

## **CHANGES TO USML CATEGORIES VIII AND XIX AND THEIR BOOKEND ECCNS 9A610 AND 9A619**

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As part of the continuing review of the U.S. Munitions List (“USML”) and the Commerce Control List (“CCL”) 600 / 500 Series Export Control Classification Numbers (“ECCN”) as part of Export Control Reform, on November 21, 2016 the Department of State, Directorate of Defense Trade Controls (“DDTC”) published its Final Rule regarding refresher changes to USML Category VIII which pertains to military aircraft and related articles and USML Category XIX which pertains to military gas turbine engines and related articles and the Department of Commerce, Bureau of Industry and Security (“BIS”) also published its Final Rule related to the bookend changes to ECCN 9A610 for military aircraft transitioned to the CCL and ECCN 9A619 for military gas turbine engines transitioned to the CCL. These changes go into effect on December 31, 2016.

As you read through changes to USML Category VIII and note certain deletions, you will find new entries under the CCL ECCNs 9A610.

We encourage exporters and compliance professionals to read the complete Federal Register Notices. Important information is contained in the Department of State and Commerce responses to Industry comments on the revisions to the USML/CCL that illuminate the Government's thinking and will better aid your company in proper export jurisdiction and classification work.

### **Changes to USML Category VIII:**

This rule updates and expands the scope of controlled military aircraft and revises the list of controlled enumerated parts, components, accessories and attachments.

Substantive changes to USML Category VIII are as follows:

- USML Category VIII(a) is revised to clarify that the controls for all paragraphs of Category VIII(a) are applicable to aircraft “whether manned, unmanned, remotely piloted, or optionally piloted”;
- USML Category VIII(a)(5) was changed to clarify the USML control of unmanned aerial vehicles is limited to those specifically designed to incorporate a defense article.
- USML Category VIII(a)(6) which captured armed unmanned aerial vehicles (UAVs) (MT if the UAV has a range equal to or greater than 300 km) was deleted as this control is now contained in revised USML Category VIII(a)(5);
- USML Categories VIII(a)(7), (a)(8) and (a)(9) were revised to clarify USML control of aircraft or “specifically designed” to include defense articles as follows:

- (a)(7): to perform intelligence, surveillance and reconnaissance functions;
- (a)(8): to perform electronic warfare functions, airborne warning and control aircraft, or aircraft specially designed to incorporate defense articles for command, control and communications functions; and
- (a)(9): for the purpose of performing aerial refueling functions;
- USML Category (a)(14) was modified to exclude L-100 and LM-100J aircraft from the scope of control;
- USML Category VIII(d) was modified to delete the “ship-based” control parameter, remove land based landing and recovery equipment thus limiting the launching and recovery equipment for aircrafts in VIII(a) on the USML to that on vessels VI(a) – (c);
- The following types of aircraft were added to the controls of USML Category VIII(h)(1), which controls ALL “specially designed” parts and components therefore. The B-21 and EA-18G are added. The F/A-18 G variant was deleted from control under VIII(h)(1). Reference to “equipment” was also deleted from this paragraph because the specific types of equipment that warrant ITAR control are now enumerated separately in the added subcategory USML Category VIII(h)(29);
- USML Category VIII(h)(2) was revised, deleting face gear gearboxes, split torque gear boxes, variable speed gearboxes, synchronization shafts and interconnecting draft shafts to only control rotorcraft (helicopter) gearboxes with internal pitch line velocities exceeding 20,000 feet per minute and able to operate 30 minutes with loss of lubrication, and specially designed parts and components therefor. A Note was added to define how to calculate loss of lubrication;
- USML Category VIII(h)(4)(ii) was modified, to describe the types of wing folding systems for the types of aircraft controlled;
- USML Category VIII(h)(5) was updated to add the words “On-aircraft” in order to clarify/narrow the types of arresting gear controlled by this USML Category;
- USML Category VIII(h)(6) was updated to include rocket launchers (for aircraft);
- USML Category VIII(h)(7) was modified to control only damage or failure-adaptive flight control systems, that do not consist solely of redundant internal circuitry, specially designed for aircraft controlled in the ITAR and removed control of such systems specially designed for aircraft controlled under ECCN 9A610;
- USML Category VIII(h)(8) was modified to clarify the meaning of “threat-adaptive autonomous flight control systems”;
- USML Category VIII(h)(10) was revised to clarify the types of radar altimeters controlled in this Category;
- USML Category VIII(h)(18) was modified to add control of “specially designed” parts and components that are designed to meet the same performance criteria as the drive systems and flight control systems identified in this subcategory;
- USML Category VIII(h)(19) was modified to remove control on thrust reversers specially designed for aircraft controlled under ECCN 9A610;
- USML Categories VIII(h)(23) that controlled Electricity-generating fuel cells, VIII(h)(24) that controlled thermal engines, VIII(h)(25) that controlled thermal batteries and VIII(h)(26) that controlled thermionic generators were deleted and placed into reserve.
- USML Category VIII(h)(27) was added to control variable speed gearboxes, where a “variable speed gearbox” has the ability to vary the gearbox output speed by mechanical

