DEPARTMENT OF STATE

22 CFR Part 121

RIN 1400-AD89

[Public Notice:  9395]

Amendment to the International Traffic in Arms Regulations: U.S. Munitions List Categories VIII and XIX

AGENCY: Department of State.

ACTION: Proposed rule.

SUMMARY: As part of the President’s Export Control Reform (ECR) effort, the Department of State proposes to amend the International Traffic in Arms Regulations (ITAR) to revise Categories VIII (aircraft and related articles) and XIX (gas turbine engines and associated equipment) of the U.S. Munitions List (USML) to describe more precisely the articles warranting control on the USML. The revisions contained in this rule are part of the Department of State’s retrospective plan under E.O. 13563.

DATES: The Department of State will accept comments on this proposed rule until [insert date 45 days from date of publication in the Federal Register].
ADDRESSES: Interested parties may submit comments within 45 days of the date of publication by one of the following methods:

- E-mail: DDTCPublicComments@state.gov with the subject line, “ITAR Amendment – Categories VIII and XIX.”
- Internet: At www.regulations.gov, search for this notice by using this rule’s RIN (1400-AD89).

Comments received after that date will be considered if feasible, but consideration cannot be assured. Those submitting comments should not include any personally identifying information they do not wish to be made public or information for which a claim of confidentiality is asserted, because those comments and/or transmittal e-mails will be made available for public inspection and copying after the close of the comment period via the Directorate of Defense Trade Controls website at www.pmddtc.state.gov. Parties who wish to comment anonymously may do so by submitting their comments via www.regulations.gov, leaving the fields that would identify the commenter blank and including no identifying information in the comment itself. Comments submitted via www.regulations.gov are immediately available for public inspection.

FOR FURTHER INFORMATION CONTACT: Mr. C. Edward Peartree, Director, Office of Defense Trade Controls Policy, Department of State,
SUPPLEMENTARY INFORMATION: The Directorate of Defense Trade Controls (DDTC), U.S. Department of State, administers the International Traffic in Arms Regulations (ITAR) (22 CFR parts 120-130). The items subject to the jurisdiction of the ITAR, i.e., “defense articles,” are identified on the ITAR’s U.S. Munitions List (USML) (22 CFR 121.1). With few exceptions, items not subject to the export control jurisdiction of the ITAR are subject to the jurisdiction of the Export Administration Regulations (“EAR,” 15 CFR parts 730-774, which includes the Commerce Control List (CCL) in Supplement No. 1 to Part 774), administered by the Bureau of Industry and Security (BIS), U.S. Department of Commerce. Both the ITAR and the EAR impose license requirements on exports and reexports. Items not subject to the ITAR or to the exclusive licensing jurisdiction of any other set of regulations are subject to the EAR.

USML List Review

On March 2, 2015, the Department published a Notice of Inquiry requesting public comment on USML Categories VIII and XIX (see 80 FR 11314). This Notice of Inquiry initiated a review of these categories to ensure that they are clear, do not inadvertently control items in normal
commercial use, account for technological developments, and properly implement the national security and foreign policy objectives of the reform effort. The Department will similarly review each of the various USML categories that have been revised in the context of the ECR initiative.

In response to this Notice of Inquiry, the Department received 25 comments from the public. These comments offered proposals for modifications to the phrasing of regulatory text in USML Category VIII and Category XIX. The public comments were reviewed and considered by the Department and other agencies. Where the recommended changes added to the clarity of the regulation and were consistent with ECR objectives, the Department accepted them.

All references to the USML in this rule are to the list of defense articles that are controlled for the purpose of export or temporary import pursuant to the ITAR, and not to the defense articles on the USML that are controlled by the Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF) for the purpose of permanent import under its regulations (see 27 C.F.R. Part 447). Pursuant to §38(a)(1) of the Arms Export Control Act (AECA), all defense articles controlled for export or import are part of the USML under the AECA. For the sake of clarity, the list of defense articles controlled by ATF for the purpose of permanent import is the United States
Munitions Import List (USMIL). The transfer of defense articles from the ITAR’s USML to the EAR’s CCL for the purpose of export control does not affect the list of defense articles controlled on the USMIL under the AECA for the purpose of permanent import.

**Revision of Category VIII**

This proposed rule revises USML Category VIII, covering aircraft and related articles, to describe more precisely the articles warranting control on the USML.

Paragraph (a) is revised to clarify that the controls for all paragraphs are applicable “whether manned, unmanned, remotely piloted, or optionally piloted,” by modifying paragraph (a)(5) to clarify the features meriting USML control, and by deleting paragraph (a)(6) and placing it into reserve, because the relevant control would be subsumed by paragraph (a)(5). Paragraphs (a)(7) and (a)(8) are modified to clarify the features meriting USML control. Paragraphs (a)(11) and (a)(13) are deleted and placed into reserve. Paragraph (a)(14) is modified to exclude L-100 aircraft manufactured prior to 2013 from the scope of control. The Note to paragraph (a) is revised to incorporate technical corrections.

Paragraph (d) is modified to delete the “ship-based” control parameter and to clarify the intent and scope of the control.
Notes 1 and 3 to paragraph (f) are modified to incorporate clarifying language.

Several changes are proposed within paragraph (h). Paragraph (h)(1) is modified to delete the references to “equipment” in order to resolve any doubt that all production and test equipment specially designed for USML Category VIII articles presently is subject to the EAR under Export Control Classification Number (ECCN) 9B610. This rule proposes to move specific types of production and test equipment for specific aircraft identified in (h)(1) to the control of the USML because they are of a nature that inherently reveals technical data directly related to the defense article. The Department requests public comment on whether the production and test equipment identified in revised paragraph (h)(30) of the proposed revisions to USML Category VIII per se reveal technical data directly related to a defense article.

In addition, paragraph (h)(1) is revised to update the list of subject platforms. The Note to paragraph (h)(1) is modified to incorporate technical corrections and to enhance the clarity of the note. Paragraph (h)(2) is revised to focus the scope of control on certain rotorcraft gearboxes meeting specific technical parameters, and a note to paragraph (h)(2) is added to clarify certain terminology used therein. Paragraph (h)(4)(ii) is modified to clarify
the scope of control. Paragraph (h)(5) is updated to add the words “On-aircraft” in order to clarify the scope of control. Paragraph (h)(7) is modified to clarify the scope of control and to include control over specially designed parts and components of the subject flight control systems. Paragraph (h)(8) is modified to clarify the meaning of “threat-adaptive autonomous flight control systems.” Paragraph (h)(10) is modified to enhance the clarity of the control text. Paragraph (h)(13) is deleted and placed into reserve. Paragraph (h)(16) is modified to incorporate a technical correction. Paragraph (h)(18) is modified to control specially designed parts and components of the subject systems. Paragraph (h)(19) is modified to remove reference to ECCN 9A610.

Current paragraphs (h)(23) through (h)(26) are placed into reserve, with new controls added as paragraphs (h)(27) through (h)(30). Finally, the note to Category VIII is modified to update the paragraphs of paragraph (h) that are affected.

A number of commenting parties submitted observations or recommendations that pertained to sections of the ITAR other than USML Categories VIII and XIX. Additional commenting parties offered general observations or requests regarding the ECR initiative or defense trade generally. The Department is not addressing such comments in this
proposed rule because they are outside the scope of the pending inquiry. The Department welcomes input from the public on these matters under separate cover and through standard means of communication, and offers guidance to industry through the efforts of the DDTC Response Team or the Advisory Opinion process. As outlined in the Notice of Inquiry referenced above, this rulemaking addresses only the USML Categories identified specifically in the Notice of Inquiry.

One commenter recommended that paragraph (a)(5) and paragraph (a)(13) be removed, and another commenter similarly recommended that paragraph (a)(6) be deleted, with paragraphs added to each entry in paragraph (a) for which the Department sought to control unmanned or optionally-piloted variants. The Department has revised these paragraphs, as described below, and modified paragraph (a) to confirm that the subject aircraft are ITAR-controlled if manned, unmanned, remotely piloted, or optionally piloted.

A commenting party stated that the term “attack helicopters” in paragraph (a)(4) is ambiguous, and proposed a clarifying note. The Department did not accept this recommendation, because it has received little evidence to date to indicate that ITAR users have struggled with the
meaning of this language and no other commenting party expressed a similar concern.

Several commenting parties suggested that the use of the term “military” in Category VIII, when used in the control text as a feature that would distinguish ITAR-controlled aircraft from other aircraft (e.g., in paragraph (a)(5)), did not provide sufficient clarity to allow for reliable self-classification of an aircraft. The Department accepted this suggestion and, where practical, has replaced references to “military” aircraft with controls impacting those aircraft that incorporate or are specially designed to incorporate a defense article. This includes revisions to paragraph (a)(5) and (a)(7).

Additional commenting parties recommended that paragraph (a)(7) be revised to specifically describe the technical parameters or capabilities that merit ITAR control in the context of intelligence, