

**DEPARTMENT OF COMMERCE****Bureau of Industry and Security****15 CFR Parts 740 and 774****[Docket No.—120201082-3709-02]****RIN 0694-AF58****Control of Military Training Equipment, Energetic Materials, Personal Protective Equipment, Shelters, Articles Related to Launch Vehicles, Missiles, Rockets, Military Explosives, and Related Items****AGENCY:** Bureau of Industry and Security, Department of Commerce.**ACTION:** Final rule.

**SUMMARY:** This rule implements four previously proposed rules, and adds to the Export Administration Regulations (EAR) controls on energetic materials, personal protective equipment, shelters, military training equipment, articles related to launch vehicles, missiles, rockets, military explosives, and related items that the President has determined no longer warrant control on the United States Munitions List (USML). This rule also adds to the EAR controls on items within the scope of the Munitions List (WAML) of the Wassenaar Arrangement on Export Controls for Conventional Arms and Dual-Use Goods and Technologies (Wassenaar Arrangement) that are not specifically identified on the USML or the Commerce Control List (CCL), but that were subject to USML jurisdiction. Finally, this rule moves certain items that were already subject to the EAR to the new Export Control Classification Numbers (ECCNs) created by this rule. This rule is being published in conjunction with the publication of a Department of State, Directorate of Defense Trade Controls rule revising USML Categories IV, V, IX, X, and XVI to control those articles the President has determined warrant control in those categories of the USML. Both rules are part of the President's Export Control Reform Initiative. The revisions in this final rule are also part of Commerce's retrospective regulatory review plan under Executive Order (EO) 13563.

**DATES:** This rule is effective July 1, 2014.

**FOR FURTHER INFORMATION CONTACT:** For questions regarding energetic materials and related items controlled under ECCNs 1B608, 1C608, or 1D608 and personal protective equipment, shelters and related items controlled under ECCNs 1A613, 1B613, 1D613 or 1E613, contact Michael Rithmire, Office of National Security and Technology

Transfer Controls, at (202) 482-6105 or [michael.rithmire@bis.doc.gov](mailto:michael.rithmire@bis.doc.gov).

For questions regarding military training equipment and related items controlled under ECCNs 0A614, 0B614, 0D614 or 0E614, contact Daniel Squire, Office of National Security and Technology Transfer Controls, at (202) 482-3710 or [daniel.squire@bis.doc.gov](mailto:daniel.squire@bis.doc.gov).

For questions regarding items related to launch vehicles, missiles, rockets, and military explosive devices controlled under ECCNs 0A604, 0B604, 0D604 or 0E604 and ECCNs 9A604, 9B604, 9D604 or 9E604, contact Dennis Krepp, Office of National Security and Technology Transfer Controls, at (202) 482-1309 or [dennis.krepp@bis.doc.gov](mailto:dennis.krepp@bis.doc.gov).

**ADDRESSEES:** Commerce's full retrospective regulatory review plan can be accessed at: <http://open.commerce.gov/news/2011/08/23/commerce-plan-retrospective-analysis-existing-rules>.

**SUPPLEMENTARY INFORMATION:****Background**

This final rule is part of the Administration's Export Control Reform (ECR) Initiative. In August 2009, President Obama directed the Administration to conduct a broad-based review of the U.S. export control system to identify additional ways to enhance national security. In April 2010, then-Secretary of Defense Robert M. Gates, describing the initial results of that effort, explained that fundamental reform of the U.S. export control system is necessary to enhance our national security. Implementing ECR includes amending the International Traffic in Arms Regulations (ITAR) and its U.S. Munitions List (USML), so that they control only those items that provide the United States with a critical military or intelligence advantage or otherwise warrant such controls, and amending the Export Administration Regulations (EAR) to control military items that do not warrant USML controls. This series of amendments to the ITAR and the EAR will reform the U.S. export control system to enhance our national security by: (i) Improving the interoperability of U.S. military forces with allied countries; (ii) strengthening the U.S. industrial base by, among other things, reducing incentives for foreign manufacturers to design out and avoid US-origin content and services; and (iii) allowing export control officials to focus government resources on transactions that pose greater national security, foreign policy, or proliferation concerns than those involving our NATO allies and other multi-regime partners.

On April 16, 2013, BIS published a final rule setting forth the framework for

adding to the CCL items that the President has determined no longer warrant control on the USML through the creation of "600 series" Export Control Classification Numbers (ECCNs) (78 FR 22660, April, 16, 2013) (herein the "April 16 (initial implementation) rule"). The "600 series" structure is described in the preamble to that rule at pages 22661-22663 and 22691-22692 and in regulatory text at page 22727 and is not repeated here. This rule follows that structure in creating new ECCNs to control energetic materials and related items, personal protective equipment, shelters and related items, military training equipment and related items, and articles related to launch vehicles, missiles, rockets, military explosives and related items on the CCL.

The changes described in this rule and the State Department's rule amending Categories IV, V, IX, X and XIV of the USML are based on a review of those categories by the Defense Department, which worked with the Departments of State and Commerce in preparing the amendments. The review was focused on identifying the types of articles that are now controlled by the USML that either (i) are inherently military and otherwise warrant control on the USML, or (ii) if of a type common to civil applications, possess parameters or characteristics that provide a critical military or intelligence advantage to the United States and that are almost exclusively available from the United States. If an article was found to satisfy either or both of those criteria, the article remains on the USML. If an article was found not to satisfy either criterion, but is nonetheless a type of article that is "specially designed" for military applications, then, generally, it is identified in one of the new "600 series" ECCNs created by this rule. No articles from Category XVI—Nuclear Weapons Related Articles are identified in "600 series" ECCNs.

Section 38(f) of the AECA (22 U.S.C. 2778(f)) obligates the President to review periodically the USML "to determine what items, if any, no longer warrant export controls under" the AECA. The President must report the results of the review to Congress and wait 30 days before removing any such items from the USML. The report must "describe the nature of any controls to be imposed on that item under any other provision of law" (22 U.S.C. 2778(f)(1)). The Department of State made the congressional notification required by Section 38(f) of the AECA for removal of these items from the USML.

All references to the USML in this rule are to the list of defense articles

that are controlled for purposes of export, reexport, retransfer, temporary import, or brokering pursuant to the ITAR, and not to the list of defense articles on the United States Munitions Import List (USMIL) that are controlled by the Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF) for purposes of permanent import under its regulations at 27 CFR Part 447. Pursuant to section 38(a)(1) of the AECA, all defense articles controlled for export or import, or that are subject to brokering controls, are part of the “USML” under the AECA. All defense articles described in the USMIL or the USML are subject to the brokering controls administered by the U.S. Department of State in part 129 of the ITAR. The transfer of defense articles from the ITAR’s USML to the EAR’s CCL, for purposes of export controls, does not affect the list of defense articles controlled on the USMIL under the AECA for purposes of permanent import or brokering controls.

On January 18, 2011, President Barack Obama issued Executive Order (EO) 13563, affirming general principles of regulation and directing government agencies to conduct retrospective reviews of existing regulations. The revisions in this final rule are part of Commerce’s retrospective regulatory review plan under EO 13563. Commerce’s full plan, completed in August 2011, can be accessed at: <http://open.commerce.gov/news/2011/08/23/commerce-plan-retrospective-analysis-existing-rules>.

## Proposed Rules

This rule implements amendments to the EAR proposed in the following four rules:

- “Revisions to the Export Administration Regulations (EAR): Control of Energetic Materials and Related Items That the President Determines No Longer Warrant Control Under the United States Munitions List (USML)”, (RIN 0694–AF53) (77 FR 25932, May 2, 2012) (herein “the May 2 (energetic materials) rule”);
- “Revisions to the Export Administration Regulations (EAR): Control of Personal Protective Equipment, Shelters, and Related Items the President Determines No Longer Warrant Control Under the United States Munitions List (USML)”, (RIN 0694–AF58) (77 FR 33688, June 7, 2012) (herein “the June 7 (protective equipment) rule”);

- “Revisions to the Export Administration Regulations (EAR): Control of Military Training Equipment and Related Items the President Determines No Longer Warrant Control Under the United States Munitions List

(USML)” (RIN 0694–AF54) (77 FR 35310, June 13, 2012) (herein “the June 13 (training equipment) rule”); and

- “Revisions to the Export Administration Regulations (EAR): Articles the President Determines No Longer Warrant Control Under the U.S. Munitions List That Are Related To Launch Vehicles, Missiles, Rockets, and Military Explosive Devices” (78 FR 6750, January 31, 2013) (RIN 0694–AF56) (herein “the January 31 (launch vehicles) rule”).

BIS’ responses to those comments and changes that apply only to a single set of controlled items are addressed in discrete sections below. Discussion of changes made by this rule that apply more broadly (cross references to ECCN 0A919, notes on forgings and castings, the United Nations reason for control, removal of the .y.99 paragraphs separate definitions for “accessories” and “attachments” and the composition of the entries for software and technology) all follow immediately below.

## Broadly Applicable Changes Made by This Rule

### *Cross References to ECCN 0A919*

In keeping with the pattern established in “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” (78 FR 40892) (July 8, 2013) (herein “July 8 (vehicles, vessels and miscellaneous equipment) rule”), this final rule adds to the “related controls” paragraph of Product Groups A, B, C, and D of the “600 series” ECCNs the following sentence: “See ECCN 0A919 for foreign-made ‘military commodities’ that incorporate more than a *de minimis* amount of U.S.-origin “600 series” controlled content.” This is a non-substantive change from what was proposed.

### *Forgings and Castings*

The four proposed rules on which this rule is based included a note in ECCNs 0A604.x, 1B608.x, 1A613.x, 0A614.x, 0B614.x and 9A604.x which stated that: “Forgings, castings, and other unfinished products, such as extrusions and machined bodies, that have reached a stage in manufacture where they are clearly identifiable by material composition, geometry, or function as commodities controlled by [ECCN].x are controlled by [ECCN].x.”

This final rule adds the phrase “mechanical properties” to notes in

ECCNs 0A604.x, 1A613.x 0A604.x and 9A604.x, because there may be circumstances when the mechanical properties, as well as the material composition, geometry or function, of a forging, casting, or unfinished product may have been altered specifically for a part or component controlled by one of those ECCNs. The omission of “mechanical properties” from the lists in the proposed rules was an error that is being corrected in this rule. This final rule removes the note from ECCNs 1B608.x and 0B614.x because it is not relevant to product group B ECCNs, which apply to test, inspection, and production equipment.

### *United Nations (UN) Reason for Control*

None of the four proposed rules on which this rule is based included the United Nations (UN) reason for control in any of their ECCNs. Consistent with the April 16 (initial implementation) rule, this final rule includes the UN controls described in § 746.1(b) of the EAR in all of the ECCNs that it creates. These controls are consistent with the amendments contained in a final rule that BIS published on July 23, 2012 (77 FR 42973), titled “Export and Reexport Controls to Rwanda and United Nations Sanctions under the Export Administration Regulations.” That rule amended § 746.1 of the EAR to describe the licensing policy that applies to countries subject to a United Nations Security Council (UNSC) arms embargo and to limit the use of license exceptions to such countries. Applying that licensing policy and related license exception restrictions to the new “600 series” ECCNs that are created by this final rule is appropriate, because of the military nature of the items controlled under these new ECCNs.

### *Paragraph .y.99*

The May 2 (energetic materials) rule, the June 7 (protective equipment) rule and the June 13 (training equipment) rule proposed including .y.99 paragraphs to ECCNs 1B608, 1D608, 1E608, 1A613, 1B613, 1D613, 1E613, 0A614, 0B614, 0D614 and 0E614. Those paragraphs would have imposed the antiterrorism (AT Column 1) reason for control on items that would otherwise be controlled in that ECCN but that had been determined to be subject to the EAR in a commodity jurisdiction determination issued by the Department of State and that are not elsewhere identified on the CCL (*i.e.*, were designated as EAR99). Applying the AT Column 1 reason for control would have increased the number of circumstances under which these items would require a license. As stated in the preamble to

the April 16 (initial implementation) rule (See 78 FR 22660, 22663, April 16, 2013), BIS agreed with a commenter that the burden of tracking down and analyzing whether items formally determined not to be subject to the ITAR that were also EAR99 items because they were not identified on the CCL outweighs the once-contemplated organizational benefits of creating the .y.99 control. Such items have already gone through an interagency review process that concluded whether the items were subject to the ITAR. Thus, BIS has determined that any such items should retain EAR99 status if not otherwise identified on the CCL and this final rule does not contain any .y.99 paragraphs.

#### Accessories and Attachments

The May 2 (energetic materials) rule, the June 7 (protective equipment) rule, and the June 13 (training equipment) rule enclosed the phrase “accessories and attachments” in quotation marks throughout their regulatory texts, in keeping with the July 15 (framework) rule, which proposed a single definition for that phrase. Subsequently, BIS published a proposed rule entitled “‘Specially Designed’ Definition” (77 FR 36409, June 19, 2012), which proposed, *inter alia*, creating separate, but identical definitions for “accessories” and for “attachments” to allow for instances when only one of the terms would be used. The April 16 (initial implementation) rule, which became effective on October 15, 2013, adopted that change as a final rule. Accordingly, this final rule identifies “accessories” and “attachments” as separate terms wherever they appear throughout the regulatory text.

#### Consistency of Controls

This final rule diverges in certain instances from the four proposed rules on which it was based with respect to the composition of the ECCNs. Software and technology ECCNs related to end items, production or other equipment, or materials generally control software and technology for the development and production of those items, and for some combination of the following six elements: operation, installation, maintenance, repair, overhaul, or refurbishing of those items. Separate technical teams determined the scope of control for different groups of ECCNs. As a result, different software and technology entries varied in the number and type of functions controlled.

While this variation was not technically inappropriate and did not receive public comments when proposed in four separate rules, BIS is

concerned that retaining this variation would complicate compliance. Standard text across ECCNs is a simpler approach. Therefore, each software ECCN in this final rule will control software for “development,” “production,” operation, or maintenance of the relevant items. Each new “600 series” technology ECCN in this final rule will control technology for “development,” “production,” operation, installation, maintenance, repair, overhaul, or refurbishing of those items. To the extent that a particular function does not apply to a particular item because no software or technology to perform the function with respect to that item exists, no burden is imposed. Controlling a larger number of functions in technology ECCNs is not an increase in burden, because all six functions are now controlled for technology on the USML.

Similarly, all “production” “equipment” ECCNs will control test, inspection, and production equipment “specially designed” for the “development,” “production,” repair, overhaul, or refurbishing of the relevant items.

#### Military Training Equipment and Related Items

##### Public Comments and BIS Responses

BIS received comments from one individual and one organization in response to the June 13 (training equipment) rule.

**Comment:** One commenter stated that the proposed rule (in combination with the Department of State’s June 13, 2012 (military training equipment) rule) fails to cover some of the military training commodities and related test, inspection and production equipment, software and technology on the Wassenaar Arrangement Munitions List. This commenter pointed out WAML category ML14, which applies to military training equipment, uses terms such as “specialized” and “modified for” in describing such equipment, whereas the June 13 (training equipment) rule used the term “specially designed.” The commenter suggested that the meanings of “specialized” and “modified for” could be broader than the meaning of “specially designed.” This commenter also suggested that the U.S. Government should seek a change in the WAML to match the proposed changes to the EAR and not publish a final rule until such a change is adopted.

**Response:** BIS believes that the definition of “specially designed,” which became effective on October 15, 2013, in § 772.1 of the EAR, will not cause any of the gaps in coverage that

this commenter suggests. The definition initially encompasses items “for use” in an article on the USML or an item on the CCL and then goes on to release items that meet one or more of six specific criteria. BIS believes that the term “for use in an article on the USML or an item on the CCL” covers anything that would be covered by the terms “specialized” or “modified for” and that one of the six criteria releasing items from the definition would release anything that would not be covered by the terms “specialized” or “modified for.” Accordingly, BIS is making no changes to the rule and does not agree that a change to the WAML is needed before this rule is published.

**Comment:** One commenter indicated that proposed ECCN 0D614, which applies to certain software directly related to military training equipment, is narrower than WAML category ML21, which applies to *inter alia* certain “Software . . . for . . . equipment, materials or software, specified by the Munitions List,” leaving such software for software not subject to export license requirements despite its presence on the WAML.

**Response:** BIS does not agree with this commenter’s interpretation of WAML category ML21. BIS believes that the phrase “specified by the Munitions List” in category ML21 refers to categories on the WAML that cover equipment, materials or software, not to WAML category ML21 itself, which applies to software generally. WAML category ML14 applies to military training equipment, which, in this rule, is covered by ECCN 0A614. ECCN 0D614 applies to software for that equipment, thereby implementing the scope of WAML category ML21 as it applies to software for military training equipment.

**Comment:** One commenter stated that the military training equipment in proposed ECCN 0A614 would overlap proposed ECCN 0A617.d test models for development of USML or 600 series items.

**Response:** BIS does not agree that the overlap suggested by the commenter exists. ECCN 0A617.d (as published at 78 FR 40892, 40913, July 8, 2013) will, when effective, apply to test models used in the “development” of defense articles controlled by USML Categories IV, VI, VII and VIII. The term “development” is defined in the EAR to relate to activities that occur prior to serial production of an item (15 CFR 772.1). ECCN 0A614 will apply to training equipment, which may include some models used for training, but any test models used at the development stage would be covered by ECCN

0A617.d. BIS does not believe that any change in the wording of either ECCN is necessary to make this point.

**Comment:** One commenter stated that proposed 0A614.a equipment for military training not in Category IX includes military trainer aircraft in proposed ECCN 9A610.a in the November 7 (aircraft) rule and in existing ECCN 9A991.a.2.

**Response:** Proposed ECCN 0A614.a applies to training simulators. ECCN 9A610.a, which has become effective since the commenter made this comment, and ECCN 9A991.a.2 apply to operational aircraft. Therefore, the duplication that the commenter suggests does not actually exist.

**Comment:** One commenter objected to the .y.99 paragraphs in the ECCNs generally. The commenter pointed out that the .y.99 paragraphs imposed AT controls on items that previously had been classified by the U.S. government as EAR99. The other commenter stated that the header to ECCN 0A614.y is limited to parts, components, accessories and attachments, whereas paragraph .y.99 of that ECCN is not so limited.

**Response:** BIS agrees that items previously determined to be EAR99 should not be added to the 600 series as a result of this rule. Therefore, this final rule contains no .y.99 paragraphs.

**Comment:** One commenter stated that commodities in proposed ECCN 0B614 are included in existing ECCN 2B018 and related software and technology for those ECCN 0B614 commodities in ECCNs 0D614 and 0E614 are included in existing ECCNs 2D018 and 2E018, respectively.

**Response:** ECCN 2B018 covers certain enumerated equipment used in armaments manufacture. ECCN 0B614 covers test, inspection and production equipment specially designed for military training equipment. Although some of that training equipment is used to train personnel in the use of armaments, BIS believes that there is little, if any, overlap between ECCNs 0B614 and 2B018. In the event that such overlap exists, the order of review set forth in Supplement No. 4 to part 774 of the EAR, which became effective on October 15, 2013 would give a 600 series ECCN precedence over a non-600 series ECCN, thereby unambiguously resolving any overlap in favor of ECCN 0B614. In the same way, any overlap between ECCNs 0D614 and 2D018 or between ECCNs 0E614 and 2E018 that may exist would be unambiguously resolved in favor of ECCN 0D614 and 0E614. Accordingly, BIS is making no changes to this final rule in response to this comment.

**Comment:** One commenter stated that the coverage of "parts" and "attachments" in ECCN 0A614.x and .y in effect extended the ECCN to things not covered on the WAML because the words "parts" and "attachments" do not appear on the WAML.

**Response:** The only items listed in ECCN 0A614.y in the June 13 (training equipment) rule were in paragraph .y.99. As noted above, that paragraph has been removed from this final rule and because nothing else was in the .y paragraph, the entire paragraph has been removed from this final rule. Therefore, with respect to ECCN 0A614.y, the commenter's point has become moot.

ECCN 0A614.x applies to certain "specially designed" "parts," "components," "accessories" and "attachments" for military training equipment. The WAML category ML14 uses the phrase "specially designed components and attachments" for military training equipment. The words "parts" and "accessories" are not used in describing things anywhere on WAML or on the Wassenaar Arrangement Dual-Use List. Nevertheless, longstanding practice has been to interpret the word "components" in the WAML as including the types of things that are in the definitions of "accessories," "components," and "parts" that became effective on October 15, 2013. Therefore, BIS concludes that removing the terms "parts" and "attachments" from ECCN 0A614.x would exclude things that are covered by WAML category ML14.

**Comment:** One commenter stated that ECCNs 0A614.x and 0B614.y.99 cover parts and components for certain items on the USML that are not on the WAML. Additionally, that commenter stated that ECCNs 0D614 and 0E614, because they cover software and technology for, *inter alia*, ECCNs 0A614.x and 0B614.y.99, cover software and technology that is not on the WAML.

**Response:** ECCN 0B614.y has been removed from this final rule for the same reason that 0A614.y was removed as noted above, making the commenter's remarks regarding paragraph .y moot.

With respect to 0A614.x, 0D614 and 0E614, BIS acknowledges that the USML applies to things that are not on the WAML. BIS is not aware of any statement by the Department of State, which administers the USML, or by any other unit of the U.S. Government that the USML is or should be or is intended to be limited to items that are on the WAML. The purpose of the ECCNs created by this rule (and all other 600-series ECCNs created as part of the President's Export Control Reform

Initiative) is to control on the CCL items that the President determines no longer warrant control under the USML without regard to whether those items are also on the WAML. Accordingly, BIS is making no changes to the rule in response to this comment.

#### *Revision to ECCN 9A610 to Avoid Duplicative Coverage Military Instrument Flight Trainers*

ECCN 9A610.t reads: "Military aircraft instrument flight trainers that are not 'specially designed' to simulate combat." (See USML Cat IX for controls on such trainers that are "specially designed" to simulate combat.) The June 13 (training equipment) rule proposed a note for ECCN 0A614.a that reads: "Note: This entry includes operational flight trainers, radar target trainers, flight simulators for aircraft classified under ECCN 9A610.a, human-rated centrifuges, radar trainers for radars classified under ECCN 3A611, instrument flight trainers for military aircraft, navigation trainers for military items, target equipment, armament trainers, military pilotless aircraft trainers, mobile training units and training 'equipment' for ground military operations." This rule removes the phrase "radar trainers for radars classified under 3A611" from that note. ECCN 3A611 is a proposed new ECCN that has not yet been incorporated into the EAR (see 77 FR 70945, 70952, November 28, 2012 and 78 FR 45026, 45045, July 25, 2013). This change is needed to avoid referencing a non-existent ECCN in a final rule. BIS expects that, as part of the ECR Initiative, a new ECCN 3A611 will be created, that it will control, *inter alia*, some radars and that ECCN 0A614 will control radar trainers for those radars. BIS expects to restore the phrase to this note when ECCN 3A611 is created.

To remove duplicative coverage of military instrument flight trainers, this rule removes and reserves ECCN 9A610.t. BIS believes that this structure will make the EAR more consistent by classifying all military training equipment that is not on the USML under ECCN 0A614. Trainer aircraft would continue to be either in ECCN 9A610.a or in USML Category VIII or in ECCN 9A991.