means within the gearbox while the gearbox input speed from the engine or other source is constant, and is capable of varying output speed by 20% or greater and providing power to rotors, propellers, propfans, or liftfans; and specially designed parts and components therefor;

- USML Category VIII(h)(28) was added to control electrical power or thermal management systems specially designed for an engine controlled in Category XIX and having any of the following: (i) Electrical power generators that provide greater than 300kW of electrical power (per generator) with gravimetric power densities exceeding 2kW/pound (excluding the mass of the controller for the purpose of calculating the gravimetric power density); (ii) Heat exchangers that exchange 60 kW/K-m<sup>3</sup> or 1 kW/K of heat or greater into the gas turbine engine flow path; or (iii) Direct-cooling thermal electronic package heat exchangers that transfer 20kW of heat or greater at 100W/cm<sup>2</sup> or greater; and
- USML Category VIII(h)(29) was added to control any of the following equipment if specially designed for a defense article described in paragraph (h)(1): (i) Scale test models; (ii) Full scale iron bird ground rigs used to test major aircraft systems; or (iii) Jigs, locating fixtures, templates, gauges, molds, dies, or caul plates.

Other changes to USML Category VIII were made as follows:

- Note 2 to USML Category VIII(a) was revised to clarify the definition of “range” by adding the language “with no fuel reserve”;
- The text of USML Categories VIII(a)(11) which controlled aircraft containing mission systems and VIII(a)(13) which controlled Optionally Piloted Vehicles were deleted and the paragraphs were placed into reserve.
- USML Category VIII(e) (inertial navigation systems etc.) reflects having been placed into reserve in a final rule published by the Department of State on October 12, 2016 (81 FR 70340);
- Note 3 to USML Category VIII(f) (developmental aircraft) was modified to incorporate clarifying language capturing modifications to contracts;
- The Note to USML Category VIII(h)(1) (“specially designed” parts and components for listed aircraft platforms) was modified to incorporate technical corrections and to enhance the clarity of the note;
- USML Category VIII(h)(13) that controlled lithium-ion batteries that provide greater than 38 VDC nominal was deleted and placed into reserve;
- USML Category VIII(h)(16) was modified to incorporate a technical correction by removing the word “and”; and
- The Note to USML Category VIII was modified to update the paragraphs of Category VIII(h) that are affected, as well as to reflect Category VIII(e) having been placed into reserve.

#### **Changes to ECCN 9A610, 9B610 and other ECCNs:**

This rule revises the Commerce Control List controls for certain 600 series military aircraft, and related parts, components, accessories and attachments. It also expands the scope of certain .y paragraphs.

Substantive changes to ECCN 9A610 are as follows:

