification Number (ECCN) 3E980 is amended by revising the heading to read as follows:

3E980 "Technology" specially designed for "development," "production" or "use" of commodities controlled by 3A980 and 3A981.

\* \* \* \* \*

151. In Supplement No. 1 to part 774 (the Commerce Control List), Category 3—Electronics, Export Control Classification Number (ECCN) 3E982 is amended by revising the heading to read as follows:

3E982 "Technology" "require" for the "development" or "production" of microwave or millimeter wave "parts" or "components" classified under ECCN 3A982.

\* \* \* \* \*

152. In Supplement No. 1 to part 774 (the Commerce Control List), Category 3—Electronics, Export Control Classification Number (ECCN) 3E991 is

amended by revising the heading to read as follows:

3E991 "Technology" for the "development," "production" or "use" of electronic devices, "parts" or "components" controlled by 3A991, general purpose electronic equipment controlled by 3A992, or manufacturing and test equipment controlled by 3B991 or 3B992, or materials controlled by 3C992.

\* \* \* \* \*

153. In Supplement No. 1 to part 774 (the Commerce Control List), Category 4—Computers, Export Control Classification Number (ECCN) 4A001 is amended:

a. By revising the heading; and b. By revising "Related Controls" paragraph in the List of Items Controlled section to read as follows:

4A001 Electronic computers and related equipment, having any of the following (see List of Items Controlled), and "electronic assemblies" and "specially designed" "components" therefor.

\* \* \* \* \*

List of Items Controlled

\* \* \* \* \*

Related Controls: See also 4A101 and 4A994. See Category 5-Part 2 for electronic computers and related equipment performing or incorporating "information security" functions as the primary function. Equipment designed or rated for transient ionizing radiation is "subject to the ITAR" (see 22 CFR parts 120 through 130).

\* \* \* \* \*

154. In Supplement No. 1 to part 774 (the Commerce Control List), Category 4—Computers, Export Control Classification Number (ECCN) 4A003 is amended:

a. By revising the heading; b. By removing Note 2 at the end of the License Requirements section; c. By adding a Reporting Requirements section after the License Requirements section; and d. By revising the License Exception GBS paragraph in the License Exceptions section to read as follows:

4A003 "Digital computers," "electronic assemblies" and related equipment therefor, as follows (see List of Items Controlled) and "specially designed" "components" therefor.

\* \* \* \* \*

Reporting Requirements

Special Post Shipment Verification reporting and recordkeeping requirements for exports of computers to destinations in Computer Tier 3 may be found in § 743.2 of the EAR.

License Exceptions

\* \* \* \* \*

GBS: Yes, for 4A003.e, and .g and "specially designed" "parts" and "components"

therefor, exported separately or as part of a system.

\* \* \* \* \*

155. In Supplement No. 1 to part 774 (the Commerce Control List), Category 4—Computers, Export Control Classification Number (ECCN) 4A004 is amended by adding quotes around components in the heading.

156. In Supplement No. 1 to part 774 (the Commerce Control List), Category 4—Computers, Export Control Classification Number (ECCN) 4A101 is amended by revising the "Note" to "items" paragraph b in the List of Items Controlled section to read as follows:

4A101 Analog computers, "digital computers" or digital differential analyzers, other than those controlled by 4A001 designed or modified for use in "missiles," having any of the following (see List of Items Controlled).

\* \* \* \* \*

List of Items Controlled

\* \* \* \* \*

Items:

\* \* \* \* \*

b. \* \* \*

Note: 'Radiation hardened' means that the "part," "component" or equipment is designed or rated to withstand radiation levels which meet or exceed a total irradiation dose of 5 x 10^5 rads (Si).

\* \* \* \* \*

157. In Supplement No. 1 to part 774 (the Commerce Control List), Category 4—Computers, Export Control Classification Number (ECCN) 4A102 is amended by revising the heading to read as follows:

4A102 "Hybrid computers" "specially designed" for modelling, simulation or design integration of "missiles" or their subsystems. (These items are "subject to the ITAR." See 22 CFR parts 120 through 130.)

\* \* \* \* \*

158. In Supplement No. 1 to part 774 (the Commerce Control List), Category 4—Computers, Export Control Classification Number (ECCN) 4A994 is amended:

a. By revising the heading; and b. By revising the introductory text to "items" paragraphs a and k in the List of Items Controlled section to read as follows:

4A994 Computers, "electronic assemblies" and related equipment not controlled by 4A001 or 4A003, and "specially designed" "parts" and "components" therefor (see List of Items Controlled).

\* \* \* \* \*

List of Items Controlled

\* \* \* \* \*

Items:

\* \* \* \* \*

a. Electronic computers and related equipment, and “electronic assemblies” and “specially designed” “parts” and “components” therefor, rated for operation at an ambient temperature above 343 K (70° C);  
\* \* \* \* \*

k. “Hybrid computers” and “electronic assemblies” and “specially designed” “parts” and “components” therefor containing analog-to-digital converters having all of the following characteristics:  
\* \* \* \* \*

■ 159. In Supplement No. 1 to part 774 (the Commerce Control List), Category 4—Computers, Export Control Classification Number (ECCN) 4D001 is amended by adding a Reporting Requirements section after the License Requirements section to read as follows:  
**4D001 “Software” as follows (see List of Items Controlled).**  
\* \* \* \* \*

**Reporting Requirements**

See § 743.1 of the EAR for reporting requirements for exports under License Exceptions, Special Comprehensive Licenses, and Validated End-User authorizations.  
\* \* \* \* \*

■ 160. In Supplement No. 1 to part 774 (the Commerce Control List), Category 4—Computers, Export Control Classification Number (ECCN) 4D980 is amended by revising the heading to read as follows:

**4D980 “Software” “specially designed” for the “development,” “production” or “use” of commodities controlled by 4A980.**  
\* \* \* \* \*

■ 161. In Supplement No. 1 to part 774 (the Commerce Control List), Category 4—Computers, Export Control Classification Number (ECCN) 4E980 is amended by revising the heading to read as follows:

**4E980 “Technology” for the “development,” “production” or “use” of commodities controlled by 4A980.**  
\* \* \* \* \*

■ 162. In Supplement No. 1 to part 774 (the Commerce Control List), Category 5—Telecommunications and “Information Security,” Part 1—Telecommunications is amended by adding quotes around the term components in the introductory text of Note 1, the N.B.2 and Note 2 that immediately follows the Category 5 Part 1—Telecommunications heading.

■ 163. In Supplement No. 1 to part 774 (the Commerce Control List), Category 5—Telecommunications and “Information Security,” Part 1—Telecommunications, Export Control Classification Number (ECCN) 5A001 is amended:

■ a. By revising the heading;

■ b. By revising “Related Controls” paragraph in the List of Items Controlled section;

■ c. By revising the introductory text to “items” paragraph b, e, and f in the List of Items Controlled section; and

■ d. By revising “items” paragraph d and the Note to paragraph d in the List of Items Controlled section to read as follows:

**5A001 Telecommunications systems, equipment, “components” and “accessories,” as follows (see List of Items Controlled).**  
\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

*Related Controls:* (1) Telecommunications equipment defined in 5A001.a.1 through 5A001.a.3 for use on board satellites is “subject to the ITAR” (see 22 CFR parts 120 through 130). (2) Direction finding equipment defined in 5A001.e is “subject to the ITAR” (see 22 CFR parts 120 through 130). (3) See also 5A101 and 5A991.

*Items:*

\* \* \* \* \*

b. Telecommunication systems and equipment, and “specially designed” “components” and accessories therefor, having any of the following characteristics, functions or features:

\* \* \* \* \*

d. “Electronically steerable phased array antennas” operating above 31.8 GHz;

**Note:** 5A001.d does not control “electronically steerable phased array antennas” for landing systems with instruments meeting ICAO standards covering Microwave Landing Systems (MLS).

e. Radio direction finding equipment operating at frequencies above 30 MHz and having all of the following, and “specially designed” “components” therefor:

\* \* \* \* \*

f. Mobile telecommunications interception or jamming equipment, and monitoring equipment therefor, as follows, and “specially designed” “components” therefor:

\* \* \* \* \*

■ 164. In Supplement No. 1 to part 774 (the Commerce Control List), Category 5—Telecommunications and “Information Security,” Part 1—Telecommunications, Export Control Classification Number (ECCN) 5A980 is amended by revising the heading to read as follows:

**5A980 Devices primarily useful for the surreptitious interception of wire, oral, or electronic communications, other than those controlled under 5A001.i; and “parts,” “components” and “accessories” therefor.**  
\* \* \* \* \*

■ 165. In Supplement No. 1 to part 774 (the Commerce Control List), Category 5—Telecommunications and

“Information Security,” Part 1—Telecommunications, Export Control Classification Number (ECCN) 5A991 is amended:

■ a. By revising the heading;

■ b. By revising the “Related Controls” paragraph in the List of Items Controlled section;

■ c. By revising the introductory text to “items” paragraphs b and c in the List of Items Controlled section; and

■ d. By revising “items” paragraph c.1, f, g, and h in the List of Items Controlled section to read as follows:

**5A991 Telecommunication equipment, not controlled by 5A001 (see List of Items Controlled).**  
\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

*Related Controls:* (1) Telecommunication equipment defined in 5A991 for use on board satellites is “subject to the ITAR” (see 22 CFR parts 120 through 130). (2) See also 5E101 and 5E991.

\* \* \* \* \*

*Items:*

\* \* \* \* \*

b. Telecommunication transmission equipment and systems, and “specially designed” “parts,” “components” and “accessories” therefor, having any of the following characteristics, functions or features:

\* \* \* \* \*

c. “Stored program controlled” switching equipment and related signaling systems, having any of the following characteristics, functions or features, and “specially designed” “parts,” “components” and “accessories” therefor:

**Note:** \* \* \*

c.1. “Data (message) switching” equipment or systems designed for “packet-mode operation” and “parts,” electronic assemblies and “components” therefor, n.e.s.

\* \* \* \* \*

f. Phased array antennas, operating above 10.5 GHz, containing active elements and distributed “parts” or “components,” and designed to permit electronic control of beam shaping and pointing, except for landing systems with instruments meeting International Civil Aviation Organization (ICAO) standards (microwave landing systems (MLS)).

g. Mobile communications equipment, n.e.s., and “parts,” electronic assemblies and “components” therefor; or

h. Radio relay communications equipment designed for use at frequencies equal to or exceeding 19.7 GHz and “parts” and “components” therefor, n.e.s.

■ 166. In Supplement No. 1 to part 774 (the Commerce Control List), Category 5—Telecommunications and “Information Security,” Part 1—Telecommunications, Export Control Classification Number (ECCN) 5B001 is amended:

- a. By revising the heading;
- b. By revising the Special Conditions for License Exception STA paragraph section; and
- c. By revising the introductory text to “items” paragraph a and b in the List of Items Controlled section to read as follows:

**5B001 Telecommunication test, inspection and production equipment, “components” and “accessories,” as follows (see List of Items Controlled).**

\* \* \* \* \*

STA: License Exception STA may not be used to ship 5B001.a equipment and “specially designed” “components” or “accessories” therefor, “specially designed” for the “development,” or “production” of equipment, functions or features specified by in ECCN 5A001.b.3, .b.5 or .h to any of the eight destinations listed in § 740.20(c)(2) of the EAR.

**List of Items Controlled**

\* \* \* \* \*

*Items:*

a. Equipment and “specially designed” “components” or “accessories” therefor, “specially designed” for the “development,” or “production” of equipment, functions or features, controlled by 5A001.

\* \* \* \* \*

b. Equipment and “specially designed” components or “accessories” therefor, “specially designed” for the “development” of any of the following telecommunication transmission or switching equipment:

\* \* \* \* \*

■ 167. In Supplement No. 1 to part 774 (the Commerce Control List), Category 5—Telecommunications and “Information Security,” Part 1—Telecommunications, Export Control Classification Number (ECCN) 5D001 is amended by revising the License Exception TSR paragraph in the License Exceptions section to read as follows:

**5D001 “Software” as follows (see List of Items Controlled).**

\* \* \* \* \*

**License Exceptions**

\* \* \* \* \*

TSR: Yes, except for exports and reexports to destinations outside of those countries listed in Country Group A:5 (See Supplement No. 1 to part 740 of the EAR) of “software” controlled by 5D001.a and “specially designed” for items controlled by 5A001.b.5 and 5A001.h.