#### *Revision to 0A614 to be Consistent With "600 Series" Order of Review*

In addition to the changes made in response to the public comments described above, this rule removes from ECCN 0A614.x text that appeared in the proposed rule, which would have excluded from that ECCN items that appear elsewhere on the CCL. This

change is made to be consistent with the CCL order of review in Supplement No. 4 to part 774 of the EAR, which became effective on October 15, 2013. That order of review gives for 600 series ECCNs precedence over other ECCNs.

#### Energetic Materials and Related Items

BIS received comments from six parties in response to the May 2 (energetic materials) rule.

##### ECCN 1C111.a.1 (Aluminum Powder)

**Comment:** Two commenters noted that the Related Definitions paragraph in ECCN 1C111 indicated particle size must be determined “through the use of best industrial practices,” while proposed ECCN 1C111.a.1.a limited the methods for determining particle size to the following methods: (1) ISO 2591:1988 (sieving techniques); or (2) national equivalents, such as JIS Z8820 (sedimentation). As an alternative, the respondents recommended that the “Light Scattering” method be used to determine particle size distribution in metal powders, as described by ASTM standard B 822-02, which is widely used in the metal powder industry and in the manufacture of propellants.

**Response:** This final rule retains the method of determining particle size “according to ISO 2591:1988 or national equivalents,” but eliminates the specific reference in ECCN 1C111.a.1 to JIS Z8820. BIS made this change to clarify that ECCN 1C111.a.1 does not limit exporters to using only the JIS Z8820 standard if they choose to determine particle size by using “national equivalents” to ISO 2591:1988.

**Comment:** Three commenters noted that ECCN 1C111.a.1, as proposed to be amended by the May 2 (energetic materials) rule, appeared to be a combination of the then current CCL controls on aluminum powder (as proposed in ECCN 1C111.a.1.a) and the then current USML Category V controls (as proposed in ECCN 1C111.a.1.b), neither of which clearly described the aluminum powders subject to control. Two of the commenters also indicated that the controls in ECCN 1C111.a.1 should include more specific parameters for particle size.

**Response:** This final rule amends ECCN 1C111.a.1 consistent with the controls in Category II, Item 4.C.2.c of the Missile Technology Control Regime (MTCR) Annex, which controls: “Spherical or spheroidal aluminum powder (CAS 7429-90-5) in particle size of less than  $200 \times 10^{-6}$  m (200  $\mu$ m) and an aluminum content of 97% by weight or more, if at least 10% of the total weight is made up of particles of less than 63  $\mu$ m, according to ISO

2591:1988 or national equivalents.” These revised controls provide a specific upper limit on particle size (*i.e.*, all particles that have a particle size of less than  $200 \times 10^{-6}$  m (200  $\mu$ m) and that meet all of the other technical characteristics indicated in ECCN 1C111.a.1, including 10% of the total weight consisting of particles of less than 63  $\mu$ m, are subject to control under this ECCN).

**Comment:** Two commenters expressed their concern that, within the context of ECCN 1C111.a.1.b as proposed by the May 2 (energetic materials) rule, the meaning of the term “spheroidal” was not clear and, furthermore, neither was the method by which the percentage of “spheroidal” particles would be measured (in determining whether more than 50% of the particles are “spheroidal”).

**Response:** As noted above, this final rule addresses the commenters’ concerns by amending ECCN 1C111.a.1 to be consistent with the controls in Category II, Item 4.C.2.c of the MTCR Annex and by removing the controls in proposed ECCN 1C111.a.1.b. ECCN 1C111.a.1, as amended by this final rule, uses the term “spheroidal,” in conjunction with the term “spherical,” to describe the types of aluminum powder that are subject to control under this ECCN.

**Comment:** Two commenters recommended that spherical or spheroidal aluminum powder be made subject to less stringent controls than those described in the proposed amendments to ECCN 1C111.a.1 in the May 2 (energetic materials) rule. That rule proposed controlling spherical or spheroidal aluminum powder for both missile technology (MT) and AT reasons to destinations indicated under MT Column 1 and AT Column 1, respectively, on the Commerce Country Chart (Supplement No. 1 to part 738 of the EAR). In support of their recommendation, the commenters noted the use of aluminum powders in a wide range of predominately commercial and civil applications, including the production of conductive inks for photovoltaic applications, automotive pigments, thermal spray applications, refractory materials, and heat management devices and, in addition, cited the widespread availability of technology for the production of spherical or spheroidal aluminum powder.

**Response:** This final rule does not adopt the commenters’ recommendation. The spherical or spheroidal aluminum powder described in ECCN 1C111.a.1, as amended by this final rule, is identified under Category

II, Item 4.C.2.c of the MTCR Annex. Therefore, consistent with U.S. obligations as a participating country in the MTCR, this final rule controls spherical or spheroidal aluminum powder for MT reasons (as well as AT reasons) and requires a license to all destinations indicated under MT Column 1 on the Commerce Country Chart (*i.e.*, all countries, except for Canada).

##### ECCN 1C111.a.3.f (Chlorine Trifluoride)

**Comment:** One commenter recommended that BIS restrict the application of MT controls on chlorine trifluoride, as proposed to be controlled under ECCN 1C111.a.3.f in the May 2 (energetic materials) rule, by creating an exemption from MT controls for chlorine trifluoride that is purified and packaged in commercial quantities for civil applications. Specifically, the respondent recommended that BIS add a Note to ECCN 1C111.a.3.f to read as follows: “Chlorine trifluoride is not controlled for MT reasons when purified and packaged in commercial quantities for civil applications.”

**Response:** This final rule does not adopt the commenter’s recommendation. Chlorine trifluoride, which is described in ECCN 1C111.a.3.f as amended by this final rule, is identified under Category II, Item 4.C.4.a.6 of the MTCR Annex and, prior to the effective date of this final rule, continues to be controlled for MT/AT/UN reasons under ECCN 1C018.m and for NP/AT reasons under ECCN 1C238. Consistent with U.S. obligations as a participating country in the text of the MTCR Annex and the Nuclear Suppliers Group Dual-Use Annex (Item 2.C.6), this final rule amends ECCN 1C111 to control chlorine trifluoride under ECCN 1C111.a.3.f for MT/NP/AT reasons.

##### ECCN 1C111.b.2 (Hydroxy-Terminated Polybutadiene (Including Hydroxyl-Terminated Polybutadiene) (HTPB))

**Comment:** One commenter recommended that BIS authorize exports and reexports of Hydroxyl-terminated polybutadiene (“HTPB”), under the Special Comprehensive License (SCL) procedure, by amending § 752.3(a)(1) of the EAR to remove the restriction on the eligibility of MT-controlled items. The commenter also recommended that “sample shipments” of HTPB be excluded from control under ECCN 1C111. In support of these recommendations, the commenter noted the following: (1) HTPB resin products are a staple of the manufacturing process for a broad range of commercial sectors (*e.g.*, automotive, electronic); (2) HTPB is widely available and is

manufactured in every continent; and (3) many MTCR-participating countries are leading exporters of HTPB and the lack of parity in the way various countries interpret their MTCR obligations provides an unfair advantage to non-U.S. manufacturers of HTPB products.

**Response:** This final rule does not adopt the commenter's recommendations. HTPB, which is described in ECCN 1C111.b.2 as amended by this final rule, is identified under Category II, Item 4.C.5.b of the MTCR Annex. The controls on HTPB, as described in ECCN 1C111.b.2, are consistent with U.S. obligations as a participating country in the MTCR. Specifically, HTPB requires a license for MT reasons under MT Column 1, which includes all destinations except for Canada. Furthermore, neither this final rule nor the State Department's companion rule change the controls that apply to HTPB. ECCN 1C111.b.2, as amended by this final rule, continues to control Hydroxy-terminated polybutadiene (including hydroxyl-terminated polybutadiene) (HTPB), except for HTPB (hydroxyl-terminated polybutadiene) with a hydroxyl functionality equal to or greater than 2.2 and less than or equal to 2.4, a hydroxyl value of less than 0.77 meq/g, and a viscosity at 30 °C of less than 47 poise (CAS 69102-90-5), which remains subject to the ITAR (see 22 CFR 121.1, Category V). The export controls on HTPB that are administered by DDTC are consistent with those described in WAML 8.e.12. This final rule amends the control text in ECCN 1C111.b.2 to clarify the scope of the EAR controls on HTPB by including a reference to the related USML Category V controls described above.

**Controls on Certified Reference Standards, Certified Reference Materials and Standard Reference Materials (CRS)**

**Comment:** One commenter recommended the removal from USML Category V and the addition to the CCL of Certified Reference Standards, Certified Reference Materials and Standard Reference Materials (referred to collectively as CRS) that contain trace amounts of certain chemicals controlled under USML Category V. Specifically, the commenter proposed that a new ECCN 1C994 be added to the CCL to control CRS that contain less than 0.5 grams total quantity of one or more USML Category V chemicals, provided that: (1) The total amount of the controlled chemicals comprises less than or equal to one percent of the total quantity of the CRS; and (2) the mixture or compound lacks explosive

characteristics. As an alternative, the commenter recommended controlling such mixtures or compounds under new ECCN 1C608.o on the CCL. In conjunction with this recommended change to the CCL, the commenter also recommended that a new interpretation be added to USML Category V to exclude such mixtures or compounds from control under Category V.

**Response:** This final rule does not adopt the commenter's recommendation. The commenter submitted substantially the same recommendation in a comment to the State Department's proposed rule to revise USML Category V (77 FR 25944, May 2, 2012) that was published simultaneously with the May 2 (energetic materials) rule. The Department of State final rule that is being published simultaneously with this rule did not adopt that recommendation because: "For two of these items—RDX and its derivatives and HMX and its derivatives—the MTCR Annex does not provide for a minimum level for establishing control as a munitions item. For the other two—Tetryl and 1,3,5-trichlorobenzene—the Department [of State] determined that there is no minimum level for identifying military utility or lack thereof. Therefore, the Department did not accept this recommendation." BIS concurs with this decision of the Department of State and because the chemicals are not being removed from the USML, they cannot be added to the CCL.

*Correspondence Between the BIS and State Category V Proposed Rules and WAML 8 (Energetic Materials and Related Substances)*

**Comment:** One commenter stated that certain amendments contained in the BIS May 2 (energetic materials) rule, and the companion State rule, did not fully correspond with the scope of WAML category 8 "Energetic materials and related substances." Specifically, the commenter indicated that the two proposed rules did not cover the following WAML items: 8.a.34 (to the extent not covered by proposed ECCN 1C608.n); 8.b.1; 8.b.2 (to the extent not covered by proposed USML Category V.b.1); 8.b.6 (to the extent not covered by proposed ECCN 1C608.h or .k); 8.e.6 (to the extent not covered by proposed ECCN 1C608.n); and 8.f.4.e (to the extent not covered by proposed USML Cat V.f.4.v to .f.4.xv).

**Response:** The specific WAML category 8 items cited by the commenter as not being addressed by the BIS May 2 (energetic materials) rule and the companion State rule, are, in fact,

addressed by the catch-all text in new "600 series" ECCN 1C608.n. In this final rule, ECCN 1C608.n reads as follows: "Any explosives, propellants, oxidizers, pyrotechnics, fuels, binders, or additives that are 'specially designed' for military application and not enumerated in USML Category V or elsewhere on the USML." This final rule amends ECCN 1C608.n, as proposed by the May 2 (energetic materials) rule, by revising the phrase ". . . not listed elsewhere in USML Category V or the CCL" to read ". . . not enumerated in USML Category V or elsewhere on the USML." This change is consistent with Supplement No. 4 to part 774 of the EAR, which, gives "600 series" ECCNs precedence over non-“600 series” ECCNs when classifying an item. This supplement became effective on October 15, 2013. Consequently, items that meet the general description in ECCN 1C608.n and that are not enumerated in USML Category V, or enumerated elsewhere on the USML, are controlled under ECCN 1C608.n.

**Comment:** One commenter indicated that the BIS May 2 (energetic materials) rule and the companion State rule contain duplicative coverage of the following items: Inhibited red fuming nitric acid (IRFNA) (proposed USML Category V.d.10 and proposed ECCN 1C111.a.3.e); HTPB (proposed USML Category V.e.7 is a subset of proposed ECCN 1C111.b.2); chlorine trifluoride (proposed ECCN 1C111.a.3.f and current ECCN 1C238); and spherical aluminum powder (proposed ECCN 1C111.a.1.b is a subset of proposed ECCN 1C111.a.1.a).

**Response:** (1) **IRFNA:** Although the controls on "inhibited red fuming nitric acid" (IRFNA) in the BIS May 2 (energetic materials) rule and the companion State rule are similar, they were derived from different sources. The BIS rule proposed to amend ECCN 1C111 to control IRFNA under ECCN 1C111.a.3.e., using control text consistent with the IRFNA controls described in the MTCR Annex, Category II, Item 4.C.4.a.5. In State's companion rule, the IRFNA controls conformed with the controls described in WAML 8.d.10, which states, "Liquid oxidizers comprised of or containing inhibited red fuming nitric acid (IRFNA) (CAS 8007-58-7)." To avoid confusion based on the similarity between these two sets of controls, this final rule does not add IRFNA to ECCN 1C111. Instead, State's companion final rule will control IRFNA consistent with both the MTCR and WAML controls, and this rule adds a note to the "Related Controls" paragraph of ECCN 1C111 referring readers to USML Category V(d)(10) for controls on IRFNA.

(2) *HTPB*: As noted earlier, neither this final rule nor State's companion final rule changes the controls that apply to HTPB. The export controls on HTPB that are administered by DDTC are consistent with those described in WAML 8.e.12. The controls administered by BIS under ECCN 1C111.b.2, are consistent with those described in MTCR Annex, Category II, Item 4.C.5.b. To avoid any suggestion of a partial overlap in the HTPB controls maintained by BIS and State, this final rule amends ECCN 1C111.b.2 to clarify the scope of the EAR controls on HTPB by including a reference to the related USML Category V controls, which apply to HTPB (hydroxyl-terminated polybutadiene) with a hydroxyl functionality equal to or greater than 2.2 and less than or equal to 2.4, a hydroxyl value of less than 0.77 meq/g, and a viscosity at 30 °C of less than 47 poise (CAS 69102-90-5).

(3) *Chlorine trifluoride*: As discussed previously, BIS's May 2 (energetic materials) rule did not propose to control chlorine trifluoride under both ECCN 1C111.a.3.f and ECCN 1C238. That rule proposed to remove ECCN 1C238 from the CCL, per amendatory instruction #8 (see 77 FR 25942). However, prior to the effective date of this final rule, chlorine trifluoride continues to be controlled for MT/AT/UN reasons under ECCN 1C018.m and for NP/AT reasons under ECCN 1C238.

(4) *Spherical aluminum powder*: BIS's May 2 (energetic materials) rule proposed to amend ECCN 1C111.a.1 to control, under ECCN 1C111.a.1.a, spherical aluminum powder not controlled by proposed 1C111.a.1.b in particle size of less than  $200 \times 10^{-6}$  m ( $200 \mu\text{m}$ ) and an aluminum content of 97% by weight or more, if at least 10 percent of the total weight is made up of particles of less than  $63 \mu\text{m}$ , according to ISO 2591:1988 or national equivalents. ECCN 1C111.a.1.b, as proposed, would have controlled aluminum powder having all of the following characteristics: (i) Greater than 99% purity; (ii) greater than 50% of the particles being spheroidal, or produced by a gas atomization process using an inert gas such as nitrogen; and (iii) a particle size less than 60 microns. BIS agrees with the commenter's assessment that the controls described in proposed ECCN 1C111.a.1.a and .a.1.b, respectively, overlapped to some degree. Consequently, as noted above, this final rule revises new ECCN 1C111.a.1 to be consistent with the controls in Category II, Item 4.C.2.c of the MTCR Annex.

*Comment*: One commenter indicated that BIS's May 2 (energetic materials)

rule listed the following items in proposed new ECCN 1C608.a through .g and 1C608.j that are not identified in WAML 8: propellants having nitrocellulose with nitrogen content greater than 12.6%; shock tubes, cartridge power devices, detonators, igniters, oil well cartridges, boosters, and commercial pyrotechnic devices.

*Response*: The items in proposed new ECCN 1C608 that the commenter has identified as not listed in WAML 8 are defense articles that, prior to the effective date of this final rule, will continue to be controlled under certain catch-all provisions in USML Category V. Most of the defense articles that the President has determined no longer warrant control on the USML, are controlled under "600 series" ECCNs on the CCL. In some instances, BIS follows this approach even when an item is not specifically identified on the WAML. In deciding whether a particular item should be controlled under a "600 series" ECCN, BIS considers whether the inherent or unique military or intelligence applicability of the item warrants, at a minimum, the level of control that is typically applicable under "600 series" ECCNs (*i.e.*, NS, RS, and UN, except for those items identified under the .y paragraphs of these ECCNs, which are subject to AT controls only).

#### Changes to Controls on Energetic Materials Made by This Rule

This final rule creates four new "600 series" ECCNs in CCL Category 1 (ECCNs 1B608, 1C608, 1D608, and 1E608) and amends ECCN 1C111 to control some of the aluminum powder and hydrazine, and derivatives thereof, controlled under Category V of the USML prior to the effective date of this rule. In addition, this rule controls "equipment" for the "production" of explosives and solid propellants, previously classified under ECCN 1B018.a, and related "software," previously classified under ECCN 1D018, under new ECCNs 1B608 and 1D608, respectively. Similarly, this rule removes commercial charges and devices containing energetic materials from control under ECCN 1C018 and controls them under new ECCN 1C608, instead (except for chlorine trifluoride, which is controlled under ECCN 1C111.a.3.f). In a corresponding change, ECCN 1C238, which controlled chlorine trifluoride together with ECCN 1C018.m, is removed from the CCL. This rule also makes conforming changes to ECCNs 1C239, 1E001, 1E101, and 1E201. These amendments are discussed in more detail below.

*New ECCN 1B608 (Test, Inspection, and Production "Equipment" and Related Commodities "Specially Designed" for the "Development" or "Production" of Commodities Enumerated in ECCN 1C608 or USML Category V) and ECCN 1B018 Amended*

Paragraph .a of ECCN 1B608 controls test, inspection, and production "equipment" "specially designed" for the "production" of energetic materials and related commodities controlled by new ECCN 1C608 or USML Category V and not elsewhere specified on the USML. This "equipment" includes items controlled under ECCN 1B018.a.2 or .a.3 prior to the effective date of this rule. Paragraph .b of ECCN 1B608 controls complete installations not enumerated on the USML, including complete installations controlled under ECCN 1B018.a.1 prior to the effective date of this rule, that are "specially designed" for the "production" of energetic materials and related commodities controlled by new ECCN 1C608 or USML Category V. Paragraph .c of ECCN 1B608 controls environmental test facilities that are "specially designed" for the certification, qualification, or testing of items controlled by new ECCN 1C608 or USML Category V. Paragraphs .d through .w are reserved. Paragraph .x controls "parts," "components," "accessories" and "attachments" (including certain unfinished products that have reached a stage in manufacturing where they are clearly identifiable as commodities controlled by paragraph .x) that are "specially designed" for a commodity controlled under paragraph .a, .b, or .c of ECCN 1B608 or a defense article in USML Category V and are not elsewhere specified on the USML. These "parts," "components," "accessories" and "attachments" include "specially designed" "parts" and "components" controlled under ECCN 1B018.a.4 prior to the effective date of this rule.

Incorporating ECCN 1B018.a items into new ECCN 1B608 is consistent with the regulatory construct described in the April 16 (initial implementation) rule, under which WAML items in certain 018 ECCNs are consolidated with former USML items into "600 series" ECCNs. ECCN 1B018, as amended by this final rule, cross references ECCN 1B608, and ECCN 1B018.a is removed and reserved.

*New ECCN 1C608 (Energetic Materials and Related Commodities) and ECCN 1C018 Amended*

ECCN 1C608.a controls single base, double base, and triple base propellants having nitrocellulose with a nitrogen

content greater than 12.6 percent in the form of either: (i) Sheetstock or carpet rolls or (ii) grains with a diameter greater than 0.10 inches. Paragraphs .b through .m of ECCN 1C608 control commercial charges and devices (containing energetic materials) controlled under ECCN 1C018.b through .m prior to the effective date of this rule. This rule also reserves ECCN 1C608.i consistent with the format of the List of Items Controlled in ECCN 1C018, where ECCN 1C018.i is reserved. However, a Note following 1C608.m indicates that chlorine trifluoride, controlled under ECCNs 1C018.m and 1C238 prior to the effective date of this final rule, will be controlled under ECCN 1C111.a.3.f only, and not under new ECCN 1C608. Incorporating ECCN 1C018 items into new ECCN 1C608 is consistent with the regulatory construct described in the April 16 (initial implementation) rule, under which WAML items in certain 018 ECCNs are consolidated with former USML items into “600 series” ECCNs. ECCN 1C018, as amended, cross-references ECCN 1C608 and other ECCNs that control commercial charges and devices containing energetic materials. ECCN 1C608.n controls any explosives, propellants, oxidizers, pyrotechnics, fuels, binders, or additives that are “specially designed” for military application and not listed in USML Category V or elsewhere on the USML.

*New ECCN 1D608 (“Software” “Specially Designed” for the “Development,” “Production,” Operation, or Maintenance of Commodities Controlled by 1B608 or 1C608) and ECCN 1D018 Amended*

ECCN 1D608.a controls “software” “specially designed” for the “development,” “production,” operation, or maintenance of commodities controlled by new ECCN 1B608 or 1C608. This “software” includes “software” controlled by ECCN 1D018, prior to the effective date of this final rule, for “equipment” in ECCN 1B018.a that is being moved to new ECCN 1B608 by this final rule. Incorporating ECCN 1D018 “software” for ECCN 1B018.a items into new ECCN 1D608 is consistent with the regulatory construct described in the April 16 (initial implementation) rule, under which WAML items in 018 ECCNs are consolidated with former USML items into “600 series” ECCNs. ECCN 1D018, as amended by this final rule, cross-references ECCN 1D608. Paragraph .b of ECCN 1D608 is reserved.

*New ECCN 1E608 (“Technology” “Required” for the “Development,” “Production,” Operation, Installation, Maintenance, Repair, Overhaul, or Refurbishing of Equipment Controlled in 1B608 or Materials Controlled by 1C608)*

ECCN 1E608.a controls “technology” “required” for the “development,” “production,” operation, installation, maintenance, repair, overhaul, or refurbishing of items controlled by ECCN 1B608 or 1C608. This “technology” includes “technology” controlled by ECCN 1E001, prior to the effective date of this final rule, for “equipment” in ECCN 1B018.a that is being moved to new ECCN 1B608 by this final rule. Accordingly, ECCN 1E001 is amended to exclude both “technology” for 1B018.a items that are being moved to new ECCN 1B608 and “technology” for new ECCN 1C608 items and to cross reference ECCN 1E608 (the amendments to ECCN 1E001 are described in more detail, below). Paragraph .b of 1E608 controls “technology” for the “development” or “production” of nitrocellulose with a nitrogen content over 12.6 percent and at rates greater than 2000 pounds per hour. Paragraph .c of 1E608 controls “technology” for the “development” or “production” of nitrate esters (e.g., nitroglycerine) at rates greater than 2000 pounds per hour.