- In the “List of Items Controlled,” “Related Controls,” for ECCN 9A610, references to USML Category XIX and ECCN 9A619 related to controls on military aircraft turbine engines and related items were noted;
- BIS added a “Related Definition” for 9A610 to .y and the definition of fluid as, follows:
  - “In paragraph .y of this entry, the term ‘fluid’ includes liquids and gases”;
- Note 1 to ECCN 9A610 was revised to state that term “military aircraft” includes the LM-100J aircraft;
- BIS added ECCN 9A610.b which controls:
  - “L-100 aircraft manufactured prior to 2013”;
- BIS added ECCN 9A610.e which controls:
  - “Mobile aircraft arresting and engagement runway systems for aircraft controlled by either USML Category VIII(a) or ECCN 9A610.a”;
- BIS deleted ECCN 9A610.f and its corresponding Technical Note and replaced it with the following:
  - “Pressure refueling equipment and equipment that facilitates operations in confined areas, “specially designed” for aircraft controlled by either USML paragraph VIII(a) or ECCN 9A610.a”;
- BIS added the following Note to ECCN 9A610.t as follows:
  - “Note to paragraph .t: Composite structures, laminates, and manufactures thereof “specially designed” for unmanned aerial vehicles controlled under USML Category VIII(a) with a maximum range less than 300 km are controlled in paragraph .x of this entry”;
- BIS added the following Note to ECCN 9A610.u as follows:
  - “Note to paragraph .u: Apparatus and devices “specially designed” for the handling, control, activation and non-ship- based launching of UAVs or drones controlled by either USML paragraph VIII(a) or ECCN 9A610.a with a maximum range less than 300 km are controlled in paragraph .x of this entry”;
- BIS added the following Note to ECCN 9A610.v as follows:
  - “Note to paragraph .v: Radar altimeters designed or modified for use in UAVs or drones controlled by either USML paragraph VIII(a) or ECCN 9A610.a. that are not capable of delivering at least 500 kilograms payload to a range of at least 300 km are controlled in paragraph .x of this entry”;
- BIS added the following Note to ECCN 9A610.w as follows:
  - “Note to paragraph .w. Pneumatic, hydraulic, mechanical, electro-optical, or electromechanical flight control systems (including fly-by-wire and fly-by-light systems) and attitude control equipment designed or modified for UAVs or drones controlled by either USML paragraph VIII(a) or ECCN 9A610.a., not capable of delivering at least 500 kilograms payload to a range of at least 300 km are controlled in paragraph .x of this entry”;
- BIS revised ECCN 9A610.x as follows, changes bolded for ease of review:
  - “x. “Parts,” “components,” “accessories,” and “attachments” that are “specially designed” **for a commodity enumerated or otherwise described in ECCN 9A610 (except for 9A610.y)** or a defense article enumerated or otherwise

described in USML Category VIII and not elsewhere specified on the USML or in 9A610.y, **9A619.y, or 3A611.y**”;

- BIS also deleted Notes 1 and 2 to ECCN 9A610.x, but has not removed forgings, castings and unfinished products for 9A610.x, as it added this terminology to Part 770.2(n) interpretation;
- BIS revised ECCN 9A610.y as follows, changes bolded for ease of review:
  - “y. Specific “parts,” “components,” “accessories,” and “attachments” “specially designed” for a commodity subject to control in **this entry, ECCN 9A619**, or for a defense article in USML Categories **VIII or XIX** and not elsewhere specified in the USML or the CCL, and other aircraft commodities “specially designed” for a military use, as follows, and “parts,” “components,” “accessories,” and “attachments” “specially designed” therefor”;
- ECCN 9A610.y.8 was revised as follows:
  - “y.8. Fluid filters and filter assemblies”;
- ECCN 9A610.y.10 was revised as follows:
  - “y.10. Fluid hoses, straight and unbent lines (for a commodity subject to control in this entry or defense article in USML Category VIII), and fittings, couplings, clamps (for a commodity subject to control in this entry or defense article in USML Category VIII) and brackets therefor”;
- ECCN 9A610.y.15 was changed as follows:
  - “y.15. Cockpit or cabin mirrors.”

The substantive change to ECCN 9B610 is as follows:

- BIS revised the List of Items Controlled for ECCN 9B610 by removing all references to “equipment” and expanded the list of items not controlled by 9B610 enumerated or otherwise described in USML Category VIII(h)(2) – (28). The List of Items Controlled for ECCN 9B610 was changed as follows, changes bolded for ease of review:
  - “List of Items Controlled Related Controls: USML Category VIII(h)(1) controls “parts,” “components,” “accessories,” and “attachments” “specially designed” for the aircraft enumerated or otherwise described in Category VIII(h)(1), but does not control the commodities enumerated or otherwise described in ECCN 9B610. USML Category VIII(h)(2)–**(28)** controls other aircraft “parts,” “components,” “accessories,” “attachments,” and “systems.”

### **Changes to USML Category XIX:**

This rule updates and expands the scope of the controlled engines, revises the list of controlled engines “specially designed” parts, components, accessories and attachments, updates/clarifies the scope of controlled hot section components, adds new controls with the addition of 6 paragraphs and incorporates conforming and technical corrections.

Substantive changes to USML Category XIX are as follows:

- XIX(a) now enumerates developmental or variable cycle engine types under the Turbofan and Turbojet engine subheading;
- XIX(b) added two new paragraphs ((1) and (2)) which provide specific technical specifications for the Turboshaft and Turbojet engines it controls;
- XIX (c) for UAV/UAS, etc., had added developmental and variable cycle engine types under this Gas Turbine subheading;
- XIX(d) was revised to add the MT7, HPW3000, GE3000 and T408 engines while the TF408 and TF60 were deleted. A note was added to this paragraph to identify that these engines when incorporated into an aircraft subject to the EAR and controlled under ECCN 9A610 are licensed by the Department of Commerce, effectively eliminating the ITAR “see through” rule in this instance. However, when unincorporated, they remain ITAR controlled;
- XIX(f)(1) was revised to delete the AE1107C, GE 38, TF408 and TF 60 from the list of referenced engines and the note to this paragraph was revised to indicate reference to “This paragraph” rather than “Specially designed” does not control parts common to more than one engine except in the instance of the part being for two engines in the entry;
- XIX(f)(2) added additional controlled hot section components (...cooled intermediate pressure turbine blades, vanes, disks and related cooled structures; cooled low pressure turbine blades, vanes, disks and related cooled structures; cooled augmenters; and cooled nozzles – **ADDED**: cooled shaft-driving power turbine blades, vanes, disks and related cooled structures);
- XIX(f)(7) through (f)(12) were added to expand the list of items enumerated and controlled under this paragraph. Of particular note, (f)(12) contains certain manufacturing equipment (jigs, locating fixtures, templates, gauges, molds, dies, caul plates, or bellmouths) for the production of engines listed in (f)(1); and
- For harmonization, XIX(x) changes the reference of technical data to “technology” to conform with the EAR.

### **Changes to ECCN 9A619:**

This rule revises the Commerce Control List controls for certain 600 series military gas turbine engines and related parts, components, accessories and attachments. It also expands the scope of certain .y paragraphs.

Substantive changes to ECCN 9A619 are as follows:

- Under “Related Controls,” a new subcategory was added to identify that gas turbine engines designated 501-D22 are controlled in ECCN 9A991.d regardless of the aircraft that they will be installed in;
- Under “Related Controls,” two new subcategories concerning parts, components, accessories and attachments were added:
  - “Parts,” “components,” “accessories,” and “attachments” specified in USML Category XIX(f) are subject to the controls of that paragraph;
  - “Parts,” “components,” “accessories,” and “attachments” specified in ECCN 9A619.y are subject to the controls of that paragraph.