\* \* \* \* \*

■ 168. In Supplement No. 1 to part 774 (the Commerce Control List), Category 5—Telecommunications and “Information Security,” Part 1—Telecommunications, Export Control Classification Number (ECCN) 5D101 is amended by revising the heading to read as follows:

**5D101 “Software” “specially designed” or modified for the “use” of equipment controlled by 5A101.**

\* \* \* \* \*

■ 169. In Supplement No. 1 to part 774 (the Commerce Control List), Category 5—Telecommunications and “Information Security,” Part 1—Telecommunications, Export Control Classification Number (ECCN) 5D991 is amended by revising the heading to read as follows:

**5D991 “Software” “specially designed” or modified for the “development,” “production” or “use” of equipment controlled by 5A991 and 5B991, and dynamic adaptive routing software as described as follows (see List of Items Controlled).**

\* \* \* \* \*

■ 170. In Supplement No. 1 to part 774 (the Commerce Control List), Category 5—Telecommunications and “Information Security,” Part 1—Telecommunications, Export Control Classification Number (ECCN) 5E001 is amended:

■ a. By revising the introductory text of the License Exception TSR paragraph in the License Exceptions section;

■ b. By revising “Related Controls” paragraph in the List of Items Controlled section; and

■ c. By revising the introductory text to “items” paragraph e in the list of Items Controlled section to read as follows:

**5E001 “Technology” as follows (see List of Items Controlled).**

\* \* \* \* \*

**License Exceptions**

\* \* \* \* \*

TSR: Yes, except for exports and reexports to destinations outside of those countries listed in Country Group A:5 (See Supplement No. 1 to part 740 of the EAR) of “technology” controlled by 5E001.a for the “development” or “production” of the following:

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

Related Controls: (1) Technology defined in 5E001.b.1, 5E001.b.2, 5E001.b.4, or 5E001.c for use on board satellites is “subject to ITAR” (see 22 CFR parts 120 through 130). (2) See also 5E101, 5E980 and 5E991.

\* \* \* \* \*

*Items:*

\* \* \* \* \*

e. “Technology” according to the General Technology Note for the “development” or “production” of electronic devices and circuits, “specially designed” for telecommunications and containing “components” manufactured from “superconductive” materials, “specially designed” for operation at temperatures below the “critical temperature” of at least

one of the “superconductive” constituents and having any of the following:

\* \* \* \* \*

■ 171. In Supplement No. 1 to part 774 (the Commerce Control List), Category 5—Telecommunications and “Information Security,” Part 2—Information Security, Export Control Classification Number (ECCN) 5A002 is amended:

■ a. By revising the heading;

■ b. By revising the License Exception LVS paragraph in the License Exceptions section; and

■ c. By revising the introductory text to “items” paragraph a in the List of Items Controlled section to read as follows:

**5A002 “Information security” systems, equipment “components” therefor, as follows (see List of Items Controlled).**

\* \* \* \* \*

**License Exceptions**

LVS: Yes: \$500 for “components”. N/A for systems and equipment.

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

*Items:*

\* \* \* \* \*

a. Systems, equipment, application specific “electronic assemblies,” modules and integrated circuits for “information security,” as follows, and “components” therefor “specially designed” for “information security”:

\* \* \* \* \*

■ 172. In Supplement No. 1 to part 774 (the Commerce Control List), Category 5—Telecommunications and “Information Security,” Part 2—Information Security, Export Control Classification Number (ECCN) 5A992 is amended by revising the heading and the “items” paragraph b in the List of Items Controlled section to read as follows:

**5A992 Equipment not controlled by 5A002 (see List of Items Controlled).**

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

*Items:*

\* \* \* \* \*

b. “Information security” equipment, n.e.s., (e.g., cryptographic, cryptanalytic, and cryptologic equipment, n.e.s.) and “components” therefor.

\* \* \* \* \*

■ 173. In Supplement No. 1 to part 774 (the Commerce Control List), Category 5—Telecommunications and “Information Security,” Part 2—Information Security, Export Control Classification Number (ECCN) 5D992 is amended by revising the heading to read as follows:

**5D992 “Information Security” “software” not controlled by 5D002 as follows (see List of Items Controlled).**

\* \* \* \* \*

■ 174. In Supplement No. 1 to part 774 (the Commerce Control List), Category 5—Telecommunications and “Information Security,” Part 2—Information Security, Export Control Classification Number (ECCN) 5E992 is amended by revising the heading to read as follows:

**5E992 “Information Security” “technology” according to the General Technology Note, not controlled by 5E002, as follows (see List of Items Controlled).**

■ 175. In Supplement No. 1 to part 774 (the Commerce Control List), Category 6—Sensors and Lasers, Export Control Classification Number (ECCN) 6A001 is amended by adding quotes around the term components in the heading and in the introductory text to “items” paragraph a, a.1, a.1.d, and a.2 and the “Note” to a.2.f in the List of Items Controlled section.

■ 176. In Supplement No. 1 to part 774 (the Commerce Control List), Category 6—Sensors and Lasers, Export Control Classification Number (ECCN) 6A002 is amended:

- a. By revising the heading;
- b. By revising the Special Conditions for License Exception STA section; and
- c. By revising the “Related Controls” paragraph in the List of Items Controlled section; and
- d. By revising the introductory text to “items” paragraphs a.2, a.2.c and d in the List of Items Controlled section to read as follows:

**6A002 Optical sensors and equipment, and “components” therefor, as follows (see List of Items Controlled).**

\* \* \* \* \*

STA: License Exception STA may not be used to ship to any of the eight destinations listed in § 740.20(c)(2) of the EAR any commodity in: 6A002.a.1.a or .b.

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

*Related Controls:* (1) The following commodities are “subject to the ITAR” (see 22 CFR parts 120 through 130): (a) “Image intensifiers” defined in 6A002.a.2 and “focal plane arrays” defined in 6A002.a.3 “specially designed,” modified, or configured for military use and not part of civil equipment; (b) “Space qualified” solid-state detectors defined in 6A002.a.1, “space qualified” imaging sensors (e.g., “monospectral imaging sensors” and “multispectral imaging sensors”) defined in 6A002.b.2.b.1, and “space qualified” cryocoolers defined in 6A002.d.1, unless, on or after September 23, 2002, the Department of State issues a commodity

jurisdiction determination indicating the commodity is subject to the EAR. (2) See also 6A102, 6A202, and 6A992.

\* \* \* \* \*

*Items:*

\* \* \* \* \*

a. \* \* \* \* \*  
a.2. Image intensifier tubes and “specially designed” “components” therefor, as follows:

\* \* \* \* \*

a.2.c. “Specially designed” “components,” as follows:

\* \* \* \* \*

d. Special support “components” for optical sensors, as follows:

\* \* \* \* \*

■ 177. In Supplement No. 1 to part 774 (the Commerce Control List), Category 6—Sensors and Lasers, Export Control Classification Number (ECCN) 6A003 is amended:

- a. By revising the heading;
- b. By removing the License Requirement Notes section;
- c. By adding a Reporting Requirements section after the License Requirements section; and
- d. By revising the introductory text to “items” paragraph a in the List of Items Controlled section to read as follows:

**6A003 Cameras, systems or equipment, and “components” therefor, as follows (see List of Items Controlled).**

\* \* \* \* \*

**Reporting Requirements**

See § 743.3 of the EAR for thermal camera reporting for exports that are not authorized by an individually validated license of thermal imaging cameras controlled by ECCN 6A003.b.4.b to Albania, Australia, Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, New Zealand, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, South Africa, South Korea, Spain, Sweden, Switzerland, Turkey, or the United Kingdom, must be reported to BIS.

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

*Items:*

a. Instrumentation cameras and “specially designed” “components” therefor, as follows:

\* \* \* \* \*

■ 178. In Supplement No. 1 to part 774 (the Commerce Control List), Category 6—Sensors and Lasers, Export Control Classification Number (ECCN) 6A004 is amended:

- a. By revising the heading;
- b. By revising the “Related Controls” paragraph (2) in the List of Items Controlled section; and
- c. By revising “items” paragraph a.1 in the List of Items Controlled section;

- d. By revising the introductory text of paragraph b in the List of Items Controlled section;
- e. By revising the introductory text of paragraph c in the List of Items Controlled section; and
- f. By revising paragraphs c.1, c.4, and d.1 in the List of Items Controlled section to read as follows:

**6A004 Optical equipment and components, as follows (see List of Items Controlled).**

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

*Related Controls:* \* \* \* (2) “Space qualified” “parts” and “components” for optical systems defined in 6A004.c and optical control equipment defined in 6A004.d.1 are “subject to the ITAR” (see 22 CFR parts 120 through 130). \* \* \*

*Related Definitions:* \* \* \*

*Items:*

\* \* \* \* \*

a.1. “Deformable mirrors” having either continuous or multi element surfaces, and “specially designed” “components” therefor, capable of dynamically repositioning portions of the surface of the mirror at rates exceeding 100 Hz;

\* \* \* \* \*

b. Optical “components” made from zinc selenide (ZnSe) or zinc sulphide (ZnS) with transmission in the wavelength range exceeding 3,000 nm but not exceeding 25,000 nm and having any of the following:

\* \* \* \* \*

c. “Space-qualified” “components” for optical systems, as follows:

c.1. “Components” lightweighted to less than 20% “equivalent density” compared with a solid blank of the same aperture and thickness;

\* \* \* \* \*

c.4. “Components manufactured from “composite” materials having a coefficient of linear thermal expansion equal to or less than  $5 \times 10^{-6}$  in any coordinate direction;

\* \* \* \* \*

d.1. Equipment “specially designed” to maintain the surface figure or orientation of the “space-qualified” “components” controlled by 6A004.c.1 or 6A004.c.3;

\* \* \* \* \*

■ 179. In Supplement No. 1 to part 774 (the Commerce Control List), Category 6—Sensors and Lasers, Export Control Classification Number (ECCN) 6A005 is amended:

- a. By revising the heading;
- b. By revising the “Related Controls” paragraph (6) in the List of Items Controlled section;
- c. By revising the “Note” to “items” paragraph a.6.b in the List of Items Controlled section; and
- d. By revising “items” paragraphs e and f.3 in the List of Items Controlled section to read as follows:

**6A005 “Lasers,” “components” and optical equipment, as follows (see List of Items**

Controlled), excluding items that are subject to the export licensing authority of the Nuclear Regulatory Commission (see 10 CFR part 110).

\* \* \* \* \*

List of Items Controlled

\* \* \* \* \*

Related Controls: \* \* \* (6) Shared aperture optical elements, capable of operating in "super-high power laser" applications, and "lasers" specifically designed, modified, or configured for military application are "subject to ITAR" (see 22 CFR parts 120 through 130).

\* \* \* \* \*

Items:

\* \* \* \* \*

a.6.b.2. \* \* \* TM

Note: 6A005.a.6.b does not control multiple transverse mode, industrial "lasers" with output power exceeding 2kW and not exceeding 6 kW with a total mass greater than 1,200 kg. For the purpose of this note, total mass includes all "components" required to operate the "laser," e.g., "laser," power supply, heat exchanger, but excludes external optics for beam conditioning and/or delivery.

\* \* \* \* \*

e. "Components" as follows:

e.1. Mirrors cooled either by 'active cooling' or by heat pipe cooling;

Technical Note: Active cooling is a cooling technique for optical "components" using flowing fluids within the subsurface (nominally less than 1 mm below the optical surface) of the optical component to remove heat from the optic.

e.2. Optical mirrors or transmissive or partially transmissive optical or electro-optical-"components," "specially designed" for use with controlled "lasers";

\* \* \* \* \*

f.3. Optical equipment, and "components," "specially designed" for a phased array "SHPL" system for coherent beam combination to an accuracy of λ/10 at the designed wavelength, or 0.1 μm, whichever is the smaller;

\* \* \* \* \*

180. In Supplement No. 1 to part 774 (the Commerce Control List), Category 6—Sensors and Lasers, Export Control Classification Number (ECCN) 6A006 is amended by adding quotes around the term components in the heading.

181. In Supplement No. 1 to part 774 (the Commerce Control List), Category 6—Sensors and Lasers, Export Control Classification Number (ECCN) 6A008 is amended:

a. By revising the heading;
b. By revising the Note to the "items" paragraph in the List of Items Controlled section; and
c. By revising "items" paragraph e in the List of Items Controlled section to read as follows:

6A008 Radar systems, equipment and assemblies, having any of the following

(see List of Items Controlled), and "specially designed" "components" therefor.

\* \* \* \* \*

List of Items Controlled

\* \* \* \* \*

Items:

Note: 6A008 does not control:

- Secondary surveillance radar (SSR);
-Civil Automotive Radar;
-Displays or monitors used for air traffic control (ATC);
-Meteorological (weather) radar;
-Precision Approach Radar (PAR) equipment conforming to ICAO standards and employing electronically steerable linear (1-dimensional) arrays or mechanically positioned passive antennas.

\* \* \* \* \*

e. Incorporating electronically steerable array antennas;

\* \* \* \* \*

182. In Supplement No. 1 to part 774 (the Commerce Control List), Category 6—Sensors and Lasers, Export Control Classification Number (ECCN) 6A103 is amended by revising the heading to read as follows:

6A103 Radomes designed to withstand a combined thermal shock greater than 100 cal/sq cm accompanied by a peak over pressure of greater than 50 kPa, usable in protecting "missiles" against nuclear effects (e.g., Electromagnetic Pulse (EMP), X-rays, combined blast and thermal effects), and usable for "missiles". (These items are "subject to the ITAR." See 22 CFR parts 120 through 130.)

\* \* \* \* \*

183. In Supplement No. 1 to part 774 (the Commerce Control List), Category 6—Sensors and Lasers, Export Control Classification Number (ECCN) 6A107 is amended:

a. By revising the heading; and
b. By revising "items" paragraph b in the List of Items Controlled section to read as follows:

6A107 Gravity meters (gravimeters) and "specially designed" "parts" and "components" for gravity meters and gravity gradiometers, as follows (see List of Items Controlled).