*ECCN 1C111 Amended and ECCN 1C238 Removed*

This final rule amends ECCN 1C111 by adding under 1C111.a and 1C111.d, respectively, aluminum powder and hydrazine and derivatives thereof, which the President has determined no longer warrant control under USML Category V. These items are added to ECCN 1C111 because they possess characteristics that are more similar to the propellants, and constituent chemicals therefor, that are controlled under ECCN 1C111 than the energetic materials that are controlled under new ECCN 1C608. Like the items controlled under ECCN 1C111 prior to the effective date of this final rule, these additional items are subject to missile technology (MT Column 1) controls and anti-terrorism (AT Column 1) controls, except for symmetrical dimethyl hydrazine in ECCN 1C111.d.3, which is controlled for regional stability (RS Column 1) and anti-terrorism (AT Column 1) reasons. In addition, this final rule amends the Related Controls paragraph in ECCN 1C111 to indicate that ECCN 1C608 controls oxidizers that are composed of fluorine (and also other halogens, oxygen, or nitrogen), except

for chlorine trifluoride, which is controlled under ECCN 1C111.a.3.f.

As noted in the response to comments, prior to the effective date of this final rule, chlorine trifluoride will continue to be controlled under both ECCNs 1C018.m and 1C238; ECCN 1C018.m controls chlorine trifluoride for MT, UN and AT reasons while ECCN 1C238 controls chlorine trifluoride for NP reasons. Upon the effective date of this final rule, chlorine trifluoride will be removed from ECCNs 1C018.m and 1C238 and controlled under ECCN 1C111.a.3.f only. This final rule does not also control chlorine trifluoride under ECCN 1C608.m, because chlorine trifluoride is not on the WAML and, consequently, is not subject to NS controls. Accordingly, this final rule amends ECCN 1C111 to control chlorine trifluoride under ECCN 1C111.a.3.f for MT, NP and AT reasons. RS controls will not apply to chlorine trifluoride under ECCN 1C111 (as would normally be the case with items controlled under a “600 series” ECCN), because such controls cover the same destinations as MT Column 1 restrictions. Because chlorine trifluoride is the only item controlled under ECCN 1C238, this ECCN is being removed from the CCL.

*ECCN 1C239 Amended*

This final rule amends ECCN 1C239 by revising the Related Controls paragraph in the List of Items Controlled section to remove the reference to ECCN 1C018 and replace it with a reference to new ECCN 1C608. The reason for this change is that the commercial charges and devices (containing energetic materials) controlled under ECCN 1C018.b through .m will be controlled under new ECCN 1C608.b through .m upon the effective date of this final rule. In addition, this final rule corrects the erroneous ITAR citation in the Related Controls paragraph to read 22 CFR 121.1.

*ECCN 1E001 Amended*

This final rule amends ECCN 1E001 by revising the ECCN heading to exclude “technology” for items that, upon the effective date of this final rule, will be controlled under new ECCN 1B608 or 1C608 and by amending the Related Controls paragraph in the List of Items Controlled to include a reference to new ECCN 1E608. The heading of ECCN 1E001 also is amended to exclude “technology” for items in new ECCN 1B613 from control under this ECCN, because such “technology” is controlled under new ECCN 1E613 (this conforming change reflects the addition of new ECCNs 1A613, 1B613, 1D613 and 1E613, which are also being added

to the CCL by this final rule and are described elsewhere in the preamble). In addition, this rule amends the nuclear nonproliferation (NP) controls paragraph in the License Requirements section of ECCN 1E001 to include “technology” for ECCN 1C111 items controlled for NP reasons (*i.e.*, chlorine trifluoride in ECCN 1C111.a.3.f). As a result of this change and the addition of chlorine trifluoride to ECCN 1C111, as described above, “technology” for the “development” or “production” of chlorine trifluoride ( $\text{ClF}_3$ ) will be controlled under ECCN 1E001 for missile technology (MT Column 1), nuclear nonproliferation (NP Column 1), and anti-terrorism (AT Column 1) reasons.

In addition, this final rule amends the reference to ECCN 1E002.g, in the Related Controls paragraph of ECCN 1E001, to address control libraries (parametric technical databases) specially designed or modified to enable equipment to perform the functions of equipment controlled under either 1A004.c (Nuclear, biological and chemical (NBC) detection systems) or 1A004.d (Equipment for detecting or identifying explosives residues). Adding 1A004.d as a cross reference corrects an inadvertent but non-substantive omission in the EAR as ECCN 1E002.g refers to both 1A004.c and 1A004.d.

#### *ECCN 1E101 Amended*

This final rule amends the License Requirements section of ECCN 1E101, consistent with the “technology” controls of the Nuclear Suppliers Group (NSG), to apply nuclear nonproliferation (NP Column 1) controls to “use” “technology” for ECCN 1C111 items controlled for NP reasons (*i.e.*, chlorine trifluoride in ECCN 1C111.a.3.f). As a result of this change, “use” “technology” for chlorine trifluoride will be controlled for nuclear nonproliferation (NP Column 1), missile technology (MT Column 1), and anti-terrorism (AT Column 1) reasons under ECCN 1E101. This change is consistent with the amendment in this final rule to remove chlorine trifluoride from ECCNs 1C018.m and 1C238 and control chlorine trifluoride exclusively under ECCN 1C111.a.3.f. Prior to the effective date of this final rule, “use” “technology” for chlorine trifluoride will continue to be controlled under ECCN 1E201 for nuclear nonproliferation (NP Column 1) and anti-terrorism (AT Column 1) reasons, only. Once this final rule becomes effective, it will amend ECCN 1E201 to remove “use” “technology” for chlorine trifluoride.

#### *ECCN 1E201 Amended*

This final rule amends ECCN 1E201 by revising the ECCN heading to remove “technology” for ECCN 1C238 items (*i.e.*, chlorine trifluoride) consistent with the ECCN 1C111 and 1E101 changes described above, whereby chlorine trifluoride will be controlled under ECCN 1C111.a.3.f only and ECCN 1E101 will be amended to control “use” “technology” for chlorine trifluoride.

#### *Conforming Amendments to ECCNs 1A008, 1C011, and 1C992*

This final rule also revises the Related Controls paragraphs in ECCNs 1A008 and 1C011 and both the Related Controls and Related Definitions paragraphs in ECCN 1C992 to reflect the addition of new “600 series” ECCN 1C608, as described above.

#### *Changes to the EAR Amendments Proposed in the May 2 (Energetic Materials) Rule*

#### *Changes To Make New ECCNs 1B608 and 1C608 Consistent With the CCL Order of Review*

Supplement No. 4 to part 774 of the EAR provides an “Order of review” that gives “600 series” ECCNs precedence over non-“600 series” ECCNs when classifying an item. Accordingly, the controls in ECCN 1B608.a, .b, and .x in this final rule differ from the controls proposed in the May 2 (energetic materials) rule in that they do not limit the scope of the equipment, complete installations, and “parts,” “components,” “accessories,” and “attachments” specified in ECCN 1B608.a, .b, and .x, respectively, to items that are not controlled elsewhere on the CCL. This final rule also revises the controls in ECCN 1C608.n in a similar manner. This means that, if an item subject to the EAR is described by a “600 series” ECCN (*e.g.*, ECCN 1B608 or ECCN 1C608), then the item would be controlled under the “600 series” ECCN even if it were also described elsewhere on the CCL under a non-“600 series” ECCN.

#### *Personal Protective Equipment, Shelters and Related Items*

BIS received seven public comments in response to the June 7 (protective equipment) rule.

#### *Public Comments Regarding Body Armor*

*Comment:* One commenter stated that the controls for soft body armor in ECCNs 1A005.a and 1A613.d.1 differ only by whether the body armor was “manufactured to military standards or specifications” and thus is dependent

on the class of end user (*e.g.*, police vs. military).

*Response:* BIS does not agree with this concern. Basing a control on military standards or specifications provides the necessary specificity to delineate that control regardless of the end user or its activities. Generally, when developing a product, one intends to meet military specifications and does not do so inadvertently. Consequently, BIS does not believe that the parameters proposed for soft body armor should be changed.

*Comment:* One commenter expressed concerns that ECCNs 1A005.a and 1A613.d.1 use “military standards or specifications” without defining that term, and the commenter proposed using “specifically designed” instead. Another commenter recommended adding the Note to ML13.d.1 in the WAML to ECCNs 1A005 and 1A613 to provide guidance on interpreting “military standards or specifications.” The Note to ML13.d.1 provides that “military standards or specifications include, at a minimum, specifications for fragmentation protection.”

*Response:* BIS accepts the recommendation to use the Note to ML13.d.1 but does not accept the recommendation to use “specifically designed.” While BIS believes that the commenter intended to recommend “specially designed” rather than “specifically designed,” BIS believes the Note to ML13.d.1 provides the necessary guidance on interpreting the phrase military standards or specifications, and is consistent with the Wassenaar Arrangement. Thus, this final rule includes new notes in ECCNs 1A005 and 1A613 that provide that military standards or specifications include, at a minimum, specifications for fragmentation protection.

*Comment:* One commenter recommended that the text “or foreign national equivalents” be added to the description of hard body armor plates in ECCN 1A005.b to assist classifying foreign origin items in the United States that are not NIJ rated.

*Response:* BIS accepts this recommendation and uses the phrase “national equivalents” to conform the text in ECCN 1A005.b. to the text in the related Wassenaar Arrangement Dual Use List entry. BIS interprets the phrase to include standards of other nations that are equivalent to NIJ standards. The same issue could arise with body armor controlled under ECCNs 1A005.a, 1A613.d.1, and 1A613.d.2, so BIS is also inserting conforming text to those entries in accordance with the WAML and the Wassenaar Arrangement Dual-Use List.

**Comment:** One commenter noted that the heading in ECCN 1A005 included “components” but no components were controlled in the entry.

**Response:** BIS has revised ECCN 1A005 to address the issue of “components” as well as to ensure that the entry conforms to the Wassenaar Arrangement. To that end, BIS has revised ECCN 1A005.a to read: “[s]oft body armor not manufactured to military standards or specifications, or to their equivalents, and ‘specially designed’ ‘components’ therefor.” While with this change, made in response to a public comment, “components” are controlled under ECCN 1A005.a, BIS notes that this control does not apply to items such as straps, fasteners, vests not containing body armor plates, or clothing not containing body armor plates.

While these revisions to ECCN 1A005 ensure that the entry conforms to the Wassenaar Arrangement, BIS is also revising the ECCN to maintain the specificity provided by the June 7 (protective equipment) rule. To that end, BIS is adding a new License Requirements Notes paragraph to the ECCN to provide that soft body armor not manufactured to military standards or specifications must provide ballistic protection equal to or less than NIJ level III (NIJ 0101.06, July 2008) to be controlled under 1A005.a. The note clarifying “military standards or specifications” will also be in the new License Requirements Notes paragraph.

#### Public Comments Regarding Helmets

**Comment:** One commenter requested guidance on what constitutes a military helmet in ECCN 1A613.c versus a police helmet in ECCN 0A979.

**Response:** The June 7 (protective equipment) rule proposed no changes to the scope of ECCN 0A979. The proposed rule only affected helmets controlled on the USML. As such, the proposed rule and this final rule make no changes to the scope of controls for helmets in ECCN 0A979 vis-à-vis helmets moving from the USML to ECCN 1A613.c. BIS takes the position that a helmet “specially designed” for use by a military is a military helmet and a helmet “specially designed” for use by non-military police forces is a police helmet.

**Comment:** One commenter opposed the proposed movement of helmets from ECCN 0A018 to ECCN 1A613 due to the increase in controls for the helmets and related technology. The commenter stated that the use of License Exception STA would not make up for additional controls for operation, installation, maintenance, repair, overhaul, and

refurbishing technology, as well as the elimination of the use of License Exception TSR. The commenter recommended that TSR be allowed for military helmet technology.

**Response:** BIS does not accept this recommendation. Consistent with other proposed “600 series” ECCNs, ECCN 1A613 includes some items in a 018 ECCN. Since the commenter did not provide any rationale for why a distinction should be made for military helmet technology, BIS is maintaining the proposed controls to be consistent with the structure and framework of ECR.

**Comment:** One commenter stated that military helmets described in ECCN 1A613.c include conventional military steel helmets proposed to be controlled under ECCN 1A613.y.1.

**Response:** BIS believes that the proposed Note 1 to ECCN 1A613.c provided the necessary guidance to show readers that ECCN 1A613.c would not control conventional military steel helmets in ECCN 1A613.y.1. However, to make this point more clearly, BIS is moving the applicable text in Note 1 to a parenthetical in ECCN 1A613.c. Under this final rule, ECCN 1A613.c reads: “[m]ilitary helmets (other than helmets controlled under 1A613.y.1) and helmet shells providing less than NIJ Type IV protection.”

**Comment:** One commenter recommended only controlling the following helmet components: helmet shell, liner, and comfort pad. The commenter reasoned that this would be consistent with ML13.c of the WAML, which applies to certain helmets and “specially designed components therefor (i.e., helmet shell, liner and comfort pads).”

**Response:** BIS does not accept this recommendation. The June 7 (protective equipment) rule and the State Department’s counterpart rule, 77 FR 33698 (June 7, 2012), intended to address all items in USML Category X. Limiting the controls on helmet components to helmet shells, liners, and comfort pads would not match the current coverage of the ITAR. Thus, BIS is not revising ECCN 1A613 as a result of this comment. To the extent one believes that other parts and components “specially designed” for these or any other items in the “600 series” and other EAR controls do not warrant such controls, then one may submit a request pursuant to 15 C.F.R. § 748.3(e) for an interagency determination that such items do not warrant being controlled by the relevant “specially designed” catch-all provision.

**Comment:** One commenter recommended that BIS create a new 1A005.c for helmet and helmet shells not manufactured to military standards or specifications that provide ballistic protection less than NIJ Type IV, revise ECCN 1A613.c to control helmets and helmet shells manufactured to military standards or specifications that provide ballistic protection less than NIJ Type IV, and provide positive parameters for controlling police helmets in ECCN 0A979.

**Response:** BIS does not accept this recommendation. ECCN 1A005 is a multilateral control, and as such, BIS declines to insert a new unilateral control within that ECCN. BIS believes that the text in ECCNs 1A613.c and 0A979 contains adequate controls and does not require further modifications based on this comment.

#### Public Comments Regarding Shelters

**Comment:** One commenter requested a more detailed definition to distinguish when a shelter becomes export controlled. The commenter believed the point should be when certain modifications or installations are made, such as the installation of electronic or other equipment that is itself export-controlled.

**Response:** BIS does not accept the commenter’s recommendations. The proposed control is consistent with the current controls of USML Category X, and no changes are made in this final rule.

**Comment:** One commenter requested that the following shelters should be designated EAR99: shelters modified for lighting or raceway, power and signal distribution, heating and air conditioning, equipment racks or cabinets, electromagnetic/radio frequency interference (EMI/RFI), chemical agent resistance coating (CARC) paint, skid or jack assemblies, casters, ladders or roof access steps, special door openings or emergency kickout or escape hatch panels, or generator trailers.

**Response:** BIS will not provide a negative list of shelters to determine what is controlled under ECCN 1A613.b. However, BIS believes that applying the definition of “specially designed” will alleviate concerns over what shelters are controlled in ECCN 1A613.b. Further, BIS notes that the use of CARC paint does not affect whether a shelter is controlled on the USML or CCL, and that certain EMI shelters are controlled under USML Category XI.

*Revision to 1A613 To Be Consistent With “600 series” Order of Review*

In addition to the changes made in response to the public comments described above, this rule removes from ECCN 1A613.e and .x text that appeared in the proposed rule, which would have excluded from that ECCN items that appear elsewhere on the CCL. This change is made to be consistent with the CCL order of review in Supplement No. 4 to part 774 of the EAR, which became effective on October 15, 2013. That order of review gives 600 series ECCNs precedence over other ECCNs.

*Public Comments Regarding License Exceptions TMP and BAG*

*Comment:* One commenter requested that helmets classified under ECCN 1A613.c be included along with body armor classified under ECCN 1A613.d for eligibility under License Exceptions TMP and BAG.

*Response:* BIS accepts this recommendation. On May 2, 2012, the Department of State amended the ITAR exemption for personal protective equipment in § 123.17 to add helmets when they are included with the body armor and to add chemical agent protective gear. In order to match the scope of the ITAR exemption for personal protective equipment, BIS is adding ECCN 1A613.c helmets to the list of items eligible for License Exceptions TMP and BAG (§§ 740.9(a)(11) and 740.14(h), respectively). BIS further notes that body armor or helmets subject to the EAR but not identified in ECCN 1A613 are not subject to the same restrictions in §§ 740.9(a)(11) and 740.14(h) and may thus be authorized under other provisions of TMP or BAG.

*Comment:* Two commenters recommended that BIS eliminate the proposed requirement under TMP and BAG to present the items to U.S. Customs and Border Protection (CBP) for inspection. The commenters reasoned that the CBP inspection requirement would render TMP and BAG unusable as U.S. contractors often obtain personal protective equipment at locations other than the point of departure in the United States, and potential users of the license exceptions often place the equipment into checked baggage, rendering it inaccessible for inspection by CBP.

*Response:* BIS accepts this recommendation and has removed the CBP inspection requirement from TMP and BAG. Requiring a CBP inspection for items of a non-offensive nature that will be used by U.S. persons likely in support of U.S. military forces serves no

national security or foreign policy purpose. Retaining this proposed requirement would treat body armor (and now helmets) more stringently than all other items subject to the EAR that would be available for a license exception. CBP, however, has the discretion to inspect these and any other items exported from the United States.

*Comment:* One commenter recommended that reexports and retransfers (which we understand to be transfers (in-country)) be allowed, to accommodate the redeployment of employees under a government contract and to accommodate requests from the U.S. Government to leave personal protective equipment owned and issued by the U.S. Government overseas for issue to other contractors. Another commenter stated that the issuing agency may require the equipment to remain in the country after departure by the contractor. The commenter recommended that a signed receipt of the equipment should be sufficient to show its return to the U.S. Government.

*Response:* BIS accepts the recommendation to allow reexports and transfers (in-country) for personal protective equipment authorized under TMP and BAG. However, such reexports or transfers (in-country) must be limited to U.S. persons. BIS believes that allowing for reexports and transfers (in-country) to U.S. persons only under TMP and BAG, in addition to the possible use of License Exception GOV, will sufficiently enable potential transfers of personal protective equipment among U.S. contractors and the U.S. Government.

*Miscellaneous Comments*

*Comment:* One commenter requested clarification on whether gas masks are personal protective equipment and fall under ECCN 1A613.

*Response:* BIS recommends that reviewers follow the guidance in Supplement No. 4 to part 774 of the EAR. Gas masks would only be protective equipment under ECCN 1A613.e if they are not described elsewhere on the USML (e.g., USML Category XIV) or the CCL (e.g., ECCN 1A004), and if they have been “specially designed” for military applications.

*Comment:* One commenter recommended that BIS define “equipment” or not use quotation marks with the term.

*Response:* Section 772.1 of the EAR provides a definition for “equipment,” which became effective on October 15, 2013.

*Comment:* One commenter mentioned that the proposed Note to 1A613.d references protective garments in ECCN

1A005, yet 1A005 does not contain protective garments.

*Response:* BIS has removed the reference to protective garments in the Note to 1A613.d to ensure consistency with ECCN 1A005 and the Wassenaar Arrangement.

*Comment:* One commenter stated that the proposed USML Category X and ECCN 1A613 may not cover armored plate “suitable for military use” in ML13.a and “constructions” in ML13.b. In addition, the commenter believed that the proposed rules did not cover software for software under ML21.

*Response:* BIS believes that the proposed controls cover those items previously controlled on the ITAR, and thus no changes are needed. As with all controls, BIS will monitor conformance with its multilateral obligations.

*Comment:* One commenter questioned whether protective garments under ML13.d and “specially designed” “components” therefor are captured under USML Category X or ECCN 1A613.

*Response:* BIS believes that the addition of the note to ECCN 1A613.d.1 and the changes made to conform ECCN 1A005 to the Wassenaar Arrangement already address the commenter’s concerns.

*Comment:* One commenter noted that 1A613.y refers to “parts,” “components,” “accessories,” and “attachments,” but ECCN 1A613.y.1 only applies to certain helmets, which do not fit the description of items in ECCN 1A613.y.

*Response:* BIS agrees that ECCN 1A613.y does not adequately describe the helmets in ECCN 1A613.y.1. Consequently, BIS has changed the ECCN 1A613.y heading to “[o]ther commodities as follows.”

*Comment:* One commenter stated that various items currently controlled under ECCNs 2B018, 2D018, and 2E018 are proposed to be controlled under the 1Y613 series.

*Response:* Under ECR, items currently controlled under “018” ECCNs will be moved to the “600 series.” The June 7 (protective equipment) rule followed this structure for personal protective equipment, shelters, and related items.

*Comment:* One commenter stated that the heading in ECCN 1D613 includes software for installation, repair, overhaul, or refurbishing. However, the commenter pointed out that no such software is included in the List of Items Controlled paragraph of that ECCN.

*Response:* BIS has revised the heading of ECCN 1D613 to match the scope of software controls for “600 series” items that was finalized under the April 16 (initial implementation) rule. For

additional information, see the section on Consistency of Controls above.

**Comment:** One commenter stated that the phrase “less than NIJ Type IV” or “less than NIJ level III” describes what is not controlled but does not describe what is controlled.

**Response:** BIS does not agree with this comment. Utilizing the order of review described in Supplement No. 4 to part 774 of the EAR, (as published in the April 16 (initial implementation) rule and which became effective on October 15, 2013), one would review USML Category X and ECCNs 1A613 and 1A005 to determine what is controlled. The plain meaning of the phrase cited by the commenter clearly identifies what is and what is not controlled.

**Comment:** One commenter noted that the June 7 (protective equipment) rule proposed to control items that are not currently controlled by the Wassenaar Arrangement, including ECCNs 1A613.b.2 (shelters specially designed to protect against nuclear, biological, or chemical contamination); 1A613.e (other personal protective equipment specially designed for military applications); 1A613.x (for 1A613.a, 1A613.b.2, 1A613.c, or 1A613.e); 1B613 (for development); 1B613.a (for production of portions of USML Category X (a) and (d), as well as parts of 1A613.b.2, .e., .x, and .y); 1D613.a (for portions of 1A613.b.2, .e., .x, .y, and 1B613); and 1E613.a (for portions of 1A613.b.2, .e., .x., .y, 1B613, and 1D613).

**Response:** BIS understands that some portions of the 1Y613 series will control items that are not controlled by the Wassenaar Arrangement. However, the Departments of Commerce, State, and Defense have determined that any such items warrant control as part of the “600 series” if they are currently controlled on the USML.

#### Conforming Changes to License Exceptions

BIS previously noted that the license exceptions of the EAR should be no more restrictive than the exemptions of the ITAR (see, e.g., *Proposed Revisions to the Export Administration Regulations: Implementation of Export Control Reform; Revisions to License Exceptions After Retrospective Regulatory Review*, 77 FR 37524 (June 21, 2012)). Consequently, BIS is revising part 740 to ensure the scope of License Exceptions TMP and BAG are no more restrictive than § 123.17 of the ITAR, which provides exemptions for the temporary export of certain personal protective equipment.

When the June 7 (protective equipment) rule was drafted, the ITAR

exemption under § 123.17(g) allowed the temporary export of body armor to Afghanistan and Iraq under certain conditions. On May 2, 2012, the Department of State expanded the scope of the exemption to all § 126.1 countries subject to certain conditions. To match the scope of the ITAR, BIS is amending § 740.2(a)(12) to allow for the use of TMP and BAG for certain personal protective equipment destined to or in countries in Country Group D:5. These revisions are being made consistent with the April 16 (initial implementation) rule, which amended § 740.2 to describe the restrictions on the use of license exceptions for “600 series” items. Requirements for exporting, reexporting, or transferring (in-country) certain personal protective equipment to countries in Country Group D:5 are described in § 740.9(a)(11)(ii) for TMP and § 740.14(h)(2) for BAG.

To ensure conformance with the scope of the ITAR, BIS is also revising License Exception TMP to allow temporary exports, reexports, or transfers (in-country) of personal protection equipment for a four-year period pursuant to new § 740.9(a)(11)(iii). BIS is also amending § 740.9(a)(14) to note the exception to the general rule that temporary exports, reexports, or transfers (in-country) under TMP are authorized for one year after the date of export, reexport, or transfer (in-country). These amendments to TMP will allow the license exception to be more comparable to the scope of the exemption for personal protective equipment under § 123.17 of the ITAR, which does not impose a time limitation. Similarly, BIS has removed references to “temporary” export in License Exception BAG to ensure that it is no more restrictive than the ITAR.

The amendments to License Exception TMP to describe the exception for personal protective equipment have been moved to § 740.9(a)(11) instead of the proposed § 740.9(a)(3)(v) under the June 7 (protective equipment) rule to conform with a restructured and streamlined License Exception TMP that became effective on October 15, 2013.

#### Conforming Changes to ECCNs 0A018, 1A005, 1B613, 1D613, and 1E613

Differences in the text of ECCN 0A018 between the June 7 (protective equipment) rule and this final rule are the result of changes made by the July 8 (vehicles, vessels and miscellaneous equipment) rule. In addition, this rule omits the last sentence in the Related Controls paragraph of ECCN 1A005 from

the June 7 (protective equipment) rule. That sentence referenced § 746.8(b)(1), which does not exist.

For ECCN 1A613, this rule revises 1A613.x to add a reference to USML Category X to ensure that “parts,” “components,” “accessories,” and “attachments” that are themselves not enumerated in Category X but that are “specially designed” for commodities enumerated in Category X are captured under 1A613.x. Further, this rule removes paragraphs .c.-x and the .y paragraph from 1B613 since no other items are controlled under that ECCN. Also, BIS is amending 1D613.y to remove references to 1D613.y.1 through y.99 since 1D613.y only controls specific “software” “specially designed” for the “production,” “development,” or operation or maintenance of commodities controlled by ECCN 1A613.y. Similarly, this rule removes references in 1E613.y to 1E613.y.1 through y.99, since 1E613.y only controls specific “technology” “required” for the “production,” “development,” operation, installation, maintenance, repair, overhaul, or refurbishing of commodities or software controlled by ECCN 1A613.y or 1D613.y.

#### Items Related to Launch Vehicles, Missiles, Rockets, and Military Explosive Devices

This rule finalizes the provisions contained in the January 31 (launch vehicles) proposed rule. This proposed rule from BIS was published in conjunction with a rule from the Department of State, Directorate of Defense Trade Controls, proposing to amend the list of articles controlled by USML Category IV (see 78 FR 6750 and 78 FR 6765, respectively).

Specifically, this final rule describes how articles that the President determines no longer warrant control under Category IV of the USML will now be controlled on the CCL. These articles, which are related to launch vehicles, missiles, rockets, and military explosive devices enumerated in USML Category IV, will, upon the effective date of this final rule, be controlled under new ECCNs 0A604, 0B604, 0D604, 0E604, 9A604, 9B604, 9D604, and 9E604 on the CCL. In addition, this final rule amends ECCNs 0D001, 0E001, 9B115, 9B116, 9D001, 9D002, 9D003, 9D104, 9E001, 9E002, 9E101, and 9E102 to make clarifications and conforming changes based on the addition of the aforementioned 0Y604 and 9Y604 ECCNs to the CCL and amendments by the Department of State, Directorate of Defense Trade Controls, to the list of articles controlled by USML Category IV

that are being published in conjunction with this final rule.

**Summary of Public Comments Submitted in Response to the Proposals Contained in the January 31 (Launch Vehicles) Rule Published by BIS**

BIS received comments from three parties, which are summarized below.

**ECCN 0B604.a (Test, Inspection, and Other Production “Equipment” “Specially Designed” for the “Development” or “Production” of Commodities in ECCN 0A604 or Related Defense Articles in USML Category IV)**

**Comment:** One commenter stated that the use of the term “related” in proposed new ECCN 0B604.a could cause confusion, because it implies that ECCN 0B604.a would control test, inspection, and other production “equipment” for “related” defense articles in USML Category IV, without identifying what specific defense articles are “related” to the commodities in proposed new ECCN 0A604. The commenter indicated that this approach would run counter to the stated ECR objective of clearer, performance-based controls.

**Response:** This final rule addresses the commenter’s concerns by revising new ECCN 0B604.a to control test, inspection, and other production “equipment” that is “specially designed” for the “production” or “development” of commodities controlled by ECCN 0A604 or the bombs, torpedoes, depth charges, mines and hand grenades, and “parts,” “components,” “accessories” and “attachments” therefor, controlled under USML Category IV. Specifically, this final rule replaces the term “related” in ECCN 0B604.a, as proposed in the January 31 (launch vehicles) rule, with a reference to specific types of defense articles in USML Category IV (*i.e.*, bombs, torpedoes, depth charges, mines and hand grenades, and parts, components, accessories and attachments therefor). This change is consistent with BIS’s decision to control test, inspection, and other production “equipment” coming over to the CCL from USML Category IV under two separate ECCNs (*i.e.*, new ECCNs 0B604 and 9B604), according to whether such equipment is identified on the MTCR Annex. Because test, inspection, and other production “equipment” for the bombs, torpedoes, depth charges, mines and hand grenades, and parts, components, accessories and attachments therefor, controlled under USML Category IV, is not identified on the MTCR Annex, this equipment is controlled under new ECCN 0B604

(which does not contain any MT-controlled items), while new ECCN 9B604 includes MT-controlled equipment related to launch vehicles, missiles, and rockets in USML Category IV. Consistent with this approach, this final rule also makes conforming changes to the heading of ECCN 9A604 and to ECCN 9B604.c to clarify that these two ECCNs do not control items related to the bombs, torpedoes, depth charges, mines and hand grenades, and parts, components, accessories and attachments therefor, that are enumerated in USML Category IV.

**Format of ECCN Headers**

**Comment:** One commenter recommended revising the headers for the “600 series” ECCNs containing Category IV-related items by adding the parenthetical phrase “(see List of Items Controlled),” at the end of the ECCN headers, consistent with the format described in BIS’s November 29, 2012, rule (77 FR 71214) that proposed certain amendments to the EAR to make the CCL clearer.

**Response:** This final rule revises the headers of new “600 series” ECCNs 0A604, 0B604, 9A604, and 9B604, as proposed in the January 31 (launch vehicles) rule, by adding the parenthetical phrase “(see List of Items Controlled),” at the end of the ECCN headers.

**Controls on Commercial Application Countermeasure Systems for USML Category IV Manpad Systems**

**Comment:** One commenter indicated that controlling commercial application countermeasures systems with monitoring and detection capability for man-portable air defense (MANPAD) systems under USML Category IV(c), as proposed by the rule published by the U.S. Department of State, Directorate of Defense Trade Controls, in conjunction with BIS’s January 31 (launch vehicles) rule, would require ITAR-level protection of civil aircraft platforms, which would be impractical under the conditions of civil transport. In lieu of the proposed level of control for such systems, the commenter suggested one of the following alternatives:

- Transfer of such systems to a “600 series” ECCN on the CCL;
- Establishment of a flexible licensing policy under the ITAR to address situations in which such systems are installed on civil aircraft platforms; or
- The addition of a Note to USML Category IV(c) that applies a different level of control to such systems under a defined set of circumstances (*e.g.*, when such systems are installed on civil aircraft platforms).

**Response:** The commenter’s recommendation is not accepted for the purposes of this final rule. Paragraph (d) of the Note to WAML 4.c excludes from control aircraft missile protection systems (AMPS) “installed” on “civil aircraft,” provided that all of the following conditions apply: (1) The AMPS is only operable in a specific “civil aircraft” in which the specific AMPS is installed and for which either a civil Type Certificate or an equivalent document recognized by the International Civil Aviation Organization (ICAO) has been issued; (2) the AMPS employs protection to prevent unauthorized access to “software;” and (3) the AMPS incorporates an active mechanism that forces the system not to function when it is removed from the “civil aircraft” in which it was “installed.” However, this WAML exclusion does not apply to any of the defense articles enumerated in USML Category IV as amended by the companion rule that is being published by the U.S. Department of State, Directorate of Defense Trade Controls, in conjunction with this final rule. Instead, this WAML exclusion will be addressed in subsequent ECR amendments to be published by State and Commerce that will address specific ITAR controls on AMPS and any exclusions from such ITAR controls that may apply.

**Recommended Changes to Certain ECCNs in CCL Category 9A, 9B, and 9C That Were Not Addressed in the January 31 (Launch Vehicles) Rule**

**Comment:** One commenter noted that some of the proposed ECR amendments to the EAR and the ITAR appeared to be open to the interpretation that if items subject to the WA or MTCR controls on aircraft, gas turbine engines, missiles, or spacecraft are not clearly described in the USML as subject to the ITAR, then such items are subject to the EAR, instead. The commenter recommended that both the EAR and the ITAR be amended to clearly indicate whether this interpretation is correct.

**Response:** Supplement No. 4 (Commerce Control List Order of Review), which became effective on October 15, 2013, provides guidance on jurisdictional issues involving the EAR and the ITAR. With respect to export control jurisdiction questions, new Supplement No. 4 provides that, if an item is described in the USML, including one of its catch-all paragraphs, then the item is a “defense article” subject to the ITAR. Conversely, if an item is not described on the USML, and is otherwise “subject to the EAR,” then it should be classified using the

steps provided in Supplement No. 4 to determine the appropriate level of control. Amendments to § 120.5 of the ITAR that also became effective on October 15, 2013 provide that if a defense article or service is covered by the USML, its export and temporary import are regulated by the Department of State. However, these regulatory provisions are not intended to be interpreted in isolation from other provisions in the EAR and the ITAR. Although the ECR-related amendments to the ITAR are intended, to the extent practicable, to provide a positive list of specific types of equipment and related parts, components, accessories, and attachments that continue to warrant control on the USML, the fact that a particular article is not specifically enumerated on the USML does not necessarily provide a sufficient basis, in and of itself, for making a determination that the article is controlled on the CCL, because the USML continues to have a few “catch-all” controls. In short, the guidance provided in Supplement No. 4 to part 774 of the EAR and in § 120.5 of the ITAR must be viewed within the context of other EAR and ITAR regulatory provisions.

**Comment:** One commenter questioned why some MTCR “production equipment” and “production facilities” for USML Category IV articles remained in ECCN 9B115 or ECCN 9B116, respectively, while others were included in proposed new ECCN 9B604. The commenter also questioned why “production equipment” and “production facilities” for articles described in paragraph (h)(14), “combustion chambers,” and paragraph (h)(25), “fuzes,” of State’s Category V proposed rule were not included in proposed new ECCN 9B604 or in ECCNs 9B115 and 9B116. In addition, the commenter recommended changes to a number of other CCL Category 9 ECCNs to clarify component controls, eliminate ambiguous terms, and add items subject to the EAR to certain placeholder ECCNs that only describe items enumerated in USML Category IV.

**Response:** This final rule does not adopt the commenter’s recommended changes. ECCNs 9B115 and 9B116 control only “production equipment” and “production facilities,” respectively, that are identified on the MTCR Annex, but not on the WAML or the WA dual-use list (*i.e.*, all items in these two ECCNs are subject to MT controls, but not NS controls). New ECCN 9B604 does not control these items, because it is designed to control items identified on the WAML, some of which are also listed in the MTCR Annex (*i.e.*, all items in ECCN 9B604 are

subject to NS controls). For this reason, BIS continues to control some “production equipment” and “production facilities” under ECCN 9B115 or 9B116, instead of new ECCN 9B604. As for “production equipment” and “production facilities” for articles described in paragraph (h)(14) and paragraph (h)(25) of State’s Category V proposed rule, note that, although these production items are not specifically identified in new ECCN 9B604, paragraph .c of ECCN 9B604 controls test, inspection, and other production “equipment” that is “specially designed” for the “development,” “production,” repair, overhaul, or refurbishing of commodities described in ECCN 9A604, or defense articles controlled under USML Category IV, and not specified in ECCN 0B604.a or in ECCN 9B604.a, .b, or .d.” Given the broad scope of ECCN 9B604.c, BIS does not think that any further changes to ECCN 9B604 are necessary in this regard. Finally, the recommended changes to other CCL Category 9 ECCNs (*i.e.*, to clarify component controls, eliminate ambiguous terms, and add items subject to the EAR to certain placeholder ECCNs) are not adopted, because the recommended changes are outside the scope of the January 31 (launch vehicles) rule, as well as this final rule.

*Recommended Changes to “Software” and “Technology” ECCNs in CCL Category 0D and 0E and CCL Category 9D and 9E*

**Comment:** One commenter recommended that “software” and “technology” should be controlled by the same agency that controls production equipment (*i.e.*, Commerce) and recommended corresponding changes to ECCNs 0D604 and 9D604 to control “software” “specially designed” for the “development” or “production” of defense articles in USML Category IV. In addition, the commenter recommended that ECCNs 0E604 and 9E604 be expanded to control “technology” “required” for the “development” or “production” of defense articles in USML Category IV.

**Response:** BIS did not adopt this recommendation. Based on the review of USML categories (including USML Category IV) described earlier in the preamble to this rule, ECCNs 0D604 and 9D604 only control “software” for specified items that are “subject to the EAR” and ECCNs 0E604 and 9E604 only control “technology” for specified items that are “subject to the EAR” (*i.e.*, these four ECCNs do not control “software” or “technology” for any of the defense articles enumerated in USML Category

IV). In short, as a result of the review, “software” and “technology” for launch vehicles, missiles, rockets, torpedoes, bombs, mines, and other military explosive devices and related articles enumerated in USML Category IV will continue to be controlled under Category IV and not under the related “software” and “technology” entries on the CCL (*i.e.*, ECCNs 0D604 and 9D604 and ECCNs 0E604 and 9E604, respectively).

**Comment:** One commenter recommended that the following ECCNs be revised to reflect the current MTCR controls: ECCNs 9D001 through 9D004; ECCNs 9D101 and 9D103 through 9D105; ECCNs 9E001 and 9E002; and ECCNs 9E101 and 9E102.

**Response:** This final rule does not adopt the commenter’s recommended changes to the above-referenced ECCNs, because the recommended changes are outside the scope of the January 31 (launch vehicles) rule, as well as this final rule. Further, the items addressed by the January 31 (launch vehicles) rule and the companion rule published by the Department of State, Directorate of Defense Trade Controls were reviewed to ensure the consistency of the CCL controls with any applicable controls indicated on the current MTCR Annex.

**Changes Made by This Rule to Controls on Items Related to Launch Vehicles, Missiles, Rockets, and Military Explosive Devices**

This final rule creates four new 600 series ECCNs in CCL Category 0 (ECCNs 0A604, 0B604, 0D604, and 0E604) and four new 600 series ECCNs in CCL Category 9 (ECCNs 9A604, 9B604, 9D604, and 9E604) that control articles the President has determined no longer warrant control under USML Category IV. This final rule also amends ECCNs 0D001, 0E001, 9B115, 9B116, 9D001, 9D002, 9D003, 9D104, 9E001, 9E002, 9E101, and 9E102 to make clarifications and conforming changes based on the addition of the aforementioned 0Y604 and 9Y604 ECCNs to the CCL and amendments by the Department of State, Directorate of Defense Trade Controls, to the list of articles controlled by USML Category IV that are being published in conjunction with this final rule. These amendments are discussed in more detail below.

**New ECCN 0A604: Commodities Related to Military Explosive Devices and Charges**

In new ECCN 0A604, paragraph .a controls demolition blocks, and detonators designed, modified, or adapted therefor. Paragraph .b of ECCN 0A604 controls military explosive

excavating devices. A note to 0A604.a and .b indicates that this new ECCN does not control the detonators and other items described in ECCN 1A007 or ECCN 3A232. Paragraph .c of ECCN 0A604 controls smoke hand grenades and stun hand grenades (e.g., “flashbangs”) not described in ECCN 1A984. Paragraphs .d through .w of ECCN 0A604 are reserved. Paragraph .x of ECCN 0A604 controls “parts,” “components,” “accessories,” and “attachments” that are “specially designed” for a commodity in paragraphs .a through .c of ECCN 0A604, or for a defense article in USML Category IV, and not specified elsewhere on the USML. Two notes to paragraph .x indicate that: (1) Forgings, castings, and other unfinished products are controlled by paragraph .x if they have reached a stage in manufacturing where they are clearly identifiable by mechanical properties, material composition, geometry, or function, as commodities specified in paragraph .x; and (2) “parts,” “components,” “accessories,” and “attachments” specified in USML Category IV(h) are subject to the controls of that paragraph.

*New ECCN 0B604: Test, Inspection, and Production “Equipment” and Related Commodities “Specially Designed” for the “Development” or “Production” of Commodities in ECCN 0A604 or Related Defense Articles in USML Category IV*

In new ECCN 0B604, paragraph .a controls test, inspection, and other production “equipment” that is “specially designed” for the “production” or “development” of commodities controlled by ECCN 0A604 or for bombs, torpedoes, depth charges, mines and hand grenades, and “parts,” “components,” “accessories” and “attachments” therefor, controlled under USML Category IV. In the January 31 (launch vehicles) rule, 0B604.a contained test, inspection, and production “equipment” for “commodities in ECCN 0A604, or related defense articles controlled under USML Category IV, and not specified elsewhere on the USML.” The reason for revising the controls in ECCN 0B604.a is twofold. First, one of the public comments on the January 31 (launch vehicles) rule stated that the use of the term “related” in ECCN 0B604.a may cause confusion and also would run counter to the stated ECR objective of clearer, performance-based controls. ECCN 0B604.a now identifies the specific types of articles in USML Category IV to which the test, inspection, and production “equipment” described in 0B604 is “related.” Second, the intent of the

controls in new ECCNs 0B604 and 9B604 was to control test, inspection, and other production “equipment” coming over to the CCL from USML Category IV under two separate ECCNs, according to whether such equipment was identified on the Missile Technology Control Regime (MTCR) Annex. Since test, inspection, and other production “equipment” for the bombs, torpedoes, depth charges, mines and hand grenades, and “parts,” “components,” “accessories” and “attachments” therefor, controlled under USML Category IV are not identified on the MTCR Annex, this equipment is controlled under new ECCN 0B604 (which does not contain any MT-controlled items), instead of new ECCN 9B604 (which contains MT-controlled equipment related to launch vehicles, missiles, and rockets in USML Category IV). Paragraphs .b through .w of new ECCN 0B604 are reserved. Paragraph .x of new ECCN 0B604 controls “parts,” “components,” “accessories,” and “attachments” that are “specially designed” for a commodity subject to control in paragraph .a of ECCN 0B604.

*New ECCN 0D604: “Software” “Specially Designed” for the “Development,” “Production,” Operation, or Maintenance of Commodities Controlled by ECCN 0A604 or 0B604*

ECCN 0D604.a controls “software” “specially designed” for the “development,” “production,” operation or maintenance of commodities controlled by ECCN 0A604 or ECCN 0B604. Paragraph .b of ECCN 0D604 is reserved.

*New ECCN 0E604: “Technology” “Required” for the “Development,” “Production,” Operation, Installation, Maintenance, Repair, Overhaul, or Refurbishing of Commodities Controlled by ECCN 0A604 or 0B604, or “Software” Controlled by ECCN 0D604*

ECCN 0E604.a controls “technology” “required” for the “development,” “production,” operation, installation, maintenance, repair, overhaul, or refurbishing of commodities controlled by ECCN 0A604 or 0B604, or “software” controlled by ECCN 0D604. Paragraph .b of ECCN 0E604 is reserved.

*New ECCN 9A604: Commodities Related to Launch Vehicles, Missiles, and Rockets*

In new ECCN 9A604, the heading states that the entry controls commodities related to launch vehicles, missiles, and rockets and does not also reference “torpedoes, bombs, and

mines,” as was the case in the January 31 (launch vehicles) rule. To the extent that the CCL controls any commodities related to the latter, they would be controlled under new ECCN 0B604, instead.

Paragraph .a of ECCN 9A604 controls thermal batteries “specially designed” for the systems described in USML Category IV that are capable of a range equal to or greater than 300 km.

Paragraph .b of ECCN 9A604 controls thermal batteries, except for thermal batteries controlled by ECCN 9A604.a, that are “specially designed” for the systems described in USML Category IV. Paragraph .c of ECCN 9A604 controls “components” “specially designed” for ramjet, scramjet, pulse jet, or combined cycle engines described in USML Category IV, including devices to regulate combustion in such commodities. Paragraph .d of ECCN 9A604 controls components “specially designed” for hybrid rocket motors described in USML Category IV that are usable in rockets, missiles, or unmanned aerial vehicles capable of a range equal to or greater than 300 km. Paragraph .e of ECCN 9A604 controls “components” “specially designed” for pressure gain combustion-based propulsion systems controlled under USML Category IV. Paragraphs .f through .w of ECCN 9A604 are reserved. Paragraph .x of ECCN 9A604 controls “parts,” “components,” “accessories,” and “attachments” that are “specially designed” for a commodity in paragraphs .a through .d of ECCN 9A604, or a defense article in USML Category IV, and not specified elsewhere on the USML. Two notes to paragraph .x indicate that: (1) Forgings, castings, and other unfinished products are controlled by paragraph .x if they have reached a stage in manufacturing where they are clearly identifiable by mechanical properties, material composition, geometry, or function as commodities specified in paragraph .x; and (2) “parts,” “components,” “accessories,” and “attachments” specified in USML Category IV(h) are subject to the controls of that paragraph.

*New ECCN 9B604: Test, Inspection, and Production “Equipment” and Related Commodities “Specially Designed” for the “Development” or “Production” of Commodities in ECCN 9A604 or Related Defense Articles in USML Category IV*

In new ECCN 9B604, paragraph .a controls “production facilities” “specially designed” for items that are controlled by USML Category IV(a)(1) or (a)(2). Paragraph .b of ECCN 9B604 controls test, calibration, and alignment equipment “specially designed” for

items that are controlled by USML Category IV(h)(28). Paragraph .c of ECCN 9B604 controls test, inspection, and other production “equipment” that is “specially designed” for the “development,” “production,” repair, overhaul, or refurbishing of commodities described in ECCN 9A604, or defense articles controlled under USML Category IV, and not specified in ECCN 0B604.a or in ECCN 9B604.a, .b, or .d. In the January 31 (launch vehicles) rule, ECCN 9B604.c stated that it controlled test, inspection, and other production “equipment” for “commodities described in ECCN 9A604, or defense articles controlled under USML Category IV, and not specified elsewhere on the CCL or the USML.” This revision is intended to clarify the scope of controls on the test, inspection, and production equipment described in ECCN 9B604.c vis-à-vis the controls described in ECCN 0B604.a and in the other paragraphs of ECCN 9B604 (i.e., 9B604.a, .b, and .d). Paragraph .d of ECCN 9B604 controls “specially designed” “production facilities” or production “equipment” for systems, sub-systems, and “components” controlled by USML Category IV(d)(1), (d)(7), (h)(1), (h)(4), (h)(6), (h)(7), (h)(8), (h)(9), (h)(11), (h)(20), (h)(21), (h)(26), or (h)(28). Paragraphs .e through .w are reserved. Paragraph .x of ECCN 9B604 controls “parts,” “components,” “accessories,” and “attachments” “specially designed” for a commodity subject to control in paragraph .a or .b of ECCN 9B604.

*New ECCN 9D604: “Software” “Specially Designed” for the “Development,” “Production,” Operation, or Maintenance of Commodities Controlled by ECCN 9A604 or 9B604*

ECCN 9D604.a controls “software” “specially designed” for the “development,” “production,” operation, or maintenance of commodities controlled by ECCN 9A604 or ECCN 9B604. Paragraph .b of ECCN 9D604 is reserved.

*New ECCN 9E604: “Technology” “Required” for the “Development,” “Production,” Operation, Installation, Maintenance, Repair, Overhaul, or Refurbishing of Commodities Controlled by ECCN 9A604 or 9B604, or “Software” Controlled by ECCN 9D604*

ECCN 9E604.a controls “technology” “required” for the “development,” “production,” operation, installation, maintenance, repair, overhaul, or refurbishing of commodities or “software” controlled by ECCN 9A604,

9B604, or 9D604. Paragraph .b of ECCN 9E604 is reserved.

*Conforming Amendments to ECCNs 0D001, 0E001, 1A007, 3A232, 9B115, 9B116, 9D001, 9D002, 9D003, 9D104, 9E001, 9E002, 9E101, and 9E102*

This final rule amends ECCNs 0D001, 0E001, 1A007, 3A232, 9B115, 9B116, 9D001, 9D002, 9D003, 9D104, 9E001, 9E002, 9E101, and 9E102 to make clarifications and conforming changes based on both the addition of above-referenced new “600 series” ECCNs to CCL Categories 0 and 9 and the amendments to the list of defense articles controlled by USML Category IV that are contained in a final rule from the Department of State, Directorate of Defense Trade Controls (DDTC), that is being published in conjunction with this final rule.

First, this final rule amends the headings of ECCNs 0D001 and 0E001 to exclude “software” and “technology” for items in new ECCNs 0B604 and 0B614 from control under ECCNs 0D001 and 0E001, because such “software” and “technology” is controlled under new ECCNs 0D604 and 0E604 and ECCNs 0D614 and 0E614, respectively. In addition, the headings of ECCNs 9D001, 9D002, 9D003, 9E001, and 9E002 are amended to exclude “software” and “technology” for items in new ECCN 9B604 from control under these ECCNs, because such “software” and “technology” is controlled under new ECCNs 9D604 and 9E604, respectively. This rule also excludes from control under ECCNs 0D001 and 0E001 the following “600 series” ECCNs added to the CCL by BIS’s July 8 (Category VI–VII–XIII–X) rule: ECCNs 0B606, 0B617, 0C606, and 0C617. This rule also excludes from control under ECCNs 9D001, 9D002, 9D003, 9E001, and 9E002 the following “600 series” ECCNs added to the CCL on October 15, 2013: ECCNs 9B610 and 9B619.

Second, this final rule amends ECCNs 9D001, 9D002, 9D003, 9D104, 9E001, 9E002, 9E101, and 9E102 by removing from the headings of these ECCNs all references to the CCL Category 9 placeholder ECCNs that describe only items subject to the export licensing jurisdiction of DDTC. Furthermore, this rule amends the Related Controls paragraphs of the ECCNs indicated above to identify the items described in the placeholder ECCNs as subject to the export licensing jurisdiction of DDTC.

Third, this final rule amends ECCNs 9B115 and 9B116 by removing from the headings of these ECCNs all references to the CCL Category 9 placeholder ECCNs that describe only items subject to the export licensing authority of

DDTC. These placeholder references are replaced by references to the appropriate USML Category IV controls, as described in a rule by the U.S. Department of State, Directorate of Defense Trade Controls, that is being published in conjunction with this final rule. This final rule amends the headings of ECCNs 9B115 and 9B116 by adding references to specific USML categories, because these ECCNs control “specially designed” “production equipment” and “specially designed” “production facilities,” respectively, for certain USML Category IV defense articles, as well as certain CCL Category 9 commodities.

These conforming changes and clarifications also eliminate perceived discrepancies in the current text of certain CCL Category 9 “software” and “technology” ECCNs. For example, the heading of ECCN 9E102 included “technology” for the “use” of space launch vehicles described in ECCN 9A004, while the Related Controls paragraph of ECCN 9E102 indicated that such “technology” was subject to the export licensing jurisdiction of DDTC. This final rule amends the heading of ECCN 9E102 to include “technology” for commodities described in ECCN 9A004 (except for items that are subject to the ITAR, see 22 CFR part 121) and also amends the Related Controls paragraph in ECCN 9E102 to indicate that “technology” for ECCN 9A004 (except for items that are subject to the EAR) is subject to the export licensing jurisdiction of DDTC.

This final rule also corrects an error in the heading of ECCN 9E101, which indicated that this ECCN controlled “development,” “production,” and “use” “technology.” In fact, such “use” “technology” is controlled under ECCN 9E102. Therefore, this rule amends the heading of ECCN 9E101 to remove the reference to “use” “technology.” Furthermore, this final rule amends the MT controls paragraphs in ECCNs 9E001 and 9E002 to indicate that, in addition to the items previously identified in these paragraphs, MT controls also apply to “technology” for equipment controlled by 9B115. However, the MT controls paragraph in 9E002 no longer references 9B117, because “production” “technology” for 9B117 is not controlled under ECCN 9E002, as indicated in the ECCN heading.

This rule also revises the Related Controls paragraphs in ECCNs 1A007 and 3A232 to reflect the addition of new “600 series” ECCN 0A604, as described above. Consistent with the previous changes, this rule also adds a cross

reference to ECCN 3A232 in the Related Controls paragraph for ECCN 1A007.

Changes to the EAR amendments proposed in the January 31 (launch vehicles) rule

*Test, Inspection, and Other Production “Equipment” Controlled Under New ECCN 0B604.a*

As noted in the response to comments on ECCN 0B604 (see above), ECCN 0B604.a now states that it controls test, inspection, and other production “equipment” that is “specially designed” for the “production” or “development” of commodities controlled by ECCN 0A604 or the bombs, torpedoes, depth charges, mines and hand grenades, and parts, components, accessories and attachments therefor, controlled under USML Category IV.

*Changes To Make New ECCN 9B604 Consistent With the CCL Order of Review*

Supplement No. 4 to part 774, which became effective on October 15, 2013, gives “600 series” ECCNs precedence over non-“600 series” ECCNs when classifying an item. Accordingly, the controls in ECCN 9B604 in this final rule differ from the controls proposed in the January 31 (launch vehicles) rule in that they do not limit the scope of the test, inspection, and other production “equipment” controlled by ECCN 9B604.c to “equipment” that is not controlled elsewhere on the CCL (except with respect to “equipment” specified in ECCN 0B604.a or elsewhere in 9B604, i.e., 9B604.a, .b, or .d). This means that if an item subject to the EAR is described by a “600 series” ECCN (e.g., ECCN 9B604), then the item would be controlled under the “600 series” ECCN even if it were also described elsewhere on the CCL under a non-“600 series” ECCN.

**Export Administration Act**

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 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 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 is 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 OMB control number. This final rule would affect the following approved information collections: Simplified Network Application Processing System (control number 0694-0088), which includes, among other things, license applications; license exceptions (0694-0137); voluntary self-disclosure of violations (0694-0058); recordkeeping (0694-0096); export clearance (0694-0122); and the Automated Export System (0607-0152).

As stated in the July 15 (framework) rule, BIS believed that the combined effect of all rules to be published adding items to the EAR that would be removed from the ITAR as part of the administration’s ECR Initiative would increase the number of license applications to be submitted to BIS by approximately 16,000 annually. As the review of the USML progressed, the interagency group gained more specific information about the number of items that would come under BIS jurisdiction. As of the June 21 (transition) rule, BIS estimated the increase in license applications to be 30,000 annually, resulting in an increase in burden hours of 8,500 (30,000 transactions at 17 minutes each) under control number 0694-0088. BIS continues to review its estimate of this level of increase as more information becomes available. As described below, the *net* burden US export controls impose on US exporters will go down as a result of the transfer of less sensitive military items to the

jurisdiction of the CCL and the application of the license exceptions and other provisions set forth in this rule.

Some items formerly on the USML will become eligible for License Exception STA under this rule. Other such items may become eligible for License Exception STA upon approval of an eligibility request. BIS believes that the increased use of License Exception STA resulting from the combined effect of all rules to be published adding items to the EAR that would be removed from the ITAR as part of the administration’s Export Control Reform Initiative would increase the burden associated with control number 0694-0137 by about 14,758 hours (12,650 transactions at 1 hour and 10 minutes each). BIS expects that this increase in burden would be more than offset by a reduction in burden hours associated with approved collections related to the ITAR.

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 of 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 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 Regulations, Department of Commerce, certified to the Chief Counsel for Advocacy that the four proposed rules on which this rule is based would not have a significant impact on a substantial number of small entities. The rationales for those certifications were stated in the preambles to the proposed rules (see 77 FR 25932, 25938, May 2, 2012; 77 FR 33688, 33693, June 7, 2012; 77 FR 35310, 35313, June 13, 2012 and 78 FR 6750, 6756, January 31, 2013). BIS received no comments on those rationales and makes no changes to them for this final rule. Therefore, they are not repeated here. Accordingly, no regulatory flexibility analysis is required, and none has been prepared.

**List of Subjects****15 CFR Part 740**

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

**15 CFR Part 774**

Exports, Reporting and recordkeeping requirements.

For the reasons stated in the preamble, the Export Administration Regulations (15 CFR parts 730–774) are amended as follows:

**PART 740—[AMENDED]**

■ 1. The authority citation for 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 FR 49107 (August 12, 2013).

■ 2. In § 740.2:

- a. Revise paragraph (a)(12);
- b. Remove the word “and” from paragraph (a)(13)(v);
- c. Redesignate paragraph (a)(13)(vi) as paragraph (a)(13)(vii); and
- d. Add a new paragraph (a)(13)(vi).

The revision and addition read as follows:

**§ 740.2 Restrictions on all License Exceptions.**

(a) \* \* \*

(12) The item is described in a “600 series” ECCN and is destined to, shipped from, or was manufactured in a destination listed in Country Group D:5 (see Supplement No.1 to part 740 of the EAR), except that:

(i) “600 series” items destined to, or in, Country Group D:5 are eligible for License Exception GOV (§ 740.11(b)(2) of the EAR); and

(ii) 1A613.c or .d items destined to, or in, Country Group D:5 are eligible for License Exception TMP (§ 740.9(a)(11) of the EAR) or License Exception BAG (§ 740.14(h)(2) of the EAR).

(13) \* \* \*

(vi) License Exception BAG (§ 740.14); and

\* \* \* \* \*

■ 3. Section 740.9 is amended by adding paragraph (a)(11) and revising the first sentence of paragraph (a)(14) introductory text to read as follows:

**§ 740.9 Temporary imports, exports, reexports, and transfers (in-country) (TMP).**

\* \* \* \* \*

(a) \* \* \*

(11) *Personal protective equipment classified under ECCN 1A613.c or .d.* (i) Temporary exports, reexports, or in-

country transfers to countries not identified in Country Group D:5. U.S. persons may temporarily export or reexport one set of body armor classified under ECCN 1A613.d, which may include one helmet classified under 1A613.c, to countries not identified in Country Group D:5, provided that:

(A) The items are with the U.S. person’s baggage or effects, whether accompanied or unaccompanied (but not mailed); and

(B) The items are for that U.S. person’s exclusive use and not for transfer of ownership unless reexported or transferred (in-country) to another U.S. person.

(ii) Temporary exports, reexports, or transfers (in-country) to countries identified in Country Group D:5.

(A) *Afghanistan.* U.S. persons may temporarily export or reexport one set of body armor classified under ECCN 1A613.d, which may include one helmet classified under ECCN 1A613.c, to Afghanistan for personal use provided that the requirements in paragraph (a)(11)(i) of this section are met.

(B) *Iraq.* U.S. persons may temporarily export or reexport one set of body armor classified under ECCN 1A613.d, which may include one helmet classified under ECCN 1A613.c, to Iraq for personal use provided that the requirements in paragraph (a)(11)(i) of this section are met. In addition, the U.S. person must be affiliated with the U.S. Government and traveling on official business or traveling in support of a U.S. Government contract, or the U.S. person must be traveling to Iraq under a direct authorization by the Government of Iraq and engaging in activities for, on behalf of, or at the request of, the Government of Iraq. Documentation regarding direct authorization from the Government of Iraq shall include an English translation.

(C) *Other countries in Country Group D:5.* U.S. persons may temporarily export or reexport one set of body armor classified under ECCN 1A613.d, which may include one helmet classified under ECCN 1A613.c, provided that the requirements in paragraph (a)(11)(i) of this section are met, and the U.S. person is affiliated with the U.S. Government traveling on official business or is traveling in support of a U.S. Government contract.

(iii) Items exported, reexported, or transferred (in-country) under paragraph (a)(11) of this section, if not consumed or destroyed in the normal course of authorized temporary use abroad, must be returned to the United States or other country from which the items were so transferred as soon as practicable but no

later than four years after the date of export, reexport or transfer (in-country).  
\* \* \* \* \*

(14) \* \* \* With the exception of items described in paragraph (a)(11) of this section, all items exported, reexported, or transferred (in-country) under this section must, if not consumed or destroyed in the normal course of authorized temporary use abroad, be returned to the United States or other country from which the items were so transferred as soon as practicable but no later than one year after the date of export, reexport, or transfer (in-country). \* \* \*

\* \* \* \* \*

■ 4. Section 740.14 is amended by adding paragraph (h) to read as follows:

**§ 740.14 Baggage (BAG).**

\* \* \* \* \*

(h) *Special provisions: personal protective equipment classified under ECCN 1A613.c or .d.* (1) *Exports, reexports, or in-country transfers to countries not identified in Country Group D:5.* U.S. persons may export, reexport, or transfer (in-country) one set of body armor classified under ECCN 1A613.d, which may include one helmet classified under or ECCN 1A613.c, to countries not identified in Country Group D:5, provided that:

(i) The items are with the U.S. person’s baggage or effects, whether accompanied or unaccompanied (but not mailed); and

(ii) The items are for that person’s exclusive use and not for transfer of ownership unless reexported or transferred (in-country) to another U.S. person.

(2) *Exports, reexports, or in-country transfers to countries identified in Country Group D:5.* (i) *Afghanistan.* U.S. persons may export, reexport, or transfer (in-country) one set of body armor classified under ECCN 1A613.d, which may include one helmet classified under ECCN 1A613.c, to Afghanistan for personal use provided that the requirements in paragraph (h)(1) of this section are met.

(ii) *Iraq.* U.S. persons may export, reexport, or transfer (in-country) one set of body armor classified under ECCN 1A613.d, which may include one helmet classified under ECCN 1A613.c, to Iraq for personal use provided that the requirements in paragraph (h)(1) of this section are met. In addition, the U.S. person must be affiliated with the U.S. Government and traveling on official business or traveling in support of a U.S. Government contract, or the U.S. person must be traveling to Iraq under a direct authorization by the

Government of Iraq and engaging in activities for, on behalf of, or at the request of, the Government of Iraq. Documentation regarding direct authorization from the Government of Iraq shall include an English translation.

(iii) *Other countries in Country Group D:5.* U.S. persons may export, reexport, or transfer (in-country) one set of body armor classified under ECCN 1A613.d, which may include one helmet classified under ECCN 1A613.c, provided that the requirements in paragraph (h)(1) of this section are met, and the U.S. person is affiliated with the U.S. Government traveling on official business or is traveling in support of a U.S. Government contract.

**Note to paragraph (h):** Body armor controlled under ECCN 1A005 is eligible for this License Exception under paragraph (b) of this section.

## PART 774—[AMENDED]

■ 5. The authority citation for 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 FR 49107 (August 12, 2013).

■ 6. In Supplement No. 1 to part 774, Category 0, Export Control Classification Number 0A018 is amended by:

- a. Revising the “Related Controls” paragraph in the List of Items Controlled section to read as follows;
- b. Removing and reserving “Items” paragraph .d in the List of Items Controlled section; and
- c. Removing the “Note” to “Items” paragraph .d in the List of Items Controlled section.

The revision reads as follows:

### Supplement No. 1 to Part 774—The Commerce Control List

\* \* \* \* \*

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

\* \* \* \* \*

#### List of Items Controlled

**Related Controls:** (1) See also 0A979, 0A988, and 22 CFR 121.1 Categories I(a), III(b–d), and X(a). (2) See ECCN 0A617.y.1 and .y.2 for items formerly controlled by ECCN 0A018.a. (3) See ECCN 1A613.c for military helmets providing less than NIJ Type IV protection and ECCN 1A613.y.1 for conventional military steel helmets that, immediately prior to July 1, 2014, were classified under 0A018.d and 0A988. (4)

See 22 CFR 121.1 Category X(a)(5) and (a)(6) for controls on other military helmets.

\* \* \* \* \*

■ 7. In Supplement No. 1 to part 774 (the Commerce Control List), Category 0—Nuclear Materials, Facilities, and Equipment [and Miscellaneous Items], add ECCN 0A604 between ECCNs 0A521 and 0A606 to read as follows:

### Supplement No. 1 to Part 774—The Commerce Control List

\* \* \* \* \*

**0A604 Commodities Related to Military Explosive Devices and Charges (see List of Items Controlled).**

#### License Requirements

*Reason for Control:* NS, RS, AT, UN

Control(s)	Country Chart (See Supp. No. 1 to part 738)
NS applies to entire entry.	NS Column 1
RS applies to entire entry.	RS Column 1
AT applies to entire entry.	AT Column 1
UN applies to entire entry.	See § 746.1(b) for UN controls

#### List Based License Exceptions (See Part 740 for a Description of All License Exceptions)

LVS: N/A  
GBS: N/A  
CIV: N/A

#### Special Conditions for STA

**STA:** Paragraph (c)(2) of License Exception STA (§ 740.20(c)(2) of the EAR) may not be used for any item in this ECCN 0A604.

#### List of Items Controlled

**Related Controls:** (1) Torpedoes, bombs, and mines are subject to the ITAR (see 22 CFR § 121.1, USML Category IV). (2) Smoke bombs, non-irritant smoke flares, canisters, grenades and charges, and other pyrotechnical articles having both military and commercial applications are controlled by ECCN 1A984. (3) Certain explosive detonator firing sets, electrically driven explosive detonators, and detonators and multipoint initiation systems are controlled by ECCN 1A007 or ECCN 3A232. (4) See ECCN 0A919 for foreign-made “military commodities” that incorporate more than a *de minimis* amount of U.S.-origin “600 series” controlled content.

**Related Definitions:** N/A

**Items:**

- a. Demolition blocks, and detonators designed, modified, or adapted therefor.
- b. Military explosive excavating devices.

**Note to 0A604.a and .b:** This entry does not control the detonators and other items described in ECCN 1A007 or ECCN 3A232.

c. Smoke hand grenades and stun hand grenades (e.g., “flashbangs”) not controlled by ECCN 1A984.

d. through w. [Reserved]

x. “Parts,” “components,” “accessories,” and “attachments” that are “specially designed” for a commodity subject to control in paragraphs .a through .c of this ECCN, or for a defense article controlled under USML Category IV, and not specified elsewhere on the USML.

**Note 1 to 0A604.x:** *Forgings, castings, and other unfinished products, such as extrusions and machined bodies, that have reached a stage in manufacturing where they are clearly identifiable by mechanical properties, material composition, geometry, or function as commodities controlled by ECCN 0A604.x, are controlled by ECCN 0A604.x.*

**Note 2 to 0A604.x:** “Parts,” “components,” “accessories,” and “attachments” specified in USML Category IV(h) are subject to the controls of that paragraph.

\* \* \* \* \*

■ 8. In Supplement No. 1 to part 774 (the Commerce Control List), Category 0—Nuclear Materials, Facilities, and Equipment [and Miscellaneous Items], add ECCN 0A614 between ECCNs 0A606 and 0A617 to read as follows:

### Supplement No. 1 to Part 774—The Commerce Control List

\* \* \* \* \*

**0A614 Military Training “Equipment,” as Follows (see List of Items Controlled).**

#### License Requirements

*Reason for Control:* NS, RS, AT, UN

Control(s)	Country Chart (See Supp. No. 1 to part 738)
NS applies to entire entry.	NS Column 1
RS applies to entire entry.	RS Column 1
AT applies to entire entry.	AT Column 1
UN applies to entire entry.	See § 746.1(b) for UN controls

#### List Based License Exceptions (See Part 740 for a Description of All License Exceptions)

LVS: \$1500  
GBS: N/A  
CIV: N/A

#### Special Conditions for STA

**STA:** Paragraph (c)(2) of License Exception STA (§ 740.20(c)(2) of the EAR) may not be used for any item in 0A614.

#### List of Items Controlled

**Related Controls:** (1) Defense articles that are enumerated or otherwise described in USML Category IX and “technical data” (including “software”) directly related thereto are subject to the ITAR. (2) See ECCN 0A919 for foreign-made “military commodities” that incorporate more than a *de minimis* amount of US-origin “600 series” items. (3) “Parts,” “components,” “accessories” and “attachments” that are common to a simulator controlled by ECCN 0A614.a and to a simulated system or an

end item that is controlled on the USML or elsewhere on the CCL are controlled under the same USML Category or ECCN as the “parts,” “components,” “accessories” and “attachments” of the simulated system or end item.

*Related Definitions:* N/A

*Items:*

a. “Equipment” “specially designed” for military training that is not enumerated or otherwise described in USML Category IX.

**Note 1 to 0A614:** This entry includes operational flight trainers, radar target trainers, flight simulators for aircraft classified under ECCN 9A610.a, human-rated centrifuges, instrument flight trainers for military aircraft, navigation trainers for military items, target equipment, armament trainers, military pilotless aircraft trainers, mobile training units and training “equipment” for ground military operations.

**Note 2 to 0A614:** This entry does not apply to “equipment” “specially designed” for training in the use of hunting or sporting weapons.

b. through w. [Reserved]

x. “Parts,” “components,” “accessories” “attachments” that are “specially designed” for a commodity controlled by this entry or an article enumerated or otherwise described in USML Category IX, and not specified elsewhere on the USML.

**Note 3 to 0A614:** Forgings, castings, and other unfinished products, such as extrusions and machined bodies, that have reached a stage in manufacturing where they are clearly identifiable by mechanical properties, material composition, geometry, or function as commodities controlled by ECCN 0A614.x are controlled by ECCN 0A614.x.

\* \* \* \* \*

■ 9. In Supplement No. 1 to part 774, Category 0, Export Control Classification Number 0A988 is revised to read as follows:

#### Supplement No. 1 to Part 774—The Commerce Control List

\* \* \* \* \*

##### 0A988 Conventional Military Steel Helmets as Described by 0A018.d.1.

No items currently are in this ECCN. See ECCN 1A613.y.1 for conventional steel helmets that, immediately prior to July 1, 2014, were classified under 0A988.

■ 10. In Supplement No. 1 to part 774 (the Commerce Control List), Category 0—Nuclear Materials, Facilities, and Equipment [and Miscellaneous Items], add ECCN 0B604 between ECCNs 0B521 and 0B606 to read as follows:

#### Supplement No. 1 to Part 774—The Commerce Control List

\* \* \* \* \*

##### 0B604 Test, Inspection, and Production “Equipment” and Related Commodities “Specially Designed” for the “Development,” “Production,” Repair, Overhaul, or Refurbishing of Commodities in ECCN 0A604 or Related

#### Defense Articles in USML Category IV (see List of Items Controlled)

##### License Requirements

*Reason for Control:* NS, RS, AT, UN

Control(s)	Country Chart (See Supp. No. 1 to part 738)	Control(s)	Country Chart (See Supp. No. 1 to part 738)
NS applies to entire entry.	NS Column 1	NS applies to entire entry.	NS Column 1
RS applies to entire entry.	RS Column 1	RS applies to entire entry.	RS Column 1
AT applies to entire entry.	AT Column 1	AT applies to entire entry.	AT Column 1
UN applies to entire entry.	See § 746.1(b) for UN controls	UN applies to entire entry.	See § 746.1(b) for UN controls

##### List Based License Exceptions (See Part 740 for a Description of All License Exceptions)

LVS: \$1500

GBS: N/A

CIV: N/A

##### Special Conditions for STA

*STA:* Paragraph (c)(2) of License Exception

STA (§ 740.20(c)(2) of the EAR) may not be used for any item in this ECCN 0B604.

##### List of Items Controlled

*Related Controls:* (1) See ECCN 9B604, which controls test, inspection, and production “equipment” and related commodities “specially designed” for the “development” or “production” of commodities in ECCN 9A604 or related defense articles in USML Category IV. (2) See ECCN 0A919 for foreign-made “military commodities” that incorporate more than a *de minimis* amount of US-origin “600 series” controlled content.

*Related Definitions:* N/A

*Items:*

a. Test, inspection, and other production “equipment” that are “specially designed” for the “development,” “production,” repair, overhaul, or refurbishing of commodities controlled by ECCN 0A604 or for bombs, torpedoes, depth charges, mines and hand grenades, and parts, components, accessories and attachments therefor, controlled under USML Category IV.

b. through w. [Reserved]

x. “Parts,” “components,” “accessories,” and “attachments” that are “specially designed” for a commodity subject to control in paragraph a. of this ECCN.

■ 11. In Supplement No. 1 to part 774 (the Commerce Control List), Category 0—Nuclear Materials, Facilities, and Equipment [and Miscellaneous Items], add ECCN 0B614 between ECCNs 0B606 and 0B617 to read as follows:

#### Supplement No. 1 to Part 774—The Commerce Control List

\* \* \* \* \*

##### 0B614 Test, Inspection, and Production “Equipment” for Military Training “Equipment” and “Specially Designed” “Parts,” “Components,” “Accessories” and “Attachments” Therefor, as Follows (see List of Items Controlled)

#### License Requirements

*Reason for Control:* NS, RS, AT, UN

*Control(s)* *Country Chart (See Supp. No. 1 to part 738)*

NS applies to entire entry.	NS Column 1
RS applies to entire entry.	RS Column 1
AT applies to entire entry.	AT Column 1
UN applies to entire entry.	See § 746.1(b) for UN controls

##### List Based License Exceptions (See Part 740 for a Description of All License Exceptions)

LVS: \$1500

GBS: N/A

CIV: N/A

##### Special Conditions for STA

*STA:* Paragraph (c)(2) of License Exception STA (§ 740.20(c)(2) of the EAR) may not be used for any item in 0B614.

##### List of Items Controlled

*Related Controls:* See ECCN 0A919 for foreign-made “military commodities” that incorporate more than a *de minimis* amount of US-origin “600 series” controlled content.

*Related Definitions:* N/A

*Items:*

a. Test, inspection, and other production “equipment” “specially designed” for the “development,” “production,” repair, overhaul, or refurbishing of commodities controlled by ECCN 0A614 or articles enumerated or otherwise described in USML Category IX.

b. through w. [Reserved]

x. “Parts,” “components,” “accessories” and “attachments” that are “specially designed” for a commodity controlled by ECCN 0B614.

■ 12. In Supplement No. 1 to Part 774 (the Commerce Control List), Category 0—Nuclear Materials, Facilities, and Equipment [and Miscellaneous Items], ECCN 0D001 is amended by revising the heading of the ECCN to read as follows:

#### Supplement No. 1 to Part 774—The Commerce Control List

\* \* \* \* \*

##### 0D001 “Software” specially designed or modified for the “development,” “production,” or “use” of items described in ECCN 0A001 or 0A002, 0B (except for ECCNs 0B604, 0B606, 0B614, 0B617, 0B986 and 0B999), or 0C (except for ECCN 0C606 and 0C617)

\* \* \* \* \*

■ 13. In Supplement No. 1 to Part 774 (the Commerce Control List), Category 0—Nuclear Materials, Facilities, and Equipment [and Miscellaneous Items], add ECCN 0D604 between ECCNs 0D521 and 0D606 to read as follows:

**Supplement No. 1 to Part 774—The Commerce Control List**

\* \* \* \* \*

**0D604** “Software” “specially designed” for the “development,” “production,” operation, or maintenance of commodities controlled by ECCN 0A604 or 0B604

**License Requirements**

*Reason for Control:* NS, RS, AT, UN

*Control(s)* *Country chart (See Supp. No. 1 to part 738)*

NS applies to entire entry.  
RS applies to entire entry.  
AT applies to entire entry.  
UN applies to entire entry.  
See § 746.1(b) for UN controls

**List Based License Exceptions (See Part 740 for a Description of All License Exceptions)**

CIV: N/A

TSR: N/A

**Special Conditions for STA**

*STA:* Paragraph (c)(2) of License Exception STA (§ 740.20(c)(2) of the EAR) may not be used for any item in this ECCN 0D604.

**List of Items Controlled**

*Related Controls:* (1) “Software” directly related to articles enumerated in USML Category IV is controlled under USML Category IV(i). (2) See ECCN 0A919 for foreign-made “military commodities” that incorporate more than a *de minimis* amount of U.S.-origin “600 series” controlled content.

*Related Definitions:* N/A

*Items:*

a. “Software” “specially designed” for the “development,” “production,” operation, or maintenance of commodities controlled by ECCNs 0A614 or 0B614.

*Control(s)*

*Country chart (See Supp. No. 1 to part 738)*

RS applies to entire entry.  
AT applies to entire entry.  
UN applies to entire entry.  
See § 746.1(b) for UN controls

**List Based License Exceptions (See Part 740 for a Description of All License Exceptions)**

CIV: N/A  
TSR: N/A

**Special Conditions for STA**

*STA:* Paragraph (c)(2) of License Exception STA (§ 740.20(c)(2) of the EAR) may not be used for any “software” in 0D614.

**List of Items Controlled**

*Related Controls:* (1) “Software” directly related to articles enumerated in USML Category IX is subject to the control of USML paragraph IX(e). (2) See ECCN 0A919 for foreign made “military commodities” that incorporate more than a *de minimis* amount of US-origin “600 series” items.

*Related Definitions:* N/A

*Items:*

a. “Software” “specially designed” for the “development,” “production,” operation, or maintenance of commodities controlled by ECCNs 0A614 or 0B614.

b. [Reserved]

\* \* \* \* \*

■ 15. In Supplement No. 1 to part 774 (the Commerce Control List), Category 0—Nuclear Materials, Facilities, and Equipment [and Miscellaneous Items], ECCN 0E001 is amended by revising the heading of the ECCN to read as follows:

**Supplement No. 1 to Part 774—The Commerce Control List**

\* \* \* \* \*

**0E001** “Technology,” according to the Nuclear Technology Note, for the “development,” “production,” or “use” of items described in ECCN 0A001 or 0A002, 0B (except for ECCNs 0B604, 0B606, 0B614, 0B617, 0B986, and 0B999), 0C (except for ECCN 0C606 and 0C617), or ECCN 0D001

\* \* \* \* \*

■ 16. In Supplement No. 1 to part 774 (the Commerce Control List), Category 0—Nuclear Materials, Facilities, and Equipment [and Miscellaneous Items], add ECCN 0E604 between ECCNs 0E521 and 0E606 to read as follows:

**Supplement No. 1 to Part 774—The Commerce Control List**

\* \* \* \* \*

**0E604** “Technology” “required” for the “development,” “production,” operation, installation, maintenance, repair, overhaul, or refurbishing of commodities controlled by ECCN 0A604 or 0B604, or “software” controlled by ECCN 0D604

**License Requirements**

*Reason for Control:* NS, RS, AT, UN

*Control(s)*

*Country chart (See Supp. No. 1 to part 738)*

NS applies to entire entry.  
RS applies to entire entry.  
AT applies to entire entry.  
UN applies to entire entry.  
See § 746.1(b) for UN controls

**List Based License Exceptions (See Part 740 for a description of All License Exceptions)**

CIV: N/A  
TSR: N/A

**Special Conditions for STA**

*STA:* Paragraph (c)(2) of License Exception STA (§ 740.20(c)(2) of the EAR) may not be used for any item in this ECCN 0E604.

**List of Items Controlled**

*Related Controls:* Technical data directly related to articles enumerated in USML Category IV are controlled under USML Category IV(i).

*Related Definitions:* N/A

*Items:*

a. “Technology” “required” for the “development,” “production,” operation, installation, maintenance, repair, overhaul, or refurbishing of commodities controlled by ECCN 0A604 or 0B604, or “software” controlled by ECCN 0D604.

b. [Reserved]

\* \* \* \* \*

■ 17. In Supplement No. 1 to part 774 (the Commerce Control List), Category 0—Nuclear Materials, Facilities, and Equipment [and Miscellaneous Items], add ECCN 0E614 between ECCNs 0E606 and 0E617 to read as follows:

**Supplement No. 1 to Part 774—The Commerce Control List**

\* \* \* \* \*

**0E614** “Technology,” as follows (see List of Items Controlled)

**License Requirements**

*Reason for Control:* NS, RS, AT, UN

*Control(s)*

*Country chart (See Supp. No. 1 to part 738)*

NS applies to entire entry.  
RS applies to entire entry.  
AT applies to entire entry.  
UN applies to entire entry.  
See § 746.1(b) for UN controls

**List Based License Exceptions (See Part 740 for a description of all license exceptions)**

CIV: N/A  
TSR: N/A

**License Requirements**

*Reason for Control:* NS, RS, AT, UN

*Control(s)* *Country chart (See Supp. No. 1 to part 738)*

NS applies to entire entry. NS Column 1

**Special Conditions for STA**

**STA:** Paragraph (c)(2) of License Exception STA (§ 740.20(c)(2) of the EAR) may not be used for any technology in 0E614.

**List of Items Controlled**

**Related Controls:** “Technical data” directly related to articles enumerated in USML Category IX is subject to the control of USML paragraph IX(e).

**Related Definitions:** N/A

Items:

a. “Technology” “required” for the “development,” “production,” operation, installation, maintenance, repair, overhaul, or refurbishing of commodities or “software” controlled by ECCNs 0A614, 0B614, or 0D614.

b. [Reserved]

\* \* \* \* \*

■ 18. In Supplement No. 1 to part 774, Category 1, ECCN 1A005 is amended by:

■ a. Adding a License Requirements Notes paragraph at the end of the License Requirements section;

■ b. Revising the Related Controls paragraph; and

■ c. Revising paragraphs a. and b. in the Items paragraph of the List of Items Controlled section.

The addition and revisions read as follows:

**Supplement No. 1 to Part 774—The Commerce Control List**

\* \* \* \* \*

**1A005 Body armor and components therefor, as follows (see List of Items Controlled)****License Requirements**

Reasons for Control

\* \* \* \* \*

**License Requirements Notes:** 1. Soft body armor not manufactured to military standards or specifications must provide ballistic protection equal to or less than NIJ level III (NIJ 0101.06, July 2008) to be controlled under 1A005.a. 2. For purposes of 1A005.a, military standards and specifications include, at a minimum, specifications for fragmentation protection.

\* \* \* \* \*

**List of Items Controlled**

**Related Controls:** (1) Bulletproof and bullet resistant vests (body armor) providing NIJ Type IV protection or greater are subject to the ITAR (see 22 CFR 121.1 Category X(a)). (2) Soft body armor and protective garments manufactured to military standards or specifications that provide protection equal to NIJ level III or less are classified under ECCN 1A613.d.1. (3) Hard armor plates providing NIJ level III ballistic protection are classified under ECCN 1A613.d.2. (4) Police helmets and shields are classified under ECCN 0A979. (5) Other personal protective “equipment” “specially designed” for military applications not controlled by the USML or elsewhere in the CCL is classified under ECCN 1A613.e. (6) For “fibrous or

filamentary materials” used in the manufacture of body armor, see ECCN 1C010.

\* \* \* \* \*

Items:

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

b. Hard body armor plates that provide ballistic protection less than NIJ level III (NIJ 0101.06, July 2008) or national equivalents.

\* \* \* \* \*

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

**Supplement No. 1 to Part 774—The Commerce Control List**

\* \* \* \* \*

**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:** High explosives and related equipment specially designed for military use are “subject to the ITAR” (see 22 CFR parts 120 through 130). This entry does not control detonators using only primary explosives, such as lead azide. See also ECCNs 0A604, 3A229, and 3A232. See 1E001 for “development” and “production” technology controls, and 1E201 for “use” technology controls.

\* \* \* \* \*

■ 20. In Supplement No. 1 to part 774 (the Commerce Control List), Category 1—Special Materials and Related Equipment, Chemicals, “Microorganisms,” and “Toxins,” ECCN 1A008 is amended by revising the second related control in the Related Controls paragraph of the List of Items Controlled section to read as follows:

**Supplement No. 1 to Part 774—The Commerce Control List**

\* \* \* \* \*

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

\* \* \* \* \*

**List of Items Controlled**

**Related Controls:** \* \* \*

(2) See also ECCNs 1C011, 1C018, 1C111, 1C239, and 1C608 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” (see 22 CFR parts 120 through 130).

\* \* \* \* \*

■ 21. In Supplement No. 1 to part 774, Category 1, add a ECCN 1A613 between ECCNs 1A290 and 1A984 to read as follows:

**Supplement No. 1 to Part 774—The Commerce Control List**

\* \* \* \* \*

**1A613 Armored and protective “equipment” and related commodities, as follows****License Requirements**

**Reason for Control:** NS, RS, AT, UN

<i>Control(s)</i>	<i>Country chart (See Supp. No. 1 to part 738)</i>
NS applies to entire entry except 1A613.y.	NS Column 1
RS applies to entire entry except 1A613.y.	RS Column 1
AT applies to entire entry.	AT Column 1
UN applies to entire entry, except 1A613.y.	See § 746.1(b) for UN controls

**List Based License Exceptions (See Part 740 for a description of all license exceptions)**

**LVS:** \$1500

**GBS:** N/A

**CIV:** N/A

**Special Conditions for STA**

**STA:** (1) Paragraph (c)(2) of License Exception STA (§ 740.20(c)(2) of the EAR) may not be used for any item in 1A613.

**List of Items Controlled**

**Related Controls:** (1) Defense articles, such as materials made from classified information, that are controlled by USML Category X or XIII of the ITAR, and technical data (including software) directly related thereto, are subject to the ITAR. (2) See ECCN 0A919 for foreign-made “military commodities” that incorporate more than a *de minimis* amount of US-origin “600 series” controlled content.

**Related Definitions:** References to “NIJ Type” protection are to the National Institute of Justice Classification guide at NIJ Standard 0101.06, Ballistic Resistance of Body Armor, and NIJ Standard 0108.01, Ballistic Resistant Protective Materials.

**Items:**

a. Armored plate “specially designed” for military use and not controlled by the USML.

**Note to paragraph a:** For controls on body armor plates, see ECCN 1A613.d.2 and USML Category X(a)(1).

b. Shelters “specially designed” to:

b.1. Provide ballistic protection for military systems, or

b.2. Protect against nuclear, biological, or chemical contamination.

c. Military helmets (other than helmets controlled under 1A613.y.1) and helmet

shells providing less than NIJ Type IV protection.

**Note 1 to paragraph c:** See ECCN 0A979 for controls on police helmets.

**Note 2 to paragraph c:** See USML Category X(a)(5) and (a)(6) for controls on other military helmets.

d. Body armor and protective garments, as follows:

d.1. Soft body armor and protective garments manufactured to military standards or specifications, or to their equivalents, that provide ballistic protection equal to or less than NIJ level III (NIJ 0101.06, July 2008); or

**Note:** For 1A613.d.1, military standards or specifications include, at a minimum, specifications for fragmentation protection.

d.2. Hard body armor plates that provide ballistic protection equal to NIJ level III (NIJ 0101.06, July 2008) or national equivalents.

**Note:** See ECCN 1A005 for controls on soft body armor not manufactured to military standards or specifications and hard body armor plates providing less than NIJ level III protection. For body armor providing NIJ Type IV protection or greater, see USML Category X(a)(1).

e. Other personal protective "equipment" "specially designed" for military applications not controlled by the USML.

f. to w. [Reserved]

x. "Parts," "components," "accessories," and "attachments" that are "specially designed" for a commodity controlled by ECCN 1A613 (except for 1A613.y) or an article enumerated in USML Category X, and not controlled elsewhere in the USML.

**Note:** forgings, castings, and other unfinished products, such as extrusions and machined bodies, that have reached a stage in manufacturing where they are clearly identifiable by mechanical properties, material composition, geometry, or function as commodities controlled by ECCN 1A613.x are controlled by ECCN 1A613.x.

y. Other commodities as follows:

y.1 Conventional military steel helmets.

y.2 [Reserved]

\* \* \* \* \*

■ 22. In Supplement No. 1 to part 774 (the Commerce Control List), Category 1—Special Materials and Related Equipment, Chemicals, "Microorganisms," and "Toxins," ECCN 1B018 is amended in the List of Items Controlled section by revising the "Related Controls" paragraph and by removing and reserving paragraph a.

The revision reads as follows:

#### Supplement No. 1 to Part 774—The Commerce Control List

\* \* \* \* \*

#### 1B018 Items on the Wassenaar Arrangement Munitions List (see List of Items controlled)

\* \* \* \* \*

#### List of Items Controlled

**Related Controls:** See ECCN 1B608.a, .b, and .x for items that, immediately prior to July 1, 2014, were classified under 1B018.a.

\* \* \* \* \*

■ 23. In Supplement No. 1 to part 774 (the Commerce Control List), Category 1—Special Materials and Related Equipment, Chemicals, "Microorganisms," and "Toxins," add ECCNs 1B608 and 1B613 between ECCNs 1B233 and 1B999 to read as follows:

#### Supplement No. 1 to Part 774—The Commerce Control List

\* \* \* \* \*

#### 1B608 Test, inspection, and production "equipment" and related commodities "specially designed" for the "development," "production," repair, overhaul, or refurbishing of commodities enumerated in ECCN 1C608 or USML Category V (see List of Items Controlled)

#### License Requirements

*Reason for Control:* NS, RS, MT, AT, UN

Control(s)	Country chart (See Supp. No. 1 to part 738)
NS applies to entire entry.	NS Column 1
RS applies to entire entry.	RS Column 1
MT applies to equipment "specially designed" for MT-controlled commodities in ECCN 1C608 or MT articles in USML Category V.	MT Column 1
AT applies to entire entry.	AT Column 1
UN applies to entire entry.	See § 746.1(b) for UN controls

#### List Based License Exceptions (See Part 740 for a description of all license exceptions)

LVS: \$1500

GBS: N/A

CIV: N/A

#### Special Conditions for STA

STA: Paragraph (c)(2) of License Exception STA (§ 740.20(c)(2) of the EAR) may not be used for any item in 1B608.

#### List of Items Controlled

**Related Controls:** (1) Defense articles that are enumerated in USML Category V, and technical data (including software) directly related thereto, are subject to the ITAR. (2) See ECCN 0A919 for foreign-made "military commodities" that incorporate more than a *de minimis* amount of US-origin "600 series" controlled content. (3) See ECCN 1B115 for controls on "production equipment," not controlled by this ECCN 1B608, for propellants or propellant constituents described in ECCN

1C011.a, 1C011.b, or 1C111 or in USML Category V.

**Related Definitions:** N/A

**Items:**

a. "Equipment" "specially designed" for the "development," "production," repair, overhaul, or refurbishing of items controlled by ECCN 1C608 or USML Category V and not elsewhere specified on the USML.

**Note to paragraph a:** ECCN 1B608.a. includes: (1) Continuous nitrators; (2) dehydration presses;

(3) cutting machines for the sizing of extruded propellants; (4) sweetie barrels (tumblers) 6 feet or more in diameter and having over 500 pounds product capacity; (5) convection current converters for the conversion of materials listed in USML Category V(c)(2); and (6) extrusion presses for the extrusion of small arms, cannon and rocket propellants.

b. Complete installations "specially designed" for the "development," "production," repair, overhaul, or refurbishing of items controlled by ECCN 1C608 or USML Category V and not elsewhere specified on the USML.

c. Environmental test facilities "specially designed" for the certification, qualification, or testing of items controlled by ECCN 1C608 or USML Category V.

d. through w. [Reserved]

x. "Parts," "components," "accessories" and "attachments" that are "specially designed" for a commodity subject to control in this ECCN or a defense article in USML Category V and not elsewhere specified on the USML.

#### 1B613 Test, inspection, and "production" "equipment" and related commodities "specially designed" for the "development," "production," repair, overhaul, or refurbishing of commodities controlled by ECCN 1A613 or USML Category X, as follows (see List of Items Controlled)

#### License Requirements

*Reason for Control:* NS, RS, AT, UN

Control(s)	Country chart (See Supp. No. 1 to part 738)
NS applies to entire entry.	NS Column 1
RS applies to entire entry.	RS Column 1
AT applies to entire entry.	AT Column 1
UN applies to entire entry.	See § 746.1(b) for UN controls

#### List Based License Exceptions (See Part 740 for a description of all license exceptions)

LVS: \$1500

GBS: N/A

CIV: N/A

#### Special Conditions for STA

STA: Paragraph (c)(2) of License Exception STA (§ 740.20(c)(2) of the EAR) may not be used for any item in 1B613.

#### List of Items Controlled

**Related Controls:** See ECCN 0A919 for foreign-made "military commodities" that

incorporate more than a *de minimis* amount of US-origin “600 series” controlled content.

*Related Definitions:* N/A

*Items:*

a. Test, inspection, and “production” “equipment,” not controlled by USML Category X(c), that is “specially designed” for the “development,” “production,” repair, overhaul, or refurbishing of commodities controlled by ECCN 1A613 or USML Category X.

b. Plasma pressure compaction (P2C) “equipment” “specially designed” for the “production” of ceramic or composite body armor plates controlled by ECCN 1A613 or USML Category X.

\* \* \* \* \*

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

#### Supplement No. 1 to Part 774—The Commerce Control List

\* \* \* \* \*

**1C011 Metals and compounds, other than those specified in 1C111, as follows (see List of Items Controlled)**

\* \* \* \* \*

#### List of Items Controlled

*Related Controls:* (1) See also ECCNs 1C111 and 1C608. \* \* \*.

\* \* \* \* \*

■ 25. In Supplement No. 1 to part 774 (the Commerce Control List), Category 1—Special Materials and Related Equipment, Chemicals, “Microorganisms,” and “Toxins,” ECCN 1C018 is revised to read as follows:

#### Supplement No. 1 to Part 774—The Commerce Control List

\* \* \* \* \*

**1C018 Commercial charges and devices containing energetic materials on the Wassenaar Arrangement Munitions List and certain chemicals**

No items currently are in this ECCN. (1) See ECCN 1C608.b. through .m for items that, immediately prior to July 1, 2014 were classified under 1C018.b through .m. (2) See ECCNs 1C011, 1C111, and 1C239 for additional controlled energetic materials, including chlorine trifluoride ( $\text{ClF}_3$ ), which is controlled under ECCN 1C111.a.3.f. (3) See ECCN 1A008 for shaped charges, detonating cord, and cutters and severing tools.

\* \* \* \* \*

■ 26. In Supplement No. 1 to part 774 (the Commerce Control List), Category 1—Special Materials and Related Equipment, Chemicals, “Microorganisms,” and “Toxins,” revise ECCN 1C111 to read as follows:

#### Supplement No. 1 to Part 774—The Commerce Control List

\* \* \* \* \*

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

#### License Requirements

*Reason for Control:* MT, NP, RS, AT

Control(s)	Country chart (See Supp. No. 1 to part 738)
MT applies to entire entry except 1C111.d.3.	MT Column 1
NP applies to 1C111.a.3.f only.	NP Column 1
RS applies to 1C111.d.3 only.	RS Column 1
AT applies to entire entry.	AT Column 1

#### List Based License Exceptions (See Part 740 for a description of all license exceptions)

LVS: N/A

GBS: N/A

CIV: N/A

#### List of Items Controlled

*Related Controls:* (1) See USML Category V(e)(7) for controls on HTPB (hydroxyl terminated polybutadiene) with a hydroxyl functionality equal to or greater than 2.2 and less than or equal to 2.4, a hydroxyl value of less than 0.77 meq/g, and a viscosity at 30 °C of less than 47 poise (CAS # 69102-90-5). (2) See USML Category V(f)(3) for controls on ferrocene derivatives, including butacene. (3) See ECCN 1C608 for controls on oxidizers that are composed of fluorine and also other halogens, oxygen, or nitrogen, except for chlorine trifluoride, which is controlled under this ECCN 1C111.a.3.f. (4) See ECCN 1C011.b for controls on boron and boron alloys not controlled under this ECCN 1C111.a.2.b. (5) See USML Category V(d)(10) for controls on Inhibited Red Fuming Nitric Acid (IRFNA) (CAS 8007-58-7).

*Related Definitions:* Particle size is the mean particle diameter on a weight or volume basis. Best industrial practices must be used in sampling, and in determining particle size, and the controls may not be undermined by the addition of larger or smaller sized material to shift the mean diameter.

*Items:*

a. Propulsive substances:

a.1. Spherical or spheroidal aluminum powder (C.A.S. 7429-90-5) in particle size of less than  $200 \times 10^{-6}$  m (200  $\mu\text{m}$ ) and an aluminum content of 97% by weight or more, if at least 10 percent of the total weight is made up of particles of less than 63  $\mu\text{m}$ , according to ISO 2591:1988 or national equivalents.

**Technical Note:** A particle size of 63  $\mu\text{m}$  (ISO R-565) corresponds to 250 mesh (Tyler) or 230 mesh (ASTM standard E-11).

a.2. Metal powders and alloys where at least 90% of the total particles by particle

volume or weight are made up of particles of less than 60  $\mu\text{m}$  (determined by measurement techniques such as using a sieve, laser diffraction or optical scanning), whether spherical, atomized, spheroidal, flaked or ground, as follows:

a.2.a. Consisting of 97% by weight or more of any of the following:

a.2.a.1. Zirconium (C.A.S. # 7440-67-7);

a.2.a.2. Beryllium (C.A.S. # 7440-41-7); or

a.2.a.3. Magnesium (C.A.S. # 7439-95-4);

a.2.b. Boron or boron alloys with a boron content of 85% or more by weight.

**Technical Note:** The natural content of hafnium in the zirconium (typically 2% to 7%) is counted with the zirconium.

**Note:** In a multimodal particle distribution (e.g., mixtures of different grain sizes) in which one or more modes are controlled, the entire powder mixture is controlled.

a.3. Oxidizer substances usable in liquid propellant rocket engines, as follows:

a.3.a. Dinitrogen trioxide (CAS 10544-73-7);

a.3.b. Nitrogen dioxide (CAS 10102-44-0)/ dinitrogen tetroxide (CAS 10544-72-6);

a.3.c. Dinitrogen pentoxide (CAS 10102-03-1);

a.3.d. Mixed oxides of nitrogen (MON);

a.3.e. [Reserved];

a.3.f. Chlorine trifluoride ( $\text{ClF}_3$ ).

**Technical Note:** Mixed oxides of nitrogen (MON) are solutions of nitric oxide (NO) in dinitrogen tetroxide/nitrogen dioxide ( $\text{N}_2\text{O}_4/\text{NO}_2$ ) that can be used in missile systems. There are a range of compositions that can be denoted as MON*i* or MON*i*<sub>j</sub>, where *i* and *j* are integers representing the percentage of nitric oxide in the mixture (e.g., MON3 contains 3% nitric oxide, MON25 25% nitric oxide. An upper limit is MON40, 40% by weight).

b. Polymeric substances:

b.1. Carboxy-terminated polybutadiene (including carboxyl-terminated polybutadiene) (CTPB);

b.2. Hydroxy-terminated polybutadiene (including hydroxyl-terminated polybutadiene) (HTPB), except for hydroxyl-terminated polybutadiene as specified in USML Category V (see 22 CFR 121.1) (also see Related Controls Note #1 for this ECCN);

b.3. Polybutadiene acrylic acid (PBAA);

b.4. Polybutadiene acrylic acid acrylonitrile (PBAN);

b.5. Polytetrahydrofuran polyethylene glycol (TPEG).

**Technical Note:** Polytetrahydrofuran polyethylene glycol (TPEG) is a block copolymer of poly 1,4 Butanediol and polyethylene glycol (PEG).

c. Other propellant energetic materials, additives, or agents:

c.1. [Reserved]

c.2. Triethylene glycol dinitrate (TEGDN);

c.3. 2 Nitrodiphenylamine (2-NDPA);

c.4. Trimethylolethane trinitrate (TMETN);

c.5. Diethylene glycol dinitrate (DEGDN).

d. Hydrazine and derivatives as follows:

d.1. Hydrazine (C.A.S. # 302-01-2) in

concentrations of 70% or more;

d.2. Monomethyl hydrazine (MMH) (C.A.S.

# 60-34-4);

d.3. Symmetrical dimethyl hydrazine (SDMH) (C.A.S. # 540-73-8);

- d.4. Unsymmetrical dimethyl hydrazine (UDMH) (C.A.S. # 57-14-7);
- d.5. Trimethylhydrazine (C.A.S. # 1741-01-1);
- d.6. Tetramethylhydrazine (C.A.S. # 6415-12-9);
- d.7. N,N diallylhydrazine;
- d.8. Allylhydrazine (C.A.S. # 7422-78-8);
- d.9. Ethylene dihydrazine;
- d.10. Monomethylhydrazine dinitrate;
- d.11. Unsymmetrical dimethylhydrazine nitrate;
- d.12. Dimethylhydrazinium azide;
- d.13. Hydrazinium azide (C.A.S. # 14546-44-2);
- d.14. Hydrazinium dinitrate;
- d.15. Diimido oxalic acid dihydrazine (C.A.S. # 3457-37-2);
- d.16. 2-hydroxyethylhydrazine nitrate (HEHN);
- d.17. Hydrazinium diperchlorate (C.A.S. # 13812-39-0);
- d.18. Methylhydrazine nitrate (MHN);
- d.19. Diethylhydrazine nitrate (DEHN);
- d.20. 3,6-dihydrazino tetrazine nitrate (DHTN), also referred to as 1,4-dihydrazine nitrate.

\* \* \* \* \*

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

- 27. In Supplement No. 1 to part 774 (the Commerce Control List), Category 1—Special Materials and Related Equipment, Chemicals, “Microorganisms,” and “Toxins,” ECCN 1C238 is removed.
- 28. In Supplement No. 1 to part 774 (the Commerce Control List), Category 1—Special Materials and Related Equipment, Chemicals, “Microorganisms,” and “Toxins,” ECCN 1C239 is amended by revising the Related Controls paragraph in the List of Items Controlled section to read as follows:

#### Supplement No. 1 to Part 774—The Commerce Control List

\* \* \* \* \*

#### 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:* (1) See ECCNs 1E001 (“development” and “production”) and 1E201 (“use”) for technology for items controlled by this entry. (2) See ECCNs 1C608 (energetic materials and related commodities on the Wassenaar Arrangement Munitions List) and 1C992 (commercial charges and devices containing energetic materials, n.e.s and nitrogen trifluoride in a gaseous state). (3) High explosives for

military use are subject to the ITAR (see 22 CFR Part 121.1).

\* \* \* \* \*

- 29. In Supplement No. 1 to Part 774 (the Commerce Control List), Category 1—Special Materials and Related Equipment, Chemicals, “Microorganisms,” and “Toxins,” add ECCN 1C608 between ECCNs 1C395 and 1C980 to read as follows:

#### Supplement No. 1 to Part 774—The Commerce Control List

\* \* \* \* \*

#### 1C608 Energetic Materials and Related Commodities (see List of Items Controlled)

#### License Requirements

*Reason for Control:* NS, RS, MT, AT, UN

Control(s)	Country chart (See Supp. No. 1 to part 738)
NS applies to entire entry.	NS Column 1
RS applies to entire entry.	RS Column 1
MT applies to 1C608.m.	MT Column 1
AT applies to entire entry.	AT Column 1
UN applies to entire entry.	See § 746.1(b) for UN controls

#### List Based License Exceptions (see Part 740 for a Description of all License Exceptions)

LVS: \$1500  
GBS: N/A  
CIV: N/A

#### Special Conditions for STA

*STA:* Paragraph (c)(2) of License Exception STA (§ 740.20(c)(2) of the EAR) may not be used for any item in 1C608.

#### List of Items Controlled

*Related Controls:* (1) The EAR does not control devices or charges containing materials controlled by USML subparagraphs V(c)(6), V(h), or V(i). The USML controls devices containing such materials. (2) The USML in Categories III, IV, or V controls devices and charges in this entry if they contain materials controlled by Category V (other than slurries) and such materials can be easily extracted without destroying the device or charge. (3) See also explosives and other items enumerated in ECCNs 1A006, 1A007, 1A008, 1C011, 1C111, 1C239, and 1C992. (4) See ECCN 0A919 for foreign-made “military commodities” that incorporate more than a *de minimis* amount of US-origin “600 series” controlled content.

*Related Definitions:* For purposes of this entry, the term “controlled materials” means controlled energetic materials enumerated in ECCNs 1C011, 1C111, 1C239, 1C608, or USML Category V.

*Items:*

- a. Single base, double base, and triple base propellants having nitrocellulose with

nitrogen content greater than 12.6% in the form of either:

- a.1. Sheetstock or carpet rolls; or
- a.2. Grains with diameter greater than 0.10 inches.

**Note:** This entry does not control propellant grains used in shotgun shells, small arms cartridges, or rifle cartridges.

**Note:** Sheetstock is propellant that has been manufactured in the form of a sheet suitable for further processing. A carpet roll is propellant that has been manufactured as a sheet, often cut to a desired width, and subsequently rolled up (like a carpet).

**Note:** Single base is propellant which consists mostly of nitrocellulose. Double base propellants consist mostly of nitrocellulose and nitroglycerine. Triple base consists mostly of nitrocellulose, nitroglycerine, and nitroguanidine. Such propellants contain other materials, such as resins or stabilizers, that could include carbon, salts, burn rate modifiers, nitrodiphenylamine, wax, polyethylene glycol (PEG), polyglycol adipate (PGA).

b. Shock tubes containing greater than 0.064 kg per meter (300 grains per foot), but not more than 0.1 kg per meter (470 grains per foot) of controlled materials.

c. Cartridge power devices containing greater than 0.70 kg, but not more than 1.0 kg of controlled materials.

d. Detonators (electric or nonelectric) and “specially designed” assemblies therefor containing greater than 0.01 kg, but not more than 0.1 kg of controlled materials.

e. Igniters not controlled by USML

Categories III or IV that contain greater than 0.01 kg, but not more than 0.1 kg of controlled materials.

f. Oil well cartridges containing greater than 0.015 kg, but not more than 0.1 kg of controlled materials.

g. Commercial cast or pressed boosters containing greater than 1.0 kg, but not more than 5.0 kg of controlled materials.

h. Commercial prefabricated slurries and emulsions containing greater than 10 kg and less than or equal to thirty-five percent by weight of USML controlled materials.

i. [Reserved]

j. Pyrotechnic devices “specially designed” for commercial purposes (e.g., theatrical stages, motion picture special effects, and fireworks displays), and containing greater than 3.0 kg, but not more than 5.0 kg of controlled materials.

k. Other commercial explosive devices or charges “specially designed” for commercial applications, not controlled by 1C608.c through .g above, containing greater than 1.0 kg, but not more than 5.0 kg of controlled materials.

l. Propyleneimine (2 methylaziridine) (C.A.S. #75-55-8).

m. Any oxidizer or mixture thereof that is a compound composed of fluorine and one or more of the following: other halogens, oxygen, or nitrogen.

**Note 1 to 1C608.m:** Nitrogen trifluoride (NF<sub>3</sub>) in a gaseous state is controlled under ECCN 1C992 and not under ECCN 1C608.m.

**Note 2 to 1C608.m:** Chlorine trifluoride (ClF<sub>3</sub>) is controlled under ECCN 1C111.a.3.f and not under ECCN 1C608.m.

**Note 3 to 1C608.m:** Oxygen difluoride ( $OF_2$ ) is controlled under USML Category V.d.10 (see 22 CFR 121.1) and not under ECCN 1C608.m.

**Note to 1C608.l and m:** If a chemical in ECCN 1C608.l or .m is incorporated into a commercial charge or device described in ECCN 1C608.c through .k or in ECCN 1C992, the classification of the commercial charge or device applies to the item.

n. Any explosives, propellants, oxidizers, pyrotechnics, fuels, binders, or additives that are “specially designed” for military application and not enumerated or otherwise described in USML Category V or elsewhere on the USML.

\* \* \* \* \*

■ 30. In Supplement No. 1 to part 774 (the Commerce Control List), Category 1—Special Materials and Related Equipment, Chemicals, “Microorganisms,” and “Toxins,” ECCN 1C992 is amended by revising, in the List of Items Controlled section, the Related Controls paragraphs and Related Definitions paragraphs (1) and (2) to read as follows:

#### Supplement No. 1 to Part 774—The Commerce Control List

\* \* \* \* \*

**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 Controls:** (1) Commercial charges and devices containing USML controlled energetic materials that exceed the quantities noted or that are not covered by this entry are controlled under ECCN 1C608. (2) Nitrogen trifluoride when not in a gaseous state is controlled under ECCN 1C608.

**Related Definitions:** (1) Items controlled by this entry ECCN 1C992 are those materials not controlled by ECCN 1C608 and not “subject to the ITAR” (see 22 CFR Parts 120 through 130). (2) For purposes of this entry, the term “controlled materials” means controlled energetic materials (see ECCNs 1C011, 1C111, 1C239, and 1C608; see also 22 CFR 121.1, Category V). \* \* \*

\* \* \* \* \*

■ 31. In Supplement No. 1 to part 774 (the Commerce Control List), Category 1—Special Materials and Related Equipment, Chemicals, “Microorganisms,” and “Toxins,” ECCN 1D018 is amended by revising the ECCN heading and by revising the “Related Controls” paragraph in the List of Items Controlled to read as follows:

#### Supplement No. 1 to Part 774—The Commerce Control List

\* \* \* \* \*

**1D018 “Software” specially designed or modified for the “development,”**

#### “production,” or “use” of items controlled by 1B018.b

\* \* \* \* \*

#### List of Items Controlled

**Related Controls:** See ECCN 1D608 for “software” for items classified under ECCN 1B608 that, immediately prior to July 1, 2014, were classified under 1B018.a.

\* \* \* \* \*

■ 32. In Supplement No. 1 to part 774 (the Commerce Control List), Category 1—Special Materials and Related Equipment, Chemicals, “Microorganisms,” and “Toxins,” add ECCNs 1D608 and 1D613 between ECCNs 1D390 and 1D993 to read as follows:

#### Supplement No. 1 to Part 774—The Commerce Control List

\* \* \* \* \*

**1D608 “Software” “specially designed” for the “development,” “production,” operation, or maintenance of commodities controlled by 1B608 or 1C608**

#### License Requirements

**Reason for Control:** NS, RS, MT, AT, UN

Control(s)	Country chart (See Supp. No. 1 to part 738)
NS applies to entire entry.	NS Column 1
RS applies to entire entry.	RS Column 1
MT applies to “software” “specially designed” for the “use” of 1B608 equipment in the “production” and handling of materials controlled by 1C608.m or MT articles in USML Category V.	MT Column 1
AT applies to entire entry.	AT Column 1
UN applies to entire entry.	See § 746.1(b) for UN controls

#### List Based License Exceptions (See Part 740 for a Description of All License Exceptions)

**CIV:** N/A

**TSR:** N/A

#### Special Conditions for STA

**STA:** Paragraph (c)(2) of License Exception STA (§ 740.20(c)(2) of the EAR) may not be used for any item in 1D608.

#### List of Items Controlled

**Related Controls:** (1) Software directly related to articles enumerated or otherwise described in USML Categories III, IV or V is subject to the controls of those USML Categories, respectively. (2) See ECCN 0A919 for foreign-made “military commodities” that incorporate more than a *de minimis* amount of U.S.-origin “600 series” items.

**Related Definitions:** N/A

#### Items:

a. “Software” “specially designed” for the “development,” “production,” operation, or maintenance of commodities controlled by 1C608 or 1C608.

b. [Reserved]

**1D613 “Software” “specially designed” for the “development,” “production,” operation, or maintenance of commodities controlled by 1A613 or 1B613, as follows (see List of Items Controlled)**

#### License Requirements

**Reason for Control:** NS, RS, AT, UN

Control(s)	Country chart (See Supp. No. 1 to part 738)
NS applies to entire entry except 1D613.y.	NS Column 1
RS applies to entire entry except 1D613.y.	RS Column 1
AT applies to entire entry.	AT Column 1
UN applies to entire entry, except 1D613.y.	See § 746.1(b) for UN controls

#### List Based License Exceptions (See Part 740 for a Description of All License Exceptions)

**CIV:** N/A

**TSR:** N/A

#### Special Conditions for STA

**STA:** Paragraph (c)(2) of License Exception STA (§ 740.20(c)(2) of the EAR) may not be used for any “software” in 1D613.

#### List of Items Controlled

**Related Controls:** (1) “Software” directly related to articles controlled by USML Category X is subject to the control of USML paragraph X(e) of the ITAR. (2) See ECCN 0A919 for foreign-made “military commodities” that incorporate more than a *de minimis* amount of US-origin “600 series” controlled content.

**Related Definitions:** N/A

#### Items:

a. “Software” (other than “software” controlled in paragraph .y of this entry) “specially designed” for the “development,” “production,” operation, or maintenance of commodities controlled by ECCNs 1A613 (except 1A613.y) or 1B613 (except 1B613.y).

b. to x. [Reserved]

y. Specific “software” “specially designed” for the “production,” “development,” operation, or maintenance of commodities controlled by ECCN 1A613.y.

\* \* \* \* \*

■ 33. In Supplement No. 1 to part 774 (the Commerce Control List), Category 1—Special Materials and Related Equipment, Chemicals, “Microorganisms,” and “Toxins,” ECCN 1E001 is amended by revising the ECCN heading, by revising the NP controls paragraph in the License Requirements section, and by revising the “Related

Controls" paragraph in the List of Items Controlled to read as follows:

**Supplement No. 1 to Part 774—The Commerce Control List**

\* \* \* \* \*

**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, 1A008, 1A101, 1B (except 1B608, 1B613, or 1B999), or 1C (except 1C355, 1C608, 1C980 to 1C984, 1C988, 1C990, 1C991, 1C995 to 1C999)

**License Requirements**

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

<i>Control(s)</i>	<i>Country chart (See Supp. No. 1 to part 738)</i>
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NP applies to "technology" for items controlled by 1A002, 1A007, 1B001, 1B101, 1B201, 1B225 to 1B233, 1C002, 1C010, 1C111, 1C116, 1C202, 1C210, 1C216, 1C225 to 1C237, 1C239, or 1C240 for NP reasons.

\* \* \* \* \*

**List Based License Exceptions (See Part 740 for a Description of All License Exceptions)**

\* \* \* \* \*

**List of Items Controlled**

*Related Controls:* (1) Also see ECCNs 1E101, 1E201, and 1E202. (2) See ECCN 1E608 for "technology" for items classified under ECCN 1B608 or 1C608 that, immediately prior to July 1, 2014, were classified under ECCN 1B018.a or 1C018.b through .m (note that ECCN 1E001 controls "development" and "production" "technology" for chlorine trifluoride controlled by ECCN 1C111.a.3.f—see ECCN 1E101 for controls on "use" "technology" for chlorine trifluoride). (3) See ECCN 1E002.g for control libraries (parametric technical databases) specially designed or modified to enable equipment to perform the functions of equipment controlled under ECCN 1A004.c (Nuclear, biological and chemical (NBC) detection systems) or ECCN 1A004.d (Equipment for detecting or identifying explosives residues). (4) "Technology" for lithium isotope separation (see related ECCN 1B233) and "technology" for items described in ECCN 1C012 are subject to the export licensing authority of the Department of Energy (see 10 CFR Part 810). (5) "Technology" for items described in ECCN 1A102 is "subject to the ITAR" (see 22 CFR Parts 120 through 130).