- Under “Related Definitions,” the following statement was added: “In paragraph .y of this entry, the term ‘fluid’ includes liquids and gases;”
- The note that followed paragraph .e in the “Items” paragraph is deleted
- Under 9A619.x and the Note to 9A619.x, the paragraph was expanded to include reference to ECCN 3A611.y and 9A610.y as follows:
  - x. “Parts,” “components,” “accessories,” and “attachments” that are “specially designed” for a commodity controlled by this ECCN 9A619 (other than ECCN 9A619.c) or for a defense article enumerated in USML Category XIX and not specified elsewhere on the USML **or in ECCN 3A611.y, 9A610.y or 9A619.y;** (**changes marked in bold**)
  - Note to paragraph .x: “Parts,” “components,” “accessories,” and “attachments” specified in USML subcategory XIX(f) are subject to the controls of that paragraph. “Parts,” “components,” “accessories,” and “attachments” specified in ECCN **3A611.y, 9A610.y or 9A619.y** are subject to the controls of that paragraph. (**changes marked in bold**)
- Under 9A619.y, reference to ECCN 9A610 and USML Category VIII were added to clarify parts and components of .y items are also controlled. Additionally, the paragraph was revised for use of the term “fluid” which is now used to encompass both liquids and gases and expanded the scope of items to be controlled. These changes to 9A619.y are as follows:
  - y. Specific “parts,” “components,” “accessories,” and “attachments” “specially designed” for a commodity subject to control in this **entry, ECCN 9A610,** or for a defense article in USML **Category VIII or Category XIX** and not elsewhere specified on the USML or in the CCL, and other commodities, as follows, and “parts,” “components,” “accessories,” and “attachments” “specially designed” therefor: (**changes marked in bold**)
    - y.3. **Fluid hoses, and lines (for a commodity subject to control in this entry or a defense article in USML Category XIX), fittings, couplings, and brackets therefor;**
    - y.4. **Fluid filters and filter assemblies;**
    - y.5. **Clamps (for a commodity subject to control in this entry or a defense article in USML Category XIX);**
    - y.6. Shims;
    - y.7. Identification plates **and nameplates;**
    - y.8. **Fluid** manifolds; and
    - y.9. **Check valves for fluid systems. (changes marked in bold)**
- Under ECCN 9B619, “Related Controls,” reference to XIX(f) was revised to reflect the additional paragraphs and now reads XIX(f)(2) – **(11) (changes marked in bold)**
- Under ECCN 9C619, reference to USML Category XIX is added to the heading;
- Under paragraph “a.” for “List of Items Controlled,” in 9C619, language is added to clarify materials “not controlled by paragraph b. of this entry” as paragraph b., b.1, b.2 and b.3 are added to the entry to enumerate additional materials controlled;
- A new Note (Note 3) is added to the entry to clarify materials described in the entry that are or have been used in gas turbine engines in production that are not enumerated or otherwise described on the USML or ECCN 9A619 are not controlled by this entry;

- Under ECCN 9E619, “List of Items Controlled,” reference to technology described in ECCN 9E003 being controlled by that ECCN is deleted and reference to paragraph b.10 is added;
- The list of items controlled under 9E619 is expanded to add subcategory b.10, Materials controlled by ECCN 9C619.b.

### **Other Changes to the EAR:**

The BIS Federal Register Notice included changes to other ECCNs. We strongly recommend that exporters read the changes to Part 770.2 of the EAR and the following ECCNs:

- Part 770.2 was amended to add paragraph (n) Interpretation 14 which provides that Unfinished “600 series” commodities, 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 any Product Group A (“End Items,” “Equipment,” “Accessories,” “Attachments,” “Parts,” “Components” and “Systems”) “600 series” ECCN are controlled in that “600 series” ECCN
- ECCN 0A604: Removed Note 1 to 0A604.x (forgings, castings, etc., remain controlled via the Interpretation note 770.2(n)) and redesignated Note 2 to 0A604x as Note 1 to 0A604.x;
- ECCN 0A614: Removed Note 3 to 0A614 (forgings, castings, etc., remain controlled via the Interpretation note 770.2(n));
- ECCN 3A611: Changed the “List of Items Controlled” section paragraph of 3A611.x to specify that it does not control an item specified in .x paragraph of another 600 Series ECCN. 3A611.y was changed to specify that parts, components, accessories and attachments specially designed for 3A611.y items are themselves caught as 3A611.y items;
- ECCN 8A992: Changed the “Related Controls” paragraph to include, “Marine gas turbine engines are not controlled in paragraph.g of this entry. See ECCN 9A619 for possible controls on marine gas turbine engines specially designed for a military use. See ECCN 9A002 for possible controls on marine gas turbine engines not specially designed for a military use. Marine gas turbine engines subject to the EAR that are not controlled in ECCNs 9A002 or 9A619 are designated EAR99.”;
- ECCN 9A115 was revised to read as follows: “Apparatus, devices and vehicles, designed or modified for the transport, handling, control, activation and launching of rockets, missiles, and unmanned aerial vehicles capable of achieving a “range” equal to or greater than 300 km. (Some of these items are controlled in ECCN 9A610; others are “subject to the ITAR.” See 22 CFR parts 120 through 130.)”;
- ECCN 9A604: Removed Note 1 to 9A604.x (forgings, castings, etc., remain controlled via the Interpretation note 770.2(n))and redesignated Note 2 to 9A604.x as Note 1 to 9A604.x; and
- ECCN 9A620: The Note to 9A620.b immediately following paragraph .x is deleted.