\* \* \* \* \*

List of Items Controlled

\* \* \* \* \*

Items:

\* \* \* \* \*

b. "Specially designed" "parts" and "components" for gravity meters controlled in 6A007.b or 6A107.a and gravity gradiometers controlled in 6A007.c.

\* \* \* \* \*

184. In Supplement No. 1 to part 774 (the Commerce Control List), Category 6—Sensors and Lasers, Export Control Classification Number (ECCN) 6A108 is

amended by revising the "Related Controls" paragraph (2) in the List of Items Controlled section to read as follows:

6A108 Radar systems and tracking systems, other than those controlled by 6A008, as follows (see List of Items Controlled).

\* \* \* \* \*

List of Items Controlled

\* \* \* \* \*

Related Controls: \* \* \* (2) Items in 6A108.a that are "specially designed" or modified for "missiles" or for items on the U.S. Munitions List are "subject to the ITAR" (see 22 CFR parts 120 through 130).

\* \* \* \* \*

185. In Supplement No. 1 to part 774 (the Commerce Control List), Category 6—Sensors and Lasers, Export Control Classification Number (ECCN) 6A203 is amended:

a. By revising the heading; and
b. By revising the introductory text to "items" paragraph a and the Note to paragraph a in the List of Items Controlled section to read as follows:

6A203 Cameras and "parts" and "components," other than those controlled by 6A003, as follows (see List of Items Controlled).

\* \* \* \* \*

List of Items Controlled

\* \* \* \* \*

Items:

\* \* \* \* \*

a. Mechanical rotating mirror cameras, as follows, and "specially designed" "parts" and "components" therefor:

\* \* \* \* \*

Note: "Parts" and "components" of cameras controlled by 6A203.a include their synchronizing electronics units and rotor assemblies consisting of turbines, mirrors and bearings.

\* \* \* \* \*

186. In Supplement No. 1 to part 774 (the Commerce Control List), Category 6—Sensors and Lasers, Export Control Classification Number (ECCN) 6A205 is amended by revising the heading to read as follows:

6A205 "Lasers," "laser" amplifiers and oscillators, other than those controlled by 6A005 (see List of Items Controlled), excluding items that are subject to the export licensing authority of the Nuclear Regulatory Commission (see 10 CFR part 110).

\* \* \* \* \*

187. In Supplement No. 1 to part 774 (the Commerce Control List), Category 6—Sensors and Lasers, Export Control Classification Number (ECCN) 6A991 is amended by revising the heading to read as follows:

**6A991 Marine or terrestrial acoustic equipment, n.e.s., capable of detecting or locating underwater objects or features or positioning surface vessels or underwater vehicles; and “specially designed” “parts” and “components,” n.e.s.**

\* \* \* \* \*

■ 188. In Supplement No. 1 to part 774 (the Commerce Control List), Category 6—Sensors and Lasers, Export Control Classification Number (ECCN) 6A992 is amended:

- a. By revising the heading; and
- b. By revising the introductory text to “items” paragraph a in the List of Items Controlled section to read as follows:

**6A992 Optical Sensors, not controlled by 6A002, as follows (see List of Items Controlled).**

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

*Items:*

\* \* \* \* \*

a. Image intensifier tubes and “specially designed” “components” therefor, as follows:

\* \* \* \* \*

■ 189. In Supplement No. 1 to part 774 (the Commerce Control List), Category 6—Sensors and Lasers, Export Control Classification Number (ECCN) 6A994 is amended by revising the heading to read as follows:

**6A994 Optics, not controlled by 6A004, as follows (see List of Items Controlled).**

\* \* \* \* \*

■ 190. In Supplement No. 1 to part 774 (the Commerce Control List), Category 6—Sensors and Lasers, Export Control Classification Number (ECCN) 6A995 is amended:

- a. By revising the heading; and
- b. By revising the “Note” following “items” paragraph e.2.b in the List of Items Controlled section to read as follows:

**6A995 “Lasers” as follows (see List of Items Controlled).**

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

*Items:*

\* \* \* \* \*

e.2.b. \* \* \*

**Note:** 6A995.e.2.b does not control multiple transverse mode, industrial “lasers” with output power less than or equal to 2kW with a total mass greater than 1,200kg. For the purpose of this note, total mass includes all “components” required to operate the “laser,” e.g., “laser,” power supply, heat exchanger, but excludes external optics for beam conditioning and/or delivery.

\* \* \* \* \*

■ 191. In Supplement No. 1 to part 774 (the Commerce Control List), Category

6—Sensors and Lasers, Export Control Classification Number (ECCN) 6A996 is amended:

- a. By revising the heading; and
- b. By revising the introductory text to “items” paragraph b in the List of Items Controlled section to read as follows:

**6A996 “Magnetometers” not controlled by ECCN 6A006, “Superconductive” electromagnetic sensors, and “specially designed” “components” therefor, as follows (see List of Items Controlled).**

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

*Items:*

\* \* \* \* \*

b. “Superconductive” electromagnetic sensors, “components” manufactured from “superconductive” materials:

\* \* \* \* \*

■ 192. In Supplement No. 1 to part 774 (the Commerce Control List), Category 6—Sensors and Lasers, Export Control Classification Number (ECCN) 6A997 is amended by revising the heading to read as follows:

**6A997 Gravity meters (gravimeters) for ground use, n.e.s., as follows (see List of Items Controlled).**

\* \* \* \* \*

■ 193. In Supplement No. 1 to part 774 (the Commerce Control List), Category 6—Sensors and Lasers, Export Control Classification Number (ECCN) 6A998 is amended:

- a. By revising the heading; and
- b. By revising “items” paragraph a in the List of Items Controlled section to read as follows:

**6A998 Radar systems, equipment and “major components” n.e.s., and “specially designed” “components” therefor, as follows (see List of Items Controlled).**

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

*Items:*

\* \* \* \* \*

a. Airborne radar equipment, n.e.s., and “specially designed” “components” therefor.

\* \* \* \* \*

■ 194. In Supplement No. 1 to part 774 (the Commerce Control List), Category 6—Sensors and Lasers, Export Control Classification Number (ECCN) 6B008 is amended by adding quotes around the term components in the heading.

■ 195. In Supplement No. 1 to part 774 (the Commerce Control List), Category 6—Sensors and Lasers, Export Control Classification Number (ECCN) 6B995 is amended by revising the heading to read as follows:

**6B995 “Specially designed” or modified equipment (see List of Items Controlled), including tools, dies, fixtures or gauges, and other “specially designed” “parts,” “components” and “accessories” therefor as follows (see List of Items Controlled).**

\* \* \* \* \*

■ 196. In Supplement No. 1 to part 774 (the Commerce Control List), Category 6—Sensors and Lasers, Export Control Classification Number (ECCN) 6C992 is amended by revising the heading to read as follows:

**6C992 Optical sensing fibers not controlled by 6A002.d.3 that are modified structurally to have a ‘beat length’ of less than 500 mm (high birefringence) or optical sensor materials not described in 6C002.b and having a zinc content of equal to or more than 6% by ‘mole fraction.’**

\* \* \* \* \*

■ 197. In Supplement No. 1 to part 774 (the Commerce Control List), Category 6—Sensors and Lasers, Export Control Classification Number (ECCN) 6C994 is amended by revising the heading to read as follows:

**6C994 Optical materials, as follows (see List of Items Controlled).**

\* \* \* \* \*

■ 198. In Supplement No. 1 to part 774 (the Commerce Control List), Category 6—Sensors and Lasers, Export Control Classification Number (ECCN) 6D001 is amended:

- a. By revising the License Exception TSR paragraph (3) in the License Exceptions section; and
- b. By revising the “Related Controls” paragraph in the List of Items Controlled section to read as follows:

**6D001 “Software” “specially designed” for the “development” or “production” of equipment controlled by 6A004, 6A005, 6A008 or 6B008.**

\* \* \* \* \*

**License Exceptions**

*CIV:* \* \* \*

*TSR:* \* \* \*

(3) Exports or reexports to destinations outside of those countries listed in Country Group A:5 (See Supplement No. 1 to part 740 of the EAR) of “software” “specially designed” for the “development” or “production” of equipment controlled by 6A004.c or d, 6A008.d, h, k or 6B008.

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

*Related Controls:* (1) “Software” “specially designed” for the “development” or “production” of “space qualified” “parts” and “components” for optical systems defined in 6A004.c and “space qualified” optical control equipment defined in 6A004.d.1 is “subject to the ITAR” (see 22



CFR parts 120 through 130). (2) See also 6D991, and ECCN 6E001 ("development") for "technology" for items controlled under this entry.

\* \* \* \* \*

■ 199. In Supplement No. 1 to part 774 (the Commerce Control List), Category 6—Sensors and Lasers, Export Control Classification Number (ECCN) 6D002 is amended by revising the "Related Controls" paragraph in the List of Items Controlled section to read as follows:

**6D002 "Software" "specially designed" for the "use" of equipment controlled by 6A002.b, 6A008 or 6B008.**

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

*Related Controls:* (1) "Software" "specially designed" for the "use" of "space qualified" imaging sensors (e.g., "monospectral imaging sensors" and "multispectral imaging sensors") defined in 6A002.b.2.b.1 is "subject to the ITAR" (see 22 CFR parts 120 through 130), unless, on or after September 23, 2002, the Department of State issues a commodity jurisdiction determination indicating the "software" is subject to the EAR. (2) "Software" "specially designed" for the "use" of "space qualified" LIDAR equipment "specially designed" for surveying or for meteorological observation, released from control under the note in 6A008.j, is controlled in 6D991. (3) See also 6D102, 6D991, and 6D992.

\* \* \* \* \*

■ 200. In Supplement No. 1 to part 774 (the Commerce Control List), Category 6—Sensors and Lasers, Export Control Classification Number (ECCN) 6D003 is amended by revising the License Exception TSR paragraph in the License Exceptions section to read as follows:

**6D003 Other "software" as follows (see List of Items Controlled).**

\* \* \* \* \*

**License Exceptions**

\* \* \* \* \*

*TSR:* Yes, except for exports or reexports to destinations outside of those countries listed in Country Group A:5 (See Supplement No. 1 to part 740 of the EAR) of "software" for items controlled by 6D003.a.

\* \* \* \* \*

■ 201. In Supplement No. 1 to part 774 (the Commerce Control List), Category 6—Sensors and Lasers, Export Control Classification Number (ECCN) 6D102 is amended by revising the heading to read as follows:

**6D102 "Software" "specially designed" or modified for the "use" of equipment controlled by 6A108.**

\* \* \* \* \*

■ 202–203. In Supplement No. 1 to part 774 (the Commerce Control List),

Category 6—Sensors and Lasers, Export Control Classification Number (ECCN) 6D993 is amended by revising the heading to read as follows:

**6D993 Other "software," not controlled by 6D003, as follows (see List of Items Controlled).**

\* \* \* \* \*

■ 204. In Supplement No. 1 to part 774 (the Commerce Control List), Category 6—Sensors and Lasers, Export Control Classification Number (ECCN) 6E001 is amended:

■ a. By removing the term "equipment" and adding in its place the term "items" in the "NP" and "RS" paragraphs in the License Requirements section;

■ b. By revising the License Exception TSR paragraph (4) introductory text in the License Exceptions section; and

■ c. By revising the "Related Controls" paragraph in the List of Items Controlled section to read as follows:

**6E001 "Technology" according to the General Technology Note for the "development" of equipment, materials or "software" controlled by 6A (except 6A991, 6A992, 6A994, 6A995, 6A996, 6A997, or 6A998), 6B (except 6B995), 6C (except 6C992 or 6C994) or 6D (except 6D991, 6D992, or 6D993).**

\* \* \* \* \*

**License Exceptions**

\* \* \* \* \*

*TSR:* \* \* \*

(4) Exports or reexports to destinations outside of those countries listed in Country Group A:5 (See Supplement No. 1 to part 740 of the EAR) of "technology" for the "development" of the following:

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

*Related Controls:* (1) "Technology" according to the General Technology Note for the "development" of the following commodities is "subject to the ITAR" (see 22 CFR parts 120 through 130): "Space qualified" (a) "Parts" and "components" for optical systems defined in 6A004.c and optical control equipment defined in 6A004.d.1.; (b) Solid-state detectors defined in 6A002.a.1, "imaging sensors" (e.g., "monospectral imaging sensors" and "multispectral imaging sensors") defined in 6A002.b.2.b.1, and cryocoolers defined in 6A002.d.1 unless on or after September 23, 2002, the Department of State issues a commodity jurisdiction determination indicating the "technology" is subject to the EAR. (2) See also 6E101, 6E201, and 6E991.