\* \* \* \* \*

■ 34. In Supplement No. 1 to Part 774 (the Commerce Control List), Category 1—Special Materials and Related Equipment, Chemicals, "Microorganisms," and "Toxins," ECCN 1E101 is amended by revising the ECCN heading and by revising the License Requirements section to read as follows:

**Supplement No. 1 to Part 774—The Commerce Control List**

\* \* \* \* \*

**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

**License Requirements**

*Reason for Control:* MT, NP, AT

<i>Control(s)</i>	<i>Country chart (See Supp. No. 1 to part 738)</i>
-------------------	--

MT applies to "technology" for 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 for MT reasons.

NP applies to "technology" for items controlled by 1B001, 1B101, 1C111, 1C116, 1D001, or 1D101 for NP reasons.

AT applies to entire entry.

\* \* \* \* \*

■ 35. In Supplement No. 1 to part 774 (the Commerce Control List), Category 1—Special Materials and Related Equipment, Chemicals, "Microorganisms," and "Toxins," ECCN 1E201 is amended by revising the ECCN heading to read as follows:

**Supplement No. 1 to Part 774—The Commerce Control List**

\* \* \* \* \*

**1E201** "Technology" according to the General Technology Note for the "use" of items controlled by 1A002, 1A007, 1A202, 1A225 to 1A227, 1B201, 1B225 to 1B232, 1B233.b, 1C002.b.3 and b.4, 1C010.a, 1C010.b, 1C010.e.1, 1C202, 1C210, 1C216, 1C225 to 1C237, 1C239, 1C240 or 1D201

\* \* \* \* \*

■ 36. In Supplement No. 1 to part 774 (the Commerce Control List), Category 1—Special Materials and Related Equipment, Chemicals, "Microorganisms," and "Toxins," add ECCNs 1E608 and 1E613 between ECCNs 1E355 and 1E994 to read as follows:

**Supplement No. 1 to Part 774—The Commerce Control List**

\* \* \* \* \*

**1E608** "Technology" "required" for the "development," "production," operation, installation, maintenance, repair, overhaul, or refurbishing of equipment controlled in 1B608 or materials controlled by 1C608

**License Requirements**

*Reason for Control:* NS, RS, MT, AT, UN

<i>Control(s)</i>	<i>Country Chart (See Supp. No. 1 to part 738)</i>
-------------------	--

NS applies to entire entry.

RS applies to entire entry.

MT applies to "technology" "required" for 1C608.m.

AT applies to entire entry.

UN applies to entire entry. See § 746.1(b) for UN controls

**List Based License Exceptions (See Part 740 for a Description of all License Exceptions)**

*CIV:* N/A

*TSR:* N/A

**Special Conditions for STA**

*STA:* Paragraph (c)(2) of License Exception STA (§ 740.20(c)(2) of the EAR) may not be used for any item in 1E608.

**List of Items Controlled**

*Related Controls:* (1) Technical data directly related to articles enumerated or otherwise described in USML Categories III, IV, or V are subject to the controls of those USML Categories, respectively.

(2) "Technology" for chlorine trifluoride is controlled under ECCN 1E001 ("development" and "production") and ECCN 1E101 ("use").

*Related Definitions:* N/A

*Items:*

a. "Technology" "required" for the "development," "production," operation, installation, maintenance, repair, overhaul, or refurbishing of equipment controlled by ECCN 1B608 or materials controlled by ECCN 1C608.

b. "Technology" "required" for the "development" or "production" of nitrocellulose with nitrogen content over 12.6% and at rates greater than 2000 pounds per hour.

c. "Technology" "required" for the "development" or "production" of nitrate esters (e.g., nitroglycerine) at rates greater than 2000 pounds per hour.

**1E613** “Technology” “required” for the “development,” “production,” operation, installation, maintenance, repair, overhaul, or refurbishing of commodities controlled by 1A613 or 1B613 or “software” controlled by 1D613, as follows (see list of items controlled).

#### License Requirements

Reason for Control: NS, RS, AT, UN

Control(s)	Country chart (See Supp. No. 1 to part 738)
NS applies to entire entry except 1E613.y.	NS Column 1
RS applies to entire entry except 1E613.y.	RS Column 1
AT applies to entire entry.	AT Column 1
UN applies to entire entry, except 1E613.y.	See § 746.1(b) for UN controls

#### List Based License Exceptions (See Part 740 for a description of all license exceptions)

CIV: N/A

TSR: N/A

#### Special Conditions for STA

STA: Paragraph (c)(2) of License Exception STA (§ 740.20(c)(2) of the EAR) may not be used for any “technology” in 1E613.

#### List of Items Controlled

Related Controls: Technical data directly related to articles controlled by USML Category X are subject to the control of USML paragraph X(e) of the ITAR.

Related Definitions: N/A

#### Items:

a. “Technology” (other than “technology” controlled by paragraph .y of this entry) “required” for the “development,” “production,” operation, installation, maintenance, repair, overhaul, or refurbishing of commodities or “software” controlled by ECCNs 1A613 (except 1A613.y), 1B613 or 1D613 (except 1D613.y).  
b. through x. [Reserved]

y. Specific “technology” “required” for the “production,” “development,” operation, installation, maintenance, repair, overhaul, or refurbishing of commodities or software controlled by ECCN 1A613.y or 1D613.y.

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

#### Supplement No. 1 to Part 774—The Commerce Control List

\* \* \* \* \*

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

\* \* \* \* \*

#### List of Items Controlled

Related Controls: (1) See ECCNs 0A604 and 1A007 for electrically driven explosive detonators. \* \* \*

\* \* \* \* \*

■ 38. In Supplement No. 1 to part 774 (the Commerce Control List), Category 9—Aerospace and Propulsion, add ECCN 9A604 between ECCNs 9A120 and 9A610 to read as follows:

#### Supplement No. 1 to Part 774—The Commerce Control List

\* \* \* \* \*

#### 9A604 Commodities related to launch vehicles, missiles, and rockets (see List of Items Controlled)

#### License Requirements

Reason for Control: NS, RS, MT, AT, UN

Control(s)	Country chart (See Supp. No. 1 to part 738)
NS applies to entire entry.	NS Column 1
RS applies to entire entry.	RS Column 1
MT applies to 9A604.a, .c, and .d.	MT Column 1
AT applies to entire entry.	AT Column 1
UN applies to entire entry.	See § 746.1(b) for UN controls

#### List Based License Exceptions (See Part 740 for a Description of All License Exceptions)

LVS: N/A

GBS: N/A

CIV: N/A

#### Special Conditions for STA

STA: Paragraph (c)(2) of License Exception STA (§ 740.20(c)(2) of the EAR) may not be used for any item in this ECCN 9A604.

#### List of Items Controlled

Related Controls: (1) Launch vehicles, missiles, and rockets are subject to the ITAR (see 22 CFR § 121.1, USML Category IV). (2) See ECCN 0A919 for foreign-made “military commodities” that incorporate more than a *de minimis* amount of U.S.-origin “600 series” controlled content.

Related Definitions: N/A

#### Items:

a. Thermal batteries “specially designed” for systems controlled under USML Category IV capable of a range equal to or greater than 300 km.

b. Thermal batteries, except for thermal batteries controlled by 9A604.a, that are “specially designed” for systems controlled under USML Category IV.

c. “Components” “specially designed” for ramjet, scramjet, pulse jet, or combined cycle engines controlled under USML Category IV, including devices to regulate combustion in such commodities.

d. “Components” “specially designed” for hybrid rocket motors controlled under USML Category IV usable in rockets, missiles, or unmanned aerial vehicles capable of a range equal to or greater than 300 km.

e. “Components” “specially designed” for pressure gain combustion-based propulsion systems controlled under USML Category IV.

f. through w. [Reserved]

x. “Parts,” “components,” “accessories,” and “attachments” that are “specially designed” for a commodity subject to control in paragraphs .a through .d of this ECCN, or a defense article controlled under USML Category IV, and not specified elsewhere on the USML.

**Note 1 to 9A604.x:** *Forgings, castings, and other unfinished products, such as extrusions and machined bodies, that have reached a stage in manufacturing where they are clearly identifiable by mechanical properties, material composition, geometry, or function as commodities controlled by ECCN 9A604.x, are controlled by ECCN 9A604.x.*

**Note 2 to 9A604.x:** *“Parts,” “components,” “accessories,” and “attachments” specified in USML Category IV(h) are subject to the controls of that paragraph.*

\* \* \* \* \*

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

■ 39. In Supplement No. 1 to part 774 (the Commerce Control List) Category 9, ECCN 9A610, remove and reserve paragraph .t in the Items paragraph of the List of Items Controlled Section.

■ 40. In Supplement No. 1 to part 774 (the Commerce Control List), Category 9—Aerospace and Propulsion, ECCN 9B115 is amended by revising the heading of the ECCN and by revising the “Related Controls” paragraph in the List of Items Controlled to read as follows:

#### Supplement No. 1 to Part 774—The Commerce Control List

\* \* \* \* \*

#### 9B115 “Specially designed” production equipment for systems, sub-systems and “components” controlled by ECCN 9A101 or by USML Category IV(d)(2), (d)(3), (d)(4), or (h)(17)

\* \* \* \* \*

#### List of Items Controlled

Related Controls: (1) Although items described in USML Category IV(d)(2), (d)(3), (d)(4), or (h)(17) 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 export licensing authority of BIS. (2) “Specially designed” production “equipment” for systems, sub-systems, and “components” described in USML Category IV(d)(1), (d)(7), (h)(1), (h)(4), (h)(6), (h)(7), (h)(8), (h)(9), (h)(11), (h)(20), (h)(21), (h)(26), or (h)(28) are controlled by ECCN 9B604. (3) See ECCN 0A919 for foreign-made “military commodities” that incorporate more than a *de minimis* amount of US-origin “600 series” controlled content.

\* \* \* \* \*

■ 41. In Supplement No. 1 to part 774 (the Commerce Control List), Category

9—Aerospace and Propulsion, ECCN 9B116 is amended by revising the heading of the ECCN and by revising the “Related Controls” paragraph in the List of Items Controlled to read as follows:

**Supplement No. 1 to Part 774—The Commerce Control List**

\* \* \* \* \*

**9B116 “Specially designed” “production facilities” for systems, sub-systems, and “components” controlled by ECCN 9A012 (applies to MT-controlled items only) or 9A101 or by USML Category IV(d)(2), (d)(3), (d)(4), or (h)(17)**

\* \* \* \* \*

**List of Items Controlled**

*Related Controls:* (1) Although items described in USML Category IV(d)(2), (d)(3), (d)(4), or (h)(17) are “subject to the ITAR” (see 22 CFR parts 120 through 130), the “production facilities” controlled in this entry that are related to these items are subject to the export licensing authority of BIS.

(2) “Specially designed” “production facilities” for systems, sub-systems, and “components” described in USML Category IV(d)(1), (d)(7), (h)(1), (h)(4), (h)(6), (h)(7), (h)(8), (h)(9), (h)(11), (h)(20), (h)(21), (h)(26), or (h)(28) are controlled by ECCN 9B604. (3) See ECCN 0A919 for foreign-made “military commodities” that incorporate more than a *de minimis* amount of US-origin “600 series” controlled content.

\* \* \* \* \*

■ 42. In Supplement No. 1 to part 774 (the Commerce Control List), Category 9—Aerospace and Propulsion, add ECCN 9B604 between ECCNs 9B117 and 9B610 to read as follows:

**Supplement No. 1 to Part 774—The Commerce Control List**

\* \* \* \* \*

**9B604 Test, inspection, and production “equipment” and related commodities “specially designed” for the “development,” “production,” repair, overhaul, or refurbishing of commodities in ECCN 9A604 or related defense articles in USML Category IV (see List of Items Controlled)**

**License Requirements**

*Reason for Control:* NS, RS, MT, AT, UN

<i>Control(s)</i>	<i>Country chart (See Supp. No. 1 to part 738)</i>
NS applies to entire entry.	NS Column 1
RS applies to entire entry.	RS Column 1

<i>Control(s)</i>	<i>Country chart (See Supp. No. 1 to part 738)</i>
MT applies to 9B604.a and .b and to 9B604.d “specially designed” “production facilities” or production “equipment” for defense articles identified as MTCR Annex items in USML Category IV(d)(1), (h)(1), (h)(4), (h)(6), (h)(7), (h)(8), (h)(9), (h)(11), (h)(20), (h)(21), or (h)(26).	MT Column 1
AT applies to entire entry.	AT Column 1
UN applies to entire entry.	See § 746.1(b) for UN controls

**List Based License Exceptions (See Part 740 for a Description of all License Exceptions)**

LVS: \$1,500

GBS: N/A

CIV: N/A

**Special Conditions for STA**

*STA:* Paragraph (c)(2) of License Exception STA (§ 740.20(c)(2) of the EAR) may not be used for any item in this ECCN 9B604.

**List of Items Controlled**

*Related Controls:* (1) “Production facilities” for the “production” or “development” of commodities enumerated or otherwise described in ECCN 9A012 or 9A101 or in USML Category IV(d)(2), (d)(3), (d)(4), or (h)(17) are controlled by ECCN 9B116. (2) Test, inspection, and other production “equipment” “specially designed” for the “production” or “development” of commodities enumerated or otherwise described in ECCN 9A101 or in USML Category IV(d)(2), (d)(3), (d)(4), or (h)(17) are controlled by ECCN 9B115. (3) See ECCN 0A919 for foreign-made “military commodities” that incorporate more than a *de minimis* amount of US-origin “600 series” controlled content.

*Related Definitions:* N/A

*Items:*

- “Production facilities” “specially designed” for items that are controlled by USML Category IV(a)(1) or (a)(2).
- Test, calibration, and alignment equipment “specially designed” for items that are controlled by USML Category IV(h)(28).
- Test, inspection, and other production “equipment” that is “specially designed” for the “development,” “production,” repair, overhaul, or refurbishing of commodities described in ECCN 9A604, or defense articles controlled under USML Category IV, and not specified in ECCN 0B604.a or in ECCN 9B604.a, .b, or .d.

- “Specially designed” “production facilities” or production “equipment” for systems, sub-systems, and “components” controlled by USML Category IV(d)(1), (d)(7), (h)(1), (h)(4), (h)(6), (h)(7), (h)(8), (h)(9), (h)(11), (h)(20), (h)(21), (h)(26), or (h)(28).

e. through w. [Reserved]  
x. “Parts,” “components,” “accessories,” and “attachments” that are “specially designed” for a commodity subject to control in paragraph .a or .b of this ECCN.

\* \* \* \* \*

43. In Supplement No. 1 to part 774 (the Commerce Control List), Category 9—Aerospace and Propulsion, ECCN 9D001 is amended by revising the ECCN heading, by revising the MT controls paragraph in the License Requirements section, and by revising the Related Controls paragraph in the List of Items Controlled to read as follows:

**Supplement No. 1 to Part 774—The Commerce Control List**

\* \* \* \* \*

**9D001 “Software” “specially designed” or modified for the “development” of equipment or “technology” controlled by ECCN 9A001 to 9A004 (except for items in 9A004 that are subject to the ITAR, see 22 CFR part 121), 9A012, 9A101 (except for items in 9A101.b that are subject to the ITAR, see 22 CFR part 121), 9A106.d. or .e, 9A110, or 9A120, 9B (except for ECCNs 9B604, 9B610, 9B619, 9B990, and 9B991), or ECCN 9E003**

**License Requirements**

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

<i>Control(s)</i>	<i>Country chart (See Supp. No. 1 to part 738)</i>
MT applies to “software” for equipment controlled by 9B116 for MT reasons.	MT Column 1

*	*	*	*	*	*
*	*	*	*	*	*

**List of Items Controlled**

*Related Controls:* “Software” that is “required” for the “development” of items specified in ECCNs 9A004 (except for items that are subject to the EAR), 9A005 to 9A011, 9A101.b (except for items that are subject to the EAR), 9A103 to 9A105, 9A106.a, .b, and .c, 9A107 to 9A109, 9A110 (for items that are “specially designed” for use in missile systems and subsystems), and 9A111 to 9A119 is “subject to the ITAR” (see 22 CFR parts 120 through 130).

\* \* \* \* \*

■ 44. In Supplement No. 1 to part 774 (the Commerce Control List), Category 9—Aerospace and Propulsion, ECCN 9D002 is amended by revising the ECCN heading, by revising the NS controls paragraph in the License Requirements section, and by revising the Related Controls paragraph in the List of Items Controlled to read as follows:

## Supplement No. 1 to Part 774—The Commerce Control List

\* \* \* \* \*

**9D002** “Software” “specially designed” or modified for the “production” of equipment controlled by ECCN 9A001 to 9A004 (except for items in 9A004 that are subject to the ITAR, see 22 CFR part 121), 9A012, 9A101 (except for items in 9A101.b that are subject to the ITAR, see 22 CFR part 121), 9A106.d or .e, 9A110, or 9A120, 9B (except for ECCNs 9B604, 9B610, 9B619, 9B990, and 9B991)

### License Requirements

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

<i>Control(s)</i>	<i>Country chart (See Supp. No. 1 to part 738)</i>
NS applies to “software” for equipment controlled by 9A001 to 9A003, 9A012, and 9B001 to 9B010.	NS Column 1

\* \* \* \* \*

### List of Items Controlled

*Related Controls:* “Software” that is “required” for the “production” of items specified in ECCNs 9A004 (except for items that are subject to the EAR), 9A005 to 9A011, 9A101.b (except for items that are subject to the EAR), 9A103 to 9A105, 9A106.a, .b, and .c, 9A107 to 9A109, 9A110 (for items that are “specially designed” for use in missile systems and subsystems), and 9A111 to 9A119 is “subject to the ITAR” (see 22 CFR parts 120 through 130).

\* \* \* \* \*

■ 45. In Supplement No. 1 to part 774 (the Commerce Control List), Category 9—Aerospace and Propulsion, ECCN 9D003 is amended by revising the ECCN heading and by revising the Related Controls paragraph in the List of Items Controlled to read as follows:

## Supplement No. 1 to Part 774—The Commerce Control List

\* \* \* \* \*

**9D003** “Software” incorporating “technology” specified by ECCN 9E003.h and used in “FADEC Systems” for propulsion systems controlled by ECCN 9A001 to 9A004 (except for items in 9A004 that are subject to the ITAR, see 22 CFR part 121), 9A101 (except for items in 9A101.b that are subject to the ITAR, see 22 CFR part 121), 9A106.d or .e, or 9B (except for ECCNs 9B604, 9B610, 9B619, 9B990, and 9B991)

\* \* \* \* \*

### List of Items Controlled

*Related Controls:* (1) See also 9D103. (2) “Software” “required” for the “use” of

equipment specified in ECCNs 9A004 (except for items that are subject to the EAR), 9A005 to 9A011, 9A101.b (except for items that are subject to the EAR), 9A103 to 9A105, 9A106.a, .b, and .c, 9A107 to 9A109, 9A110 (for items that are “specially designed” for use in missile systems and subsystems), and 9A111 to 9A119 is “subject to the ITAR” (see 22 CFR parts 120 through 130).

(3) “Software” directly related to defense articles that are “subject to the ITAR” (see 22 CFR parts 120 through 130) is also “subject to the ITAR” (see 22 CFR parts 120 through 130).

\* \* \* \* \*

■ 46. In Supplement No. 1 to part 774 (the Commerce Control List), Category 9—Aerospace and Propulsion, ECCN 9D104 is amended by revising the heading of the ECCN and by revising the Related Controls paragraph in the List of Items Controlled to read as follows:

## Supplement No. 1 to Part 774—The Commerce Control List

\* \* \* \* \*

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

\* \* \* \* \*

### List of Items Controlled

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

\* \* \* \* \*

■ 47. In Supplement No. 1 to part 774 (the Commerce Control List), Category 9—Aerospace and Propulsion, add ECCN 9D604 between ECCNs 9D105 and 9D610 to read as follows:

**9D604** “Software” “specially designed” for the “development,” “production,” operation, or maintenance of commodities controlled by ECCN 9A604 or 9B604

### License Requirements

*Reason for Control:* NS, RS, MT, AT, UN

<i>Control(s)</i>	<i>Country chart (See Supp. No. 1 to part 738)</i>
NS applies to entire entry.	NS Column 1

<i>Control(s)</i>	<i>Country chart (See Supp. No. 1 to part 738)</i>
RS applies to entire entry.	RS Column 1

*Control(s)*

*Country chart (See Supp. No. 1 to part 738)*

MT applies to “software,” as described in paragraph .a of this entry, for commodities controlled for MT reasons in ECCN 9A604.c or .d, or ECCN 9B604.

AT applies to entire entry.

UN applies to entire entry.

MT Column 1

AT Column 1

See § 746.1(b) for UN controls

### List Based License Exceptions (See Part 740 for a Description of All License Exceptions)

*CIV:* N/A  
*TSR:* N/A

### Special Conditions for STA

*STA:* Paragraph (c)(2) of License Exception STA (§ 740.20(c)(2) of the EAR) may not be used for any item in this ECCN 9D604.

### List of Items Controlled

*Related Controls:* (1) Software directly related to articles enumerated or otherwise described in USML Category IV is controlled under USML Category IV(i). (2) See also ECCNs 9D101 and 9D104 for controls on “software” for the “use” of missiles and related commodities. (3) See ECCN 0A919 for foreign-made “military commodities” that incorporate more than a *de minimis* amount of U.S.-origin “600 series” controlled content.

*Related Definitions:* N/A

### Items

a. “Software” “specially designed” for the “development,” “production,” operation or maintenance of commodities controlled by ECCN 9A604 or ECCN 9B604.

b. [Reserved]

■ 48. In Supplement No. 1 to part 774 (the Commerce Control List), Category 9—Aerospace and Propulsion, ECCN 9E001 is amended by revising the ECCN heading, by revising the MT controls paragraph in the License Requirements section, and by revising the Related Controls paragraphs in the List of Items Controlled to read as follows:

## Supplement No. 1 to Part 774—The Commerce Control List

**9E001** “Technology” according to the General Technology Note for the “development” of equipment or “software,” controlled by ECCN 9A001.b, 9A004 (except for items in 9A004 that are subject to the ITAR, see 22 CFR part 121), or 9A012, 9B (except for ECCNs 9B604, 9B610, 9B619, 9B990, and 9B991), or ECCN 9D001 to 9D004, 9D101, or 9D104

### License Requirements

*Reason for Control:*



**List Based License Exceptions (See Part 740 for a Description of All License Exceptions)**

CIV: N/A  
TSR: N/A

**Special Conditions for STA**

*STA:* Paragraph (c)(2) of License Exception STA (§ 740.20(c)(2) of the EAR) may not be used for any item in this ECCN 9E604.

**List of Items Controlled**

*Related Controls:* (1) Technical data directly related to articles enumerated or otherwise

described in USML Category IV is controlled under USML Category IV(i). (2) See also ECCNs 9E002, 9E101, and 9E102 for controls on “technology” for the “development,” “production,” and “use” of missiles and related items controlled on the CCL.

*Related Definitions:* N/A

*Items:*

a. “Technology” “required” for the “development,” “production,” operation, installation, maintenance, repair, overhaul, or refurbishing of commodities controlled by

ECCN 9A604 or 9B604, or “software” controlled by ECCN 9D604.

b. [Reserved]

Dated: December 26, 2013.

**Kevin J. Wolf,**

*Assistant Secretary for Export Administration.*

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