\* \* \* \* \*

■ 205. In Supplement No. 1 to part 774 (the Commerce Control List), Category 6—Sensors and Lasers, Export Control Classification Number (ECCN) 6E002 is amended:

■ a. By removing the term "equipment" and adding in its place the term "items" in the "NP" and "RS" paragraphs in the License Requirements section;

■ b. By revising the License Exception TSR paragraph (3) introductory text in the License Exceptions section; and

■ c. By revising the "Related Controls" paragraph in the List of Items Controlled section to read as follows:

**6E002 "Technology" according to the General Technology Note for the "production" of equipment or materials controlled by 6A (except 6A991, 6A992, 6A994, 6A995, 6A996, 6A997 or 6A998), 6B (except 6B995) or 6C (except 6C992 or 6C994).**

\* \* \* \* \*

**License Exceptions**

\* \* \* \* \*

*TSR:* \* \* \*

(3) Exports or reexports to destinations outside of those countries listed in Country Group A:5 (See Supplement No. 1 to part 740 of the EAR) of "technology" for the "development" of the following:

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

*Related Controls:* (1) "Technology" according to the General Technology Note for the "production" of the following commodities is "subject to the ITAR" (see 22 CFR parts 120 through 130) when intended for use on a satellite: "Space qualified" (a) "Parts" and "components" for optical systems defined in 6A004.c and optical control equipment defined in 6A004.d.1.; (b) Solid-state detectors defined in 6A002.a.1, "imaging sensors" (e.g., "monospectral imaging sensors" and "multispectral imaging sensors") defined in 6A002.b.2.b.1, and cryocoolers defined in 6A002.d.1 unless on or after September 23, 2002, the Department of State issues a commodity jurisdiction determination indicating the "technology" is subject to the EAR. (2) See also 6E992.

\* \* \* \* \*

■ 206. In Supplement No. 1 to part 774 (the Commerce Control List), Category 6—Sensors and Lasers, Export Control Classification Number (ECCN) 6E993 is amended by revising the introductory text to "items" paragraph a to read as follows:

**6E993 Other "technology," not controlled by 6E003, as follows (see List of Items Controlled).**

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

Items:

\* \* \* \* \*

a. Optical fabrication technologies for serially producing optical "parts" and "components" at a rate exceeding 10 m<sup>2</sup> of

surface area per year on any single spindle and having all of the following:

\* \* \* \* \*

■ 207. In Supplement No. 1 to part 774 (the Commerce Control List), Category 7—Navigation and Avionics, Export Control Classification Number (ECCN) 7A001 is amended by adding quotes around the term components in the heading.

■ 208. In Supplement No. 1 to part 774 (the Commerce Control List), Category 7—Navigation and Avionics, Export Control Classification Number (ECCN) 7A002 is amended by adding quotes around the term component in the heading.

■ 209. In Supplement No. 1 to part 774 (the Commerce Control List), Category 7—Navigation and Avionics, Export Control Classification Number (ECCN) 7A003 is amended:

■ a. By revising the heading;  
 ■ b. By revising the “Related Controls” paragraph in the List of Items Controlled section; and

■ c. By revising the introductory text to “items” paragraphs a and c in the List of Items Controlled section to read as follows:

**7A003 Inertial systems and “specially designed” “components,” as follows (see List of Items Controlled).**

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

*Related Controls:* (1) See also 7A103 and 7A994. (2) Inertial Navigation Systems (INS) and inertial equipment, and “specially designed” “parts” and “components” therefor specifically designed, modified or configured for military use are “subject to the ITAR” (see 22 CFR parts 120 through 130).

\* \* \* \* \*

*Items:*

a. Inertial Navigation Systems (INS) (gimballed or strapdown) and inertial equipment, designed for “aircraft,” land vehicles, vessels (surface or underwater) or “spacecraft,” for navigation, attitude, guidance or control and having any of the following and “specially designed” “components” therefor:

\* \* \* \* \*

c. Inertial measurement equipment for heading or True North determination and having any of the following, and “specially designed” “components” therefor:

\* \* \* \* \*

■ 210. In Supplement No. 1 to part 774 (the Commerce Control List), Category 7—Navigation and Avionics, Export Control Classification Number (ECCN) 7A004 is amended by adding quotes around the term components in the heading; and adding quotes around the term Components in the “items”

paragraph b in the List of Items Controlled section.

■ 211. In Supplement No. 1 to part 774 (the Commerce Control List), Category 7—Navigation and Avionics, Export Control Classification Number (ECCN) 7A005 is amended:

■ a. By revising the heading;  
 ■ b. By revising the License Requirements section;  
 ■ c. By revising the “Related Controls” paragraph in the List of Items Controlled section; and  
 ■ d. By revising the “Note” to “items” paragraph b in the List of Items Controlled section to read as follows:

**7A005 Global Navigation Satellite Systems (GNSS) receiving equipment having any of the following (see List of Items Controlled) and “specially designed” “components” therefor.**

\* \* \* \* \*

**License Requirements**

These items are “subject to the ITAR” (see 22 CFR parts 120 through 130).

**List of Items Controlled**

\* \* \* \* \*

*Related Controls:* (1) See also 7A105 and 7A994. Typically commercially available GPS do not employ decryption or adaptive antenna and are classified as 7A994. (2) For equipment “specially designed” for military use, see Categories XI and XV of the U.S. Munitions List (22 CFR 121).

\* \* \* \* \*

*Items:*

\* \* \* \* \*

b. \* \* \*

**Note:** 7A005.b does not apply to GNSS receiving equipment that only uses “components” designed to filter, switch, or combine signals from multiple omnidirectional antennas that do not implement adaptive antenna techniques.

\* \* \* \* \*

■ 212. In Supplement No. 1 to part 774 (the Commerce Control List), Category 7—Navigation and Avionics, Export Control Classification Number (ECCN) 7A008 is amended by adding quotes around the term components in the heading.

■ 213. In Supplement No. 1 to part 774 (the Commerce Control List), Category 7—Navigation and Avionics, Export Control Classification Number (ECCN) 7A101 is amended:

■ a. By revising the heading; and  
 ■ b. By revising the introductory text to “items” paragraph a in the List of Items Controlled section to read as follows:

**7A101 Accelerometers, other than those controlled by 7A001 (see List of Items Controlled), and “specially designed” “parts” and “components” therefor.**

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

*Items:*

a. Linear accelerometers designed for use in inertial navigation systems or in guidance systems of all types, usable in “missiles” having all of the following characteristics, and “specially designed” “parts” and “components” therefor:

\* \* \* \* \*

■ 214. In Supplement No. 1 to part 774 (the Commerce Control List), Category 7—Navigation and Avionics, Export Control Classification Number (ECCN) 7A102 is amended by revising the heading to read as follows:

**7A102 Gyros, other than those controlled by 7A002 (see List of Items Controlled), and “specially designed” “parts” and “components” therefor.**

\* \* \* \* \*

■ 215. In Supplement No. 1 to part 774 (the Commerce Control List), Category 7—Navigation and Avionics, Export Control Classification Number (ECCN) 7A103 is amended:

■ a. By revising the heading;  
 ■ b. By revising the “Related Controls” paragraph in the List of Items Controlled section; and

■ c. By revising “items” paragraph a and b and the introductory text to the “Technical Note” paragraph at the end of the “items” paragraph in the List of Items Controlled section to read as follows:

**7A103 Instrumentation, navigation equipment and systems, other than those controlled by 7A003, and “specially designed” “parts” and “components” therefor, as follows (see List of Items Controlled).**

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

*Related Controls:* (1) See ECCN 7A003 and 7A994. (2) For rockets, missiles, or unmanned aerial vehicles controlled under the U.S. Munitions List (USML), items described in 7A103.b are “subject to the ITAR” (see 22 CFR parts 120 through 130). (3) Inertial navigation systems and inertial equipment, and “specially designed” “parts” and “components” therefor specifically designed, modified or configured for military use are “subject to the ITAR” (see 22 CFR parts 120 through 130).

\* \* \* \* \*

*Items:*

\* \* \* \* \*

a. Inertial or other equipment using accelerometers or gyros controlled by 7A001, 7A002, 7A101 or 7A102 and systems incorporating such equipment, and “specially designed” “parts” and “components” therefor;

b. Integrated flight instrument systems, which include gyrostabilizers or automatic pilots, designed or modified for use in

rockets, missiles, or unmanned aerial vehicles capable of achieving a "range" equal to or greater than 300 km, and "specially designed" "parts" and "components" therefor.

c. \* \* \*

**Technical Note:** An "integrated navigation system" typically incorporates the following "parts" and "components":

\* \* \* \* \*

■ 216. In Supplement No. 1 to part 774 (the Commerce Control List), Category 7—Navigation and Avionics, Export Control Classification Number (ECCN) 7A104 is amended:

- a. By revising the heading; and
- b. By revising the "Related Controls" paragraph in the List of Items Controlled section to read as follows:

**7A104 Gyro-astro compasses and other devices, other than those controlled by 7A004, which derive position or orientation by means of automatically tracking celestial bodies or satellites and "specially designed" "parts" and "components" therefor.**

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

**Related Controls:** This entry controls "specially designed" "parts" and "components" for gyro-astro compasses and other devices controlled by 7A004.

\* \* \* \* \*

■ 217. In Supplement No. 1 to part 774 (the Commerce Control List), Category 7—Navigation and Avionics, Export Control Classification Number (ECCN) 7A105 is amended by revising the heading to read as follows:

**7A105 Receiving equipment for Global Navigation Satellite Systems (GNSS) (e.g. GPS, GLONASS, or Galileo) having any of the following characteristics, and "specially designed" "parts" and "components" therefor. (These items are "subject to the ITAR." See 22 CFR parts 120 through 130.)**

\* \* \* \* \*

■ 218. In Supplement No. 1 to part 774 (the Commerce Control List), Category 7—Navigation and Avionics, Export Control Classification Number (ECCN) 7A106 is amended by revising the heading to read as follows:

**7A106 Altimeters, other than those controlled by 7A006, of radar or laser radar type, designed or modified for use in "missiles". (These items are "subject to the ITAR." See 22 CFR parts 120 through 130.)**

■ 219. In Supplement No. 1 to part 774 (the Commerce Control List), Category 7—Navigation and Avionics, Export Control Classification Number (ECCN) 7A107 is amended by revising the heading to read as follows:

**7A107 Three axis magnetic heading sensors having all of the following characteristics (see List of Items Controlled), and "specially designed" "parts" and "components" therefor.**

\* \* \* \* \*

■ 220. In Supplement No. 1 to part 774 (the Commerce Control List), Category 7—Navigation and Avionics, Export Control Classification Number (ECCN) 7A115 is amended by revising the heading to read as follows:

**7A115 Passive sensors for determining bearing to specific electromagnetic sources (direction finding equipment) or terrain characteristics, designed or modified for use in "missiles". (These items are "subject to the ITAR." See 22 CFR parts 120 through 130.)**

■ 221. In Supplement No. 1 to part 774 (the Commerce Control List), Category 7—Navigation and Avionics, Export Control Classification Number (ECCN) 7A116 is amended by revising the heading to read as follows:

**7A116 Flight control systems (hydraulic, mechanical, electro-optical, or electro-mechanical flight control systems (including fly-by-wire systems) and attitude control equipment) designed or modified for "missiles". (These items are "subject to the ITAR." See 22 CFR parts 120 through 130.)**

■ 222. In Supplement No. 1 to part 774 (the Commerce Control List), Category 7—Navigation and Avionics, Export Control Classification Number (ECCN) 7A117 is amended by revising the heading to read as follows:

**7A117 "Guidance sets" capable of achieving system accuracy of 3.33% or less of the range (e.g., a "CEP" of 10 km or less at a "range" of 300 km). (These items are "subject to the ITAR." See 22 CFR parts 120 through 130.)**

■ 223. In Supplement No. 1 to part 774 (the Commerce Control List), Category 7—Navigation and Avionics, Export Control Classification Number (ECCN) 7A994 is amended:

- a. By redesignating the License Requirement Note in the License Requirements section as License Requirement Note 1;
- b. By adding a License Requirement Note 2 in the License Requirements section; and
- c. By revising the "Related Controls" paragraph in the List of Items Controlled section to read as follows:

**7A994 Other navigation direction finding equipment, airborne communication equipment, all aircraft inertial navigation systems not controlled under 7A003 or 7A103, and other avionic equipment, including "parts" and "components," n.e.s.**

**License Requirements**

\* \* \* \* \*

**License Requirement Notes:**

(1) \* \* \*

(2) Typically commercially available GPS do not employ decryption or adaptive antenna and are classified as 7A994.

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

**Related Controls:** (1) See also 7A005 and 7A105. (2) QRS11 Micromachined Angular Rate Sensors are "subject to the ITAR" (see 22 CFR parts 120 through 130), unless the QRS11-00100-100/101 is integrated into and included as an integral "component" of a commercial primary or standby instrument system of the type described in ECCN 7A994, or aircraft of the type described in ECCN 9A991 that incorporates such systems, or is exported solely for integration into such a system; or the QRS11-00050-443/569 is integrated into an automatic flight control system of the type described in ECCN 7A994, or aircraft of the type described in ECCN 9A991 that incorporates such systems, or are exported solely for integration into such a system. (See Commodity Jurisdiction requirements in 22 CFR Parts 121; Category VIII(e), Note(1).) In the latter case, such items are subject to the EAR. Technology specific to the development and production of QRS11 sensors remains "subject to the ITAR" (see 22 CFR parts 120 through 130).

\* \* \* \* \*

■ 224. In Supplement No. 1 to part 774 (the Commerce Control List), Category 7—Navigation and Avionics, Export Control Classification Number (ECCN) 7B003 is amended by revising the "Related Controls" paragraph (1) in the List of Items Controlled section to read as follows:

**7B003 Equipment "specially designed" for the "production" of equipment controlled by 7A (except 7A994).**

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

**Related Controls:** (1) See also 7B103, (this entry is "subject to the ITAR" (see 22 CFR parts 120 through 130)) and 7B994. \* \* \*

\* \* \* \* \*

■ 225. In Supplement No. 1 to part 774 (the Commerce Control List), Category 7—Navigation and Avionics, Export Control Classification Number (ECCN) 7B103 is amended by revising the heading to read as follows:

**7B103 "Specially designed" "production facilities" for equipment controlled by 7A117. (These items are "subject to the ITAR." See 22 CFR parts 120 through 130.)**

■ 226. In Supplement No. 1 to part 774 (the Commerce Control List), Category 7—Navigation and Avionics, Export Control Classification Number (ECCN) 7D001 is amended:

- a. By revising the “RS” entry in the the License Requirements table; and
- b. By revising the “Related Controls” paragraphs (2) and (3) in the List of Items Controlled section to read as follows:

**7D001 “Software” “specially designed” or modified for the “development” or “production” of equipment controlled by 7A (except 7A994) or 7B (except 7B994).**

**License Requirements**

*Reason for Control:* \* \* \*

Control(s)	Country chart
* * * * *	* * * * *
RS applies to “software” for inertial navigation systems and inertial equipment, and “components” therefor, for “9A991.b aircraft”.	RS Column 1
* * * * *	* * * * *

**List of Items Controlled**

\* \* \* \* \*

*Related Controls:* \* \* \* (2) The “software” related to 7A003.b, 7A005, 7A103.b, 7A105, 7A106, 7A115, 7A116, 7A117, or 7B103 is “subject to the ITAR” (see 22 CFR parts 120 through 130). (3) “Software” for inertial navigation systems and inertial equipment and “parts” or “components” “specially designed” therefor that are directly related to defense articles and not “specially designed” for use on civil aircraft is “subject to the ITAR” (see 22 CFR parts 120 through 130).

\* \* \* \* \*

■ 227. In Supplement No. 1 to part 774 (the Commerce Control List), Category 7—Navigation and Avionics, Export Control Classification Number (ECCN) 7D003 is amended by adding a Reporting Requirements section after the License Requirements section to read as follows:

**7D003 Other “software” as follows (see List of Items Controlled).**

\* \* \* \* \*

**Reporting Requirements**

See § 743.1 of the EAR for reporting requirements for exports under License Exceptions, Special Comprehensive Licenses, and Validated End-User authorizations.

\* \* \* \* \*

■ 228. In Supplement No. 1 to part 774 (the Commerce Control List), Category 7—Navigation and Avionics, Export Control Classification Number (ECCN) 7D101 is amended:

- a. By revising the heading;
- b. By revising the MT entry in the License Requirements table; and

■ c. By revising the “Related Controls” paragraph in the List of Items Controlled section to read as follows:

**7D101 “Software” “specially designed” or modified for the “use” of equipment controlled by 7A001 to 7A006, 7A101 to 7A107, 7A115, 7A116, 7A117, 7B001, 7B002, 7B003, 7B101, 7B102, or 7B103 for MT reasons.**

**License Requirements**

*Reason for Control:* \* \* \*

Control(s)	Country chart
MT applies to the entire entry.	MT Column 1
* * * * *	* * * * *

**List of Items Controlled**

\* \* \* \* \*

*Related Controls:* (1) The “software” related to 7A003.b, 7A005, 7A103.b, 7A105, 7A106, 7A115, 7A116, 7A117, or 7B103 is “subject to the ITAR” (see 22 CFR parts 120 through 130). (2) “Software” for inertial navigation systems and inertial equipment and “parts” and “components” “specially designed” therefor that are directly related to a defense article is “subject to the ITAR” (see 22 CFR parts 120 through 130).

\* \* \* \* \*

■ 229. In Supplement No. 1 to part 774 (the Commerce Control List), Category 7—Navigation and Avionics, Export Control Classification Number (ECCN) 7D102 is amended by revising the “Related Controls” paragraph in the List of Items Controlled section to read as follows:

**7D102 Integration “software,” as follows (See List of Items Controlled).**

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

*Related Controls:* The “software” related to 7A003.b or 7A103.b is “subject to the ITAR” (see 22 CFR parts 120 through 130).

\* \* \* \* \*

■ 230. In Supplement No. 1 to part 774 (the Commerce Control List), Category 7—Navigation and Avionics, Export Control Classification Number (ECCN) 7D103 is amended by revising the heading to read as follows:

**7D103 “Software” “specially designed” for modelling or simulation of the “guidance sets” controlled by 7A117 or for their design integration with “missiles”. (This entry is “subject to the ITAR.” See 22 CFR parts 120 through 130.)**

■ 231. In Supplement No. 1 to part 774 (the Commerce Control List), Category 7—Navigation and Avionics, Export

Control Classification Number (ECCN) 7E001 is amended:

- a. By revising the RS entry of the License Requirements table;
- b. By adding a Reporting Requirements section after the License Requirements section; and
- c. By revising the “Related Controls” paragraph (2) in the List of Items Controlled section to read as follows:

**7E001 “Technology” according to the General Technology Note for the “development” of equipment or “software,” controlled by 7A (except 7A994), 7B (except 7B994), 7D001, 7D002, or 7D003.**

**License Requirements**

*Reason for Control:* \* \* \*

Control(s)	Country chart
* * * * *	* * * * *
RS applies to “technology” for inertial navigation systems or inertial equipment, and “components” therefor, for 9A991.b aircraft.	RS Column 1
* * * * *	* * * * *

**Reporting Requirements**

See § 743.1 of the EAR for reporting requirements for exports under License Exceptions, Special Comprehensive Licenses, and Validated End-User authorizations.

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

*Related Controls:* \* \* \* (2) The “technology” related to 7A003.b, 7A005, 7A103.b, 7A105, 7A106, 7A115, 7A116, 7A117, 7B103, software in 7D101 specified in the Related Controls paragraph of ECCN 7D101, 7D102.a, or 7D103 is “subject to the ITAR” (see 22 CFR parts 120 through 130).

\* \* \* \* \*

■ 232. In Supplement No. 1 to part 774 (the Commerce Control List), Category 7—Navigation and Avionics, Export Control Classification Number (ECCN) 7E002 is amended:

- a. By revising the RS entry in the License Requirements table;
- b. By adding a Reporting Requirements section after the License Requirements section; and
- c. By revising the “Related Controls” paragraph (2) in the List of Items Controlled section to read as follows:

**7E002 “Technology” according to the General Technology Note for the “production” of equipment controlled by 7A (except 7A994) or 7B (except 7B994).**

License Requirements

Reason for Control: \* \* \*

Control(s) Country chart

RS applies to "technology" for inertial navigation systems or inertial equipment, and "components" therefor, for 9A991.b aircraft.

Reporting Requirements

See § 743.1 of the EAR for reporting requirements for exports under License Exceptions, Special Comprehensive Licenses, and Validated End-User authorizations.

\* \* \* \* \*

List of Items Controlled

Related Controls: \* \* \* (2) The "technology" related to 7A003.b, 7A005, 7A103.b, 7A105, 7A106, 7A115, 7A116, 7A117, or 7B103 is "subject to the ITAR" (see 22 CFR parts 120 through 130).

■ 233. In Supplement No. 1 to part 774 (the Commerce Control List), Category 7—Navigation and Avionics, Export Control Classification Number (ECCN) 7E101 is amended:
■ a. By revising the heading;
■ b. By revising the RS entry of the License Requirements table; and
■ c. By revising the "Related Controls" paragraph in the List of Items Controlled section to read as follows:

7E101 "Technology," according to the General Technology Note for the "use" of equipment controlled by 7A001 to 7A006, 7A101 to 7A107, 7A115 to 7A117, 7B001, 7B002, 7B003, 7B101, 7B102, 7B103, or 7D101 to 7D103 for MT reasons.

License Requirements

Reason for Control: \* \* \*

Control(s) Country chart

RS applies to "technology" required for the use of inertial navigation systems, or inertial equipment, or "specially designed" "parts" and "components" therefor, "specially designed" for 9A991.b aircraft.

Control(s) Country chart

\* \* \* \* \*

List of Items Controlled

Related Controls: The "technology" related to 7A003.b, 7A005, 7A103.b, 7A105, 7A106, 7A115, 7A116, 7A117, 7B103, software specified in the Related Controls paragraph of ECCN 7D101, 7D102.a, or 7D103 is "subject to the ITAR" (see 22 CFR parts 120 through 130).

■ 234. In Supplement No. 1 to part 774 (the Commerce Control List), Category 7—Navigation and Avionics, Export Control Classification Number (ECCN) 7E104 is amended by revising the heading to read as follows:

7E104 Design "Technology" for the integration of the flight control, guidance, and propulsion data into a flight management system, designed or modified for rockets or missiles capable of achieving a "range" equal to or greater than 300 km, for optimization of rocket system trajectory. (This entry is "subject to the ITAR." See 22 CFR parts 120 through 130.)

■ 235. In Supplement No. 1 to part 774 (the Commerce Control List), Category 7—Navigation and Avionics, Export Control Classification Number (ECCN) 7E994 is amended by revising the "Related Controls" paragraph in the List of Items Controlled section to read as follows:

7E994 "Technology," n.e.s., for the "development," "production" or "use" of navigation, airborne communication, and other avionics equipment.

List of Items Controlled

Related Controls: Technology specific to the development and production of QRS11 sensors remains "subject to the ITAR" (see 22 CFR parts 120 through 130) and (see ECCN 7A994, Related Controls).

■ 236. In Supplement No. 1 to part 774 (the Commerce Control List), Category 8—Marine, Export Control Classification Number (ECCN) 8A002 is amended:
■ a. By revising the heading;
■ b. By revising the introductory text to "items" paragraph a in the List of Items Controlled section;
■ c. By revising "items" paragraphs a.4, o.1.e, and o.2.d in the List of Items Controlled section to read as follows:

8A002 Marine systems, equipment, "parts" and "components," as follows (see List of Items Controlled).

\* \* \* \* \*

List of Items Controlled

\* \* \* \* \*

Items:

a. Systems, equipment, "parts" and "components," "specially designed" or modified for submersible vehicles and designed to operate at depths exceeding 1,000 m, as follows:

\* \* \* \* \*

a.4. "Parts" and "components" manufactured from material specified by ECCN 8C001;

\* \* \* \* \*

o.1.e. Power transmission shaft systems incorporating "composite" material "parts" or "components" and capable of transmitting more than 1 MW;

\* \* \* \* \*

o.2.d. Power transmission shaft systems incorporating "composite" material "parts" or "components" and capable of transmitting more than 2 MW;

\* \* \* \* \*

■ 237. In Supplement No. 1 to part 774 (the Commerce Control List), Category 8—Marine, Export Control Classification Number (ECCN) 8A918 is removed.

■ 238. In Supplement No. 1 to part 774 (the Commerce Control List), Category 8—Marine, Export Control Classification Number (ECCN) 8A992 is amended:

- a. By revising the heading;
■ b. By revising the License Requirements section;
■ c. By revising "items" paragraphs f and g in the List of Items Controlled section; and
■ d. By adding paragraphs l and m to the "items" paragraph in the "List of Items Controlled" section to read as follows:

8A992 Vessels, marine systems or equipment, not controlled by 8A001, 8A002 or 8A018, and "specially designed" "parts," and "components" therefor, and marine boilers and "parts" and "components," "accessories," and "attachments" therefor (see List of Items Controlled).

License Requirements

Reason for Control: AT, UN

Control(s) Country chart

AT applies to entire entry. UN applies to 8A992.l and m. See § 746.1(b) for UN controls

List of Items Controlled

\* \* \* \* \*

Items:

\* \* \* \* \*

f. Vessels, n.e.s., including inflatable boats, and "specially designed" "parts" and "components" therefor, n.e.s.;
g. Marine engines (both inboard and outboard) and submarine engines, n.e.s.; and

“specially designed” “parts” and “components” therefor, n.e.s.;

\* \* \* \* \*

1. Marine boilers designed to have any of the following characteristics:

1.1. Heat release rate (at maximum rating) equal to or in excess of 190,000 BTU per hour per cubic foot of furnace volume; or

1.2. Ratio of steam generated in pounds per hour (at maximum rating) to the dry weight of the boiler in pounds equal to or in excess of 0.83.

m. Major “components,” “accessories,” and “attachments” for marine boilers described in 8A992.l.

■ 239. In Supplement No. 1 to part 774 (the Commerce Control List), Category 8—Marine, Export Control Classification Number (ECCN) 8D001 is amended by revising the License Exception TSR paragraph in the License Exceptions section to read as follows:

**8D001 “Software” “specially designed” or modified for the “development”, “production” or “use” of equipment or materials, controlled by 8A (except 8A018 or 8A992), 8B or 8C.**

\* \* \* \* \*

**License Exceptions**

\* \* \* \* \*

*TSR:* Yes, except for exports or reexports to destinations outside of those countries listed in Country Group A:5 (See Supplement No. 1 to part 740 of the EAR) of “software” “specially designed” for the “development” or “production” of equipment controlled by 8A001.b, 8A001.d, or 8A002.o.3.b.

\* \* \* \* \*

■ 240. In Supplement No. 1 to part 774 (the Commerce Control List), Category 8—Marine, Export Control Classification Number (ECCN) 8E001 is amended by revising the License Exception TSR paragraph in the License Exceptions section to read as follows:

**8E001 “Technology” according to the General Technology Note for the “development” or “production” of equipment or materials, controlled by 8A (except 8A018 or 8A992), 8B or 8C.**

\* \* \* \* \*

**License Exceptions**

\* \* \* \* \*

*TSR:* Yes, except for exports or reexports to destinations outside of those countries listed in Country Group A:5 (See Supplement No. 1 to part 740 of the EAR) of “software” “specially designed” for the “development” or “production” of equipment controlled by 8A001.b, 8A001.d, or 8A002.o.3.b.

\* \* \* \* \*

■ 241. In Supplement No. 1 to part 774 (the Commerce Control List), Category 9—Aerospace and Propulsion, Export Control Classification Number (ECCN) 9A002 is amended by adding quotes

around the term components in the heading.

■ 242. In Supplement No. 1 to part 774 (the Commerce Control List), Category 9—Aerospace and Propulsion, Export Control Classification Number (ECCN) 9A003 is amended by adding quotes around the term components in the heading.

■ 243. In Supplement No. 1 to part 774 (the Commerce Control List), Category 9—Aerospace and Propulsion, Export Control Classification Number (ECCN) 9A004 is amended by revising the heading and the “Related Controls” paragraphs (2), (4), (5) and (6) in the List of Items Controlled section to read as follows:

**9A004 Space launch vehicles and “spacecraft” (see List of Items Controlled).**

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

*Related Controls:*

\* \* \* \* \*

(2) Space launch vehicles are “subject to the ITAR” (see 22 CFR parts 120 through 130).

\* \* \* \* \*

(4) All other “spacecraft” not controlled under 9A004 and their payloads, and specifically designed or modified “parts,” “components,” accessories, attachments, and associated equipment, including ground support equipment, are “subject to the ITAR” (see 22 CFR parts 120 through 130), unless otherwise transferred to the Department of Commerce via a commodity jurisdiction determination by the Department of State.

(5) Exporters requesting a license from the Department of Commerce for “spacecraft” and their associated “parts” and “components,” other than the international space station, must provide a statement from the Department of State, Directorate of Defense Trade Controls, verifying that the item intended for export is under the licensing jurisdiction of the Department of Commerce. All “specially designed” or modified “parts,” “components,” accessories, attachments, and associated equipment for “spacecraft” that have been determined by the Department of State through the commodity jurisdiction process to be under the licensing jurisdiction of the Department of Commerce, and that are not controlled by any other ECCN on the Commerce Control List, will be assigned a classification under this ECCN 9A004.

(6) Technical data required for the detailed design, development, manufacturing, or production of the international space station (to include specifically designed “parts” and “components”) remains “subject to the ITAR” (see 22 CFR parts 120 through 130). This control by the ITAR of detailed design, development, manufacturing or production technology for NASA’s international space station does not include that level of technical data necessary and reasonable for

assurance that a U.S.-built item intended to operate on NASA’s international space station has been designed, manufactured, and tested in conformance with specified requirements (e.g., operational performance, reliability, lifetime, product quality, or delivery expectations). All technical data and all defense services, including all technical assistance, for launch of the international space station, including launch vehicle compatibility, integration, or processing data, are “subject to the ITAR” (see 22 CFR parts 120 through 130).

\* \* \* \* \*

■ 244. In Supplement No. 1 to part 774 (the Commerce Control List), Category 9—Aerospace and Propulsion, Export Control Classification Number (ECCN) 9A005 is amended by revising the heading to read as follows:

**9A005 Liquid rocket propulsion systems containing any of the systems or “components,” controlled by 9A006. (These items are “subject to the ITAR.” See 22 CFR parts 120 through 130.)**

■ 245. In Supplement No. 1 to part 774 (the Commerce Control List), Category 9—Aerospace and Propulsion, Export Control Classification Number (ECCN) 9A006 is amended by revising the heading to read as follows:

**9A006 Systems, “components,” “specially designed” for liquid rocket propulsion systems. (These items are “subject to the ITAR.” See 22 CFR parts 120 through 130.)**

■ 246. In Supplement No. 1 to part 774 (the Commerce Control List), Category 9—Aerospace and Propulsion, Export Control Classification Number (ECCN) 9A007 is amended by revising the heading to read as follows:

**9A007 Solid rocket propulsion systems. (These items are “subject to the ITAR.” See 22 CFR parts 120 through 130.)**

■ 247. In Supplement No. 1 to part 774 (the Commerce Control List), Category 9—Aerospace and Propulsion, Export Control Classification Number (ECCN) 9A008 is amended by revising the heading to read as follows:

**9A008 “components” “specially designed” for solid rocket propulsion systems. (These items are “subject to the ITAR.” See 22 CFR parts 120 through 130.)**

■ 248. In Supplement No. 1 to part 774 (the Commerce Control List), Category 9—Aerospace and Propulsion, Export Control Classification Number (ECCN) 9A009 is amended by revising the heading to read as follows:

**9A009 Hybrid rocket propulsion systems. (These items are “subject to the ITAR.” See 22 CFR parts 120 through 130.)**

■ 249. In Supplement No. 1 to part 774 (the Commerce Control List), Category 9—Aerospace and Propulsion, Export

Control Classification Number (ECCN) 9A010 is amended by revising the heading to read as follows:

9A010 "Specially designed" "parts," "components," systems and structures, for launch vehicles, launch vehicle propulsion systems or "spacecraft". (These items are "subject to the ITAR." See 22 CFR parts 120 through 130.)

■ 250. In Supplement No. 1 to part 774 (the Commerce Control List), Category 9—Aerospace and Propulsion, Export Control Classification Number (ECCN) 9A011 is amended by revising the heading to read as follows:

9A011 Ramjet, scramjet or combined cycle engines, and "specially designed" "parts" and "components" therefor. (These items are "subject to the ITAR." See 22 CFR parts 120 through 130.)

■ 251. In Supplement No. 1 to part 774 (the Commerce Control List), Category 1—Aerospace and Propulsion, Export Control Classification Number (ECCN) 9A012 is amended by adding quotes around the term components in the heading; in the introductory text to "items" paragraph b in the List of Items Controlled section; and in "items" paragraph b.3 in the List of Items Controlled section.

■ 252. In Supplement No. 1 to part 774 (the Commerce Control List), Category 9—Aerospace and Propulsion, Export Control Classification Number (ECCN) 9A101 is amended by revising the "Related Controls" paragraph in the List of Items Controlled section to read as follows:

9A101 Turbojet and turbofan engines, other than those controlled by 9A001, as follows (see List of Items Controlled).

\* \* \* \* \*

List of Items Controlled

\* \* \* \* \*

Related Controls: 9A101.b controls only engines for non-military unmanned air vehicles [UAVs] or remotely piloted vehicles [RPVs], and does not control other engines designed or modified for use in "missiles," which are "subject to the ITAR" (see 22 CFR parts 120 through 130).

\* \* \* \* \*

■ 253. In Supplement No. 1 to part 774 (the Commerce Control List), Category 9—Aerospace and Propulsion, Export Control Classification Number (ECCN) 9A103 is amended by revising the heading to read as follows:

9A103 Liquid propellant tanks "specially designed" for the propellants controlled in ECCNs 1C011, 1C111 or other liquid propellants used in "missiles." (These items are "subject to the ITAR." See 22 CFR parts 120 through 130.)

■ 254. In Supplement No. 1 to part 774 (the Commerce Control List), Category

9—Aerospace and Propulsion, Export Control Classification Number (ECCN) 9A104 is amended by revising the heading to read as follows:

9A104 Sounding rockets, capable of a range of at least 300 km. (These items are "subject to the ITAR." See 22 CFR parts 120 through 130.)

■ 255. In Supplement No. 1 to part 774 (the Commerce Control List), Category 9—Aerospace and Propulsion, Export Control Classification Number (ECCN) 9A105 is amended by revising the heading to read as follows:

9A105 Liquid propellant rocket engines. (These items are "subject to the ITAR." See 22 CFR parts 120 through 130.)

■ 256. In Supplement No. 1 to part 774 (the Commerce Control List), Category 9—Aerospace and Propulsion, Export Control Classification Number (ECCN) 9A106 is amended:

- a. By revising the heading;
b. By revising the "Related Controls" paragraph in the List of Items Controlled section; and
d. By revising the introductory text to "items" paragraph d in the List of Items Controlled section to read as follows:

9A106 Systems, "parts" or "components," other than those controlled by 9A006, usable in "missiles," and "specially designed" for liquid rocket propulsion systems, as follows (see List of Items Controlled).

\* \* \* \* \*

List of Items Controlled

\* \* \* \* \*

Related Controls: Items described in 9A106.a, .b, and .c are "subject to the ITAR" (see 22 CFR parts 120 through 130).

\* \* \* \* \*

Items:

\* \* \* \* \*

d. Liquid and slurry propellant (including oxidizers) control systems, and "specially designed" "parts" and "components" therefor, designed or modified to operate in vibration environments greater than 10 g rms between 20 Hz and 2000 Hz.

\* \* \* \* \*

■ 257. In Supplement No. 1 to part 774 (the Commerce Control List), Category 9—Aerospace and Propulsion, Export Control Classification Number (ECCN) 9A107 is amended by revising the heading to read as follows:

9A107 Solid propellant rocket motors, usable in rockets with a range capability of 300 km or greater, other than those controlled by 9A007, having total impulse capacity equal to or greater than 8.41 x 10^5 Ns, but less than 1.1 x 10^6 Ns. (These items are "subject to the ITAR." See 22 CFR parts 120 through 130.)

■ 258. In Supplement No. 1 to part 774 (the Commerce Control List), Category 9—Aerospace and Propulsion, Export Control Classification Number (ECCN) 9A108 is amended by revising the heading to read as follows:

9A108 Solid rocket propulsion "parts" and "components," other than those controlled by 9A008, usable in rockets with a range capability of 300 km or greater. (These items are "subject to the ITAR." See 22 CFR parts 120 through 130.)

■ 259. In Supplement No. 1 to part 774 (the Commerce Control List), Category 9—Aerospace and Propulsion, Export Control Classification Number (ECCN) 9A109 is amended by revising the heading to read as follows:

9A109 Hybrid rocket motors, usable in rockets with a range capability of 300 km or greater, other than those controlled by 9A009, and "specially designed" "parts" and "components" therefor. (These items are "subject to the ITAR." See 22 CFR parts 120 through 130.)

■ 260. In Supplement No. 1 to part 774 (the Commerce Control List), Category 9—Aerospace and Propulsion, Export Control Classification Number (ECCN) 9A110 is amended:

- a. By revising the heading; and
b. By revising the "Related Controls" paragraph (2) in the List of Items Controlled section to read as follows:

9A110 Composite structures, laminates and manufactures thereof, other than those controlled by entry 9A010, "specially designed" for use in rockets, missiles, or unmanned aerial vehicles capable of achieving a "range" equal to or greater than 300 km or the subsystems controlled by entries 9A005, 9A007, 9A105.a, 9A106 to 9A109, 9A116, or 9A119.

\* \* \* \* \*

List of Items Controlled

\* \* \* \* \*

Related Controls: \* \* \* (2) "Composite structures, laminates, and manufactures thereof, "specially designed" for use in missile systems are "subject to the ITAR" (see 22 CFR parts 120 through 130), except those "specially designed" for non-military unmanned air vehicles controlled in 9A012.

\* \* \* \* \*

■ 261. In Supplement No. 1 to part 774 (the Commerce Control List), Category 9—Aerospace and Propulsion, Export Control Classification Number (ECCN) 9A111 is amended by revising the heading to read as follows:

9A111 Pulse jet engines, usable in rockets, missiles, or unmanned aerial vehicles capable of achieving a "range" equal to or greater than 300 km, and "specially



designed” “parts” and “components” therefor. (These items are “subject to the ITAR.” See 22 CFR parts 120 through 130.)

■ 262. In Supplement No. 1 to part 774 (the Commerce Control List), Category 9—Aerospace and Propulsion, Export Control Classification Number (ECCN) 9A115 is amended by revising the heading to read as follows:

**9A115 Apparatus, devices and vehicles, designed or modified for the transport, handling, control, activation and launching of rockets, missiles, and unmanned aerial vehicles capable of achieving a “range” equal to or greater than 300 km. (These items are “subject to the ITAR.” See 22 CFR parts 120 through 130.)**

■ 263. In Supplement No. 1 to part 774 (the Commerce Control List), Category 9—Aerospace and Propulsion, Export Control Classification Number (ECCN) 9A116 is amended by revising the heading to read as follows:

**9A116 Reentry vehicles, usable in “missiles,” and equipment designed or modified therefor. (These items are “subject to the ITAR.” See 22 CFR parts 120 through 130.)**

■ 264. In Supplement No. 1 to part 774 (the Commerce Control List), Category 9—Aerospace and Propulsion, Export Control Classification Number (ECCN) 9A117 is amended by revising the heading to read as follows:

**9A117 Staging mechanisms, separation mechanisms, and interstages therefor, usable in “missiles”. (These items are “subject to the ITAR.” See 22 CFR parts 120 through 130.)**

■ 265. In Supplement No. 1 to part 774 (the Commerce Control List), Category 9—Aerospace and Propulsion, Export Control Classification Number (ECCN) 9A118 is amended by revising the heading to read as follows:

**9A118 Devices to regulate combustion usable in engines which are usable in rockets, missiles, and unmanned aerial vehicles capable of achieving a “range” equal to or greater than 300 km, controlled by 9A011 or 9A111. (These items are “subject to the ITAR.” See 22 CFR parts 120 through 130.)**

■ 266. In Supplement No. 1 to part 774 (the Commerce Control List), Category 9—Aerospace and Propulsion, Export Control Classification Number (ECCN) 9A119 is amended by revising the heading to read as follows:

**9A119 Individual rocket stages, usable in rockets with a range capability greater than 300 km or greater, other than those controlled by 9A005, 9A007, 9A009, 9A105, 9A107 and 9A109. (These items are “subject to the ITAR.” See 22 CFR parts 120 through 130.)**

■ 267. In Supplement No. 1 to part 774 (the Commerce Control List), Category 9—Aerospace and Propulsion, Export Control Classification Number (ECCN) 9A120 is amended:

- a. By revising the heading; and
- b. By revising the “Related Controls” paragraph to read as follows:

**9A120 Complete unmanned aerial vehicles, not specified in 9A012, having all of the following characteristics (see List of Items Controlled).**

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

*Related Controls:* See ECCN 9A012 or the U.S. Munitions List Category VIII (22 CFR part 121). Also see ECCN 2B352.h for controls on certain spraying or fogging systems, and “parts” and “components” therefor, “specially designed” or modified for fitting to aircraft, “lighter than air vehicles,” or “UAVs.”

\* \* \* \* \*

■ 268. In Supplement No. 1 to part 774 (the Commerce Control List), Category 9—Aerospace and Propulsion, Export Control Classification Number (ECCN) 9A980 is amended:

- a. By revising the heading; and
- b. By adding a heading Note to read as follows:

**9A980 Nonmilitary mobile crime science laboratories; and accessories, n.e.s.**

**Heading Note:** In order for a vehicle to be classified as a nonmilitary mobile crime scene laboratory under ECCN 9A980, the vehicle must contain one or more analytical or laboratory items controlled for Crime Control (CC) reasons on the CCL, such as ECCNs 3A980 and 3A981.

\* \* \* \* \*

■ 269. In Supplement No. 1 to part 774 (the Commerce Control List), Category 9—Aerospace and Propulsion, Export Control Classification Number (ECCN) 9A990 is amended:

- a. By revising the heading; and
- b. By revising “items” paragraphs b and c in the List of Items Controlled section to read as follows:

**9A990 Diesel engines, n.e.s., and tractors and “specially designed” “parts” and “components” therefor, n.e.s. (see List of Items Controlled).**

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

*Items:*

\* \* \* \* \*

- b. Off highway wheel tractors of carriage capacity 9 mt (20,000 lbs) or more; and “major components” and accessories, n.e.s.
- c. On-Highway tractors, with single or tandem rear axles rated for 9 mt per axle (20,000 lbs.) or greater and “specially designed” “major components”.

\* \* \* \* \*

■ 270. In Supplement No. 1 to part 774 (the Commerce Control List), Category 9—Aerospace and Propulsion, Export Control Classification Number (ECCN) 9A991 is amended:

- a. By revising the heading;
- b. By revising the “Related Controls” paragraph in the List of Items Controlled section; and
- c. By revising “items” paragraphs b, c introductory text, d, and e in the List of Items Controlled section to read as follows:

**9A991 “Aircraft,” n.e.s., and gas turbine engines not controlled by 9A001 or 9A101 and “parts” and “components,” n.e.s. (see List of Items Controlled).**

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

*Related Controls:* QRS11 Micromachined Angular Rate Sensors are “subject to the ITAR” (see 22 CFR parts 120 through 130), unless the QRS11–00100–100/101 is integrated into and included as an integral “component” of a commercial primary or standby instrument system of the type described in ECCN 7A994, or aircraft of the type described in ECCN 9A991 that incorporates such a system, or is exported solely for integration into such a system; or the QRS11–00050–443/569 is integrated into an automatic flight control system of the type described in ECCN 7A994, or aircraft of the type described in ECCN 9A991 that incorporates such a system, or are exported solely for integration into such a system. (See Commodity Jurisdiction requirements in 22 CFR Part 121; Category VIII(e), Note(1)) In the latter case, such items are subject to the EAR. Technology specific to the development and production of QRS11 sensors remains “subject to the ITAR” (see 22 CFR parts 120 through 130).

\* \* \* \* \*

*Items:*

\* \* \* \* \*

- b. Aircraft n.e.s.;
- c. Aero gas turbine engines, and “parts” and “components” “specially designed” therefor.

\* \* \* \* \*

d. “Parts” and “components” “specially designed” for “aircraft” subject to the controls of ECCN 9A991.a or .b., n.e.s.

e. Pressurized aircraft breathing equipment, n.e.s.; and “parts” and “components” “specially designed” therefor, n.e.s.

■ 271. In Supplement No. 1 to part 774 (the Commerce Control List), Category 9—Aerospace and Propulsion, Export Control Classification Number (ECCN) 9B001 is amended:

- a. By revising the “MT” entry in the License Requirements table; and
- c. By revising the “Related Controls” paragraph in the List of Items Controlled section to read as follows:

**9B001 Equipment, tooling and fixtures, "specially designed" for manufacturing gas turbine blades, vanes or "tip shroud" castings, as follows (see List of Items Controlled).**

**License Requirements**

Reason for Control: \* \* \*

Control(s)	Country chart
* * * * *	* * * * *
MT applies to equipment for engines controlled under 9A001 for MT reasons and for engines controlled under 9A101.	MT Column 1
* * * * *	* * * * *
* * * * *	* * * * *

**List of Items Controlled**

\* \* \* \* \*

Related Controls: For "specially designed" production equipment of systems, sub-systems, "parts" and "components" controlled by 9A005 to 9A009, 9A011, 9A101, 9A105 to 9A109, 9A111, and 9A116 to 9A119 usable in "missiles" see 9B115. See also 9B991.

\* \* \* \* \*

■ 272. In Supplement No. 1 to part 774 (the Commerce Control List), Category 9—Aerospace and Propulsion, Export Control Classification Number (ECCN) 9B002 is amended:

- a. By revising the heading;
- b. By revising the "MT" entry in the License Requirements table; and
- c. By revising "items" paragraph a in the List of Items Controlled section to read as follows:

**9B002 On-line (real time) control systems, instrumentation (including sensors) or automated data acquisition and processing equipment, having all of the following (see List of Items Controlled).**

**License Requirements**

Reason for Control: \* \* \*

Control(s)	Country chart
* * * * *	* * * * *
MT applies to equipment for engines controlled under 9A001 for MT reasons and for engines controlled under 9A101.	MT Column 1
* * * * *	* * * * *
* * * * *	* * * * *

**List of Items Controlled**

\* \* \* \* \*

Items:

a. "Specially designed" for the "development" of gas turbine engines, assemblies, "parts" or "components"; and  
\* \* \* \* \*

■ 273. In Supplement No. 1 to part 774 (the Commerce Control List), Category 9—Aerospace and Propulsion, Export Control Classification Number (ECCN) 9B003 is amended:

- a. By revising the heading; and
- b. By revising the "MT" entry in the License Requirements table to read as follows:

**9B003 Equipment "specially designed" for the "production" or test of gas turbine brush seals designed to operate at tip speeds exceeding 335 m/s, and temperatures in excess of 773 K (500 °C), and "specially designed" "components" or "accessories" therefor.**

**License Requirements**

Reason for Control: \* \* \*

Control(s)	Country chart
* * * * *	* * * * *
MT applies to equipment for engines controlled under 9A001 for MT reasons and for engines controlled under 9A101.	MT Column 1
* * * * *	* * * * *
* * * * *	* * * * *

■ 274. In Supplement No. 1 to part 774 (the Commerce Control List), Category 9—Aerospace and Propulsion, Export Control Classification Number (ECCN) 9B004 is amended by revising the "MT" entry in the License Requirements table to read as follows:

**9B004 Tools, dies or fixtures, for the solid state joining of "superalloy", titanium or intermetallic airfoil-to-disk combinations described in 9E003.a.3 or 9E003.a.6 for gas turbines.**

**License Requirements**

Reason for Control: \* \* \*

Control(s)	Country chart
* * * * *	* * * * *
MT applies to equipment for engines controlled under 9A001 for MT reasons and for engines controlled under 9A101.	MT Column 1
* * * * *	* * * * *
* * * * *	* * * * *

■ 275. In Supplement No. 1 to part 774 (the Commerce Control List), Category 9—Aerospace and Propulsion, Export Control Classification Number (ECCN) 9B009 is amended:

- a. By revising the heading; and
- b. By revising the "Related Controls" paragraph in the List of Items Controlled section to read as follows:

**9B009 Tooling "specially designed" for producing turbine engine powder metallurgy rotor "parts" or "components" capable of operating at stress levels of 60% of Ultimate Tensile Strength (UTS) or more and metal temperatures of 873 K (600 °C) or more.**

\* \* \* \* \*  
**List of Items Controlled**  
\* \* \* \* \*

Related Controls: See ECCN 9B002.

\* \* \* \* \*

■ 276. In Supplement No. 1 to part 774 (the Commerce Control List), Category 9—Aerospace and Propulsion, Export Control Classification Number (ECCN) 9B010 is amended by adding quotes around the term components in the heading.

■ 277. In Supplement No. 1 to part 774 (the Commerce Control List), Category 9—Aerospace and Propulsion, Export Control Classification Number (ECCN) 9B115 is amended:

- a. By revising the heading; and
- b. By revising the "Related Controls" paragraph in the List of Items Controlled section to read as follows:

**9B115 "Specially designed" "production equipment" for the systems, sub-systems, "parts" and "components" controlled by 9A004 to 9A009, 9A011, 9A101, 9A103 to 9A109, 9A111, 9A116 to 9A119.**

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

Related Controls: Although items described in ECCNs 9A004 to 9A009, 9A011, 9A101, 9A104 to 9A109; 9A111, 9A116 to 9A119 are "subject to the ITAR" (see 22 CFR parts 120 through 130), the "production equipment" controlled in this entry that is related to these items is subject to the EAR.

\* \* \* \* \*

■ 278. In Supplement No. 1 to part 774 (the Commerce Control List), Category 9—Aerospace and Propulsion, Export Control Classification Number (ECCN) 9B116 is amended:

- a. By revising the heading; and
- b. By revising the "Related Controls" paragraph in the List of Items Controlled section to read as follows:

**9B116 "Specially designed" "production facilities" for the systems, sub-systems, "parts" and "components" controlled by**

9A004 to 9A009, 9A011, 9A012, 9A101, 9A103 to 9A109, 9A111, 9A116 to 9A119.

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

*Related Controls:* Although items described in ECCNs 9A004 to 9A009, 9A011, 9A101, 9A104 to 9A109; 9A111, 9A116 to 9A119 are “subject to the ITAR” (see 22 CFR parts 120 through 130), the “production equipment” controlled in this entry that is related to these items is subject to the EAR.

\* \* \* \* \*

■ 279. In Supplement No. 1 to part 774 (the Commerce Control List), Category 9—Aerospace and Propulsion, Export Control Classification Number (ECCN) 9B610 as added April 16, 2013, at 78 FR 22732, effective October 15, 2013, is amended by revising the “Related Controls” paragraph in the List of Items Controlled section to read as follows:

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

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

*Related Controls:* USML Category VIII (h)(1) controls parts, components, accessories, equipment, and attachments specially designed for various models of stealth and low observable aircraft.

\* \* \* \* \*

■ 280. In Supplement No. 1 to part 774 (the Commerce Control List), Category 9—Aerospace and Propulsion, Export Control Classification Number (ECCN) 9B619 as added April 16, 2013, at 78 FR 22732, effective October 15, 2013, is amended by revising the “Related Controls” paragraph in the List of Items Controlled section to read as follows:

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

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

*Related Controls:* USML Category XIX (f)(1) controls parts, components, accessories, equipment, and attachments specially designed for various models of stealth and low observable aircraft.

\* \* \* \* \*

■ 281. In Supplement No. 1 to part 774 (the Commerce Control List), Category 9—Aerospace and Propulsion, Export Control Classification Number (ECCN)

9B990 is amended by revising the heading to read as follows:

**9B990 Vibration test equipment and “specially designed” “parts” and “components,” n.e.s.**

\* \* \* \* \*

■ 282. In Supplement No. 1 to part 774 (the Commerce Control List), Category 9—Aerospace and Propulsion, Export Control Classification Number (ECCN) 9B991 is amended by revising the heading to read as follows:

**9B991 “Specially designed” equipment, tooling or fixtures, not controlled by 9B001, as described in the List of Items Controlled, for manufacturing or measuring gas turbine blades, vanes or tip shroud castings as follows (see List of Items Controlled).**

\* \* \* \* \*

■ 283. In Supplement No. 1 to part 774 (the Commerce Control List), Category 9—Aerospace and Propulsion, Export Control Classification Number (ECCN) 9D001 is amended by revising the “Related Controls” paragraph in the List of Items Controlled section to read as follows:

**9D001 “Software” “specially designed” or modified for the “development” of equipment or “technology,” controlled by 9A (except 9A018, 9A990 or 9A991), 9B (except 9B990 or 9B991) or 9E003.**

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

*Related Controls:* (1) “Software” “required” for the “development” of items controlled by 9A004 is “subject to the ITAR” (see 22 CFR parts 120 through 130). (2) “Software” “required” for the “development” of equipment or “technology” “subject to the ITAR” is also “subject to the ITAR” (see 22 CFR parts 120 through 130).

\* \* \* \* \*

■ 284. In Supplement No. 1 to part 774 (the Commerce Control List), Category 9—Aerospace and Propulsion, Export Control Classification Number (ECCN) 9D002 is amended by revising the “Related Controls” paragraph in the List of Items Controlled section to read as follows:

**9D002 “Software” “specially designed” or modified for the “production” of equipment controlled by 9A (except 9A018, 9A990, or 9A991) or 9B (except 9B990 or 9B991).**

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

*Related Controls:* (1) “Software” “required” for the “production” of items controlled by 9A004 is “subject to the ITAR” (see 22 CFR parts 120 through 130). (2) “Software” “required” for the “production” of

equipment or “technology” “subject to the ITAR” is also “subject to the ITAR” (see 22 CFR parts 120 through 130).

\* \* \* \* \*

■ 285. In Supplement No. 1 to part 774 (the Commerce Control List), Category 9—Aerospace and Propulsion, Export Control Classification Number (ECCN) 9D003 is amended by revising the “Related Controls” paragraph (2) in the List of Items Controlled section to read as follows:

**9D003 “Software” incorporating “technology” specified by 9E003.h and used in “FADEC Systems” for propulsion systems controlled by 9A (except 9A018, 9A990 or 9A991) or equipment controlled by 9B (except 9B990 or 9B991).**

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

*Related Controls:* \* \* \* (2) “Software” “required” for the “use” of equipment or “technology” “subject to the ITAR” is also “subject to the ITAR” (see 22 CFR parts 120 through 130).

\* \* \* \* \*

■ 286. In Supplement No. 9 to part 774 (the Commerce Control List), Category 9—Aerospace and Propulsion, Export Control Classification Number (ECCN) 9D004 is amended by revising “items” paragraphs b and e to read as follows:

**9D004 Other “software” as follows (see List of Items Controlled).**

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

*Items:*

\* \* \* \* \*

b. “Software” for testing aero gas turbine engines, assemblies, “parts” or “components,” “specially designed” to collect, reduce and analyze data in real time and capable of feedback control, including the dynamic adjustment of test articles or test conditions, as the test is in progress;

\* \* \* \* \*

e. “Software” “specially designed” or modified for the operation of “UAVs” and associated systems, equipment, “components,” controlled by 9A012;

\* \* \* \* \*

■ 287. In Supplement No. 1 to part 774 (the Commerce Control List), Category 9—Aerospace and Propulsion, Export Control Classification Number (ECCN) 9D103 is amended by revising the heading to read as follows:

**9D103 “Software” “specially designed” for modelling, simulation or design integration of “missiles,” or the subsystems controlled by 9A005, 9A007, 9A009, 9A105, 9A106, 9A107, 9A108, 9A109, 9A116 or 9A119. (This entry is**

“subject to the ITAR.” See 22 CFR parts 120 through 130.)

■ 288. In Supplement No. 1 to part 774 (the Commerce Control List), Category 9—Aerospace and Propulsion, Export Control Classification Number (ECCN) 9D104 is amended:

- a. By revising the heading; and
- b. By revising the “Related Controls” paragraph in the List of Items Controlled section to read as follows:

**9D104 “Software” “specially designed” or modified for the “use” of equipment controlled by 9A001, 9A005, 9A006, 9A007, 9A008, 9A009, 9A010, 9A011, 9A012 (for MT controlled items only), 9A101, 9A105, 9A106.c, .d and .e, 9A107, 9A108, 9A109, 9A111, 9A115, 9A116, 9A117, or 9A118.**

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

*Related Controls:* “Software” for commodities controlled by 9A005 to 9A011, 9A105, 9A106.c, 9A107 to 9A109, 9A111, 9A115, 9A116, 9A117, and 9A118 is “subject to the ITAR” (see 22 CFR parts 120 through 130).

\* \* \* \* \*

■ 289. In Supplement No. 1 to part 774 (the Commerce Control List), Category 9—Aerospace and Propulsion, Export Control Classification Number (ECCN) 9D105 is amended by revising the heading to read as follows:

**9D105 “Software” that coordinates the function of more than one subsystem, “specially designed” or modified for “use” in rockets, missiles, or unmanned aerial vehicles capable of achieving a “range” equal to or greater than 300 km. (These items are “subject to the ITAR.” See 22 CFR parts 120 through 130.)**

■ 290. In Supplement No. 1 to part 774 (the Commerce Control List), Category 9—Aerospace and Propulsion, Export Control Classification Number (ECCN) 9E001 is amended by revising the “Related Controls” paragraphs (2) and (3) in the List of Items Controlled section to read as follows:

**9E001 “Technology” according to the General Technology Note for the “development” of equipment or “software,” controlled by 9A001.b, 9A004 to 9A012, 9B (except 9B990 or 9B991) or 9D (except 9D990 or 9D991).**

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

*Related Controls:* \* \* \* (2) The “technology” required for the “development” of equipment controlled by 9A004 is “subject to the ITAR” (see 22 CFR parts 120 through 130). (3) “Technology,” required for the “development” of equipment or “software” “subject to the ITAR,” is also “subject to

the ITAR” (see 22 CFR parts 120 through 130).

\* \* \* \* \*

■ 291. In Supplement No. 1 to part 774 (the Commerce Control List), Category 9—Aerospace and Propulsion, Export Control Classification Number (ECCN) 9E002 is amended by revising the “Related Controls” paragraphs (3) and (4) in the List of Items Controlled section to read as follows:

**9E002 “Technology” according to the General Technology Note for the “production” of equipment controlled by 9A001.b, 9A004 to 9A011 or 9B (except 9B990 or 9B991).**

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

*Related Controls:* \* \* \* (3) The “technology” required for the “development” of equipment controlled by 9A004 is “subject to the ITAR” (see 22 CFR parts 120 through 130). (4) “Technology,” required for the “development” of equipment or “software” “subject to the ITAR,” is also “subject to the ITAR” (see 22 CFR parts 120 through 130).

\* \* \* \* \*

■ 292. In Supplement No. 1 to part 774 (the Commerce Control List), Category 9—Aerospace and Propulsion, Export Control Classification Number (ECCN) 9E003 is amended:

- a. By revising the “Related Controls” paragraph in the List of Items Controlled section;
- b. By revising the introductory text of “items” paragraphs a and a.3 in the List of Items Controlled section;
- c. By revising “items” paragraphs a.4, a.7, a.8, and the “Technical Note” to paragraph a.8 in the List of Items Controlled section;
- d. By revising the introductory text of “items” paragraph c in the List of Items Controlled section; and
- e. By revising “items” paragraphs f introductory text, f.1 introductory text, f.1.d, h.1, h.2, i.1, i.2, and j in the List of Items Controlled section to read as follows:

**9E003 Other “technology” as follows (see List of Items Controlled).**

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

*Related Controls:* (1) Hot section “technology” specifically designed, modified, or equipped for military uses or purposes, or developed principally with U.S. Department of Defense funding, is “subject to the ITAR” (see 22 CFR parts 120 through 130). (2) “Technology” is subject to the EAR when actually applied to a commercial aircraft engine program. Exporters may seek to establish

commercial application either on a case-by-case basis through submission of documentation demonstrating application to a commercial program in requesting an export license from the Department of Commerce in respect to a specific export, or in the case of use for broad categories of aircraft, engines, “parts” or “components,” a commodity jurisdiction determination from the Department of State.

\* \* \* \* \*

*Items:*

a. “Technology” “required” for the “development” or “production” of any of the following gas turbine engine “parts,” “components” or systems:

\* \* \* \* \*

a.3. “Parts” or “components” manufactured from any of the following:

\* \* \* \* \*

a.4. Uncooled turbine blades, vanes, “tip shrouds” or other “parts” or “components,” designed to operate at gas path total (stagnation) temperatures of 1,323 K (1,050°C) or more at sea-level static take-off (ISA) in a ‘steady state mode’ of engine operation;

\* \* \* \* \*

a.7. Gas turbine engine “parts” or “components” using “diffusion bonding” “technology” controlled by 2E003.b;

a.8. ‘Damage tolerant’ gas turbine engine rotor “parts” or “components” using powder metallurgy materials controlled by 1C002.b; or

**Technical Note:** ‘Damage tolerant’ “parts” and “components” are designed using methodology and substantiation to predict and limit crack growth.

\* \* \* \* \*

c. “Technology” “required” for manufacturing cooling holes, in gas turbine engine “parts” or “components” incorporating any of the “technologies” specified by 9E003.a.1, 9E003.a.2 or 9E003.a.5, and having any of the following:

\* \* \* \* \*

f. “Technology” “required” for the “production” of “specially designed” “parts” or “components” for high output diesel engines, as follows:

f.1. “Technology” “required” for the “production” of engine systems having all of the following “parts” and “components” employing ceramics materials controlled by 1C007:

\* \* \* \* \*

f.1.d. One or more other “part” or “component” (including exhaust ports, turbochargers, valve guides, valve assemblies or insulated fuel injectors);

h. \* \* \*

h.1. “Development” “technology” for deriving the functional requirements for the “parts” or “components” necessary for the “FADEC system” to regulate engine thrust or shaft power (e.g., feedback sensor time constants and accuracies, fuel valve slew rate);

h.2. “Development” or “production” “technology” for control and diagnostic “parts” or “components” unique to the

“FADEC system” and used to regulate engine thrust or shaft power;

i. \* \* \*

i.1. “Development” “technology” for deriving the functional requirements for the “parts” or “components” that maintain engine stability;

i.2. “Development” or “production” “technology” for “parts” or “components” unique to the adjustable flow path system and that maintain engine stability;

\* \* \* \* \*

j. “Technology” not otherwise controlled in 9E003.a.1 through a.8, a.10, and .h and used in the “development”, “production”, or overhaul of hot section “parts” or “components” of civil derivatives of military engines controlled on the U.S. Munitions List.

\* \* \* \* \*

■ 293. In Supplement No. 1 to part 774 (the Commerce Control List), Category 9—Aerospace and Propulsion, Export Control Classification Number (ECCN) 9E101 is amended by revising the “Related Controls” paragraph in the List of Items Controlled section to read as follows:

**9E101 “Technology” according to the General Technology Note for the “development,” “production” or “use” of commodities or software controlled by 9A012 (for MT controlled commodities only), 9A101, 9A103 to 9A111, 9A115 to 9A119, 9C110, 9D101, 9D103, 9D104 or 9D105.**

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

*Related Controls:* “Technology” controlled by 9E101 for items in 9A101.b, 9A104 to 9A111, 9A115 to 9A119, 9D103, and 9D105 is “subject to the ITAR” (see 22 CFR parts 120 through 130).

\* \* \* \* \*

■ 294. In Supplement No. 1 to part 774 (the Commerce Control List), Category 9—Aerospace and Propulsion, Export Control Classification Number (ECCN) 9E102 is amended by revising the “Related Controls” paragraph (2) in the List of Items Controlled section to read as follows:

**9E102 “Technology” according to the General Technology Note for the “use”**

**of space launch vehicles specified in 9A004, or commodities or software controlled by 9A005 to 9A012, 9A101, 9A104 to 9A111, 9A115 to 9A119, 9B105, 9B106, 9B115, 9B116, 9B117, 9D101, 9D103, 9D104 or 9D105.**

\* \* \* \* \*

**List of Items Controlled**

\* \* \* \* \*

*Related Controls:* \* \* \*

(2) “Technology” controlled by 9E102 for commodities or software “subject to the ITAR” (see 22 CFR parts 120 through 130) in 9A004 to 9A011, 9A101.b, 9A104, 9A105, 9A106.a to .c, 9A107 to 9A111, 9A115 to 9A119, 9B115, 9B116, 9D103, specified software in 9D104, and 9D105 is “subject to the ITAR” (see 22 CFR parts 120 through 130).

\* \* \* \* \*

Dated: September 23, 2013.

**Kevin J. Wolf,**

*Assistant Secretary for Export Administration.*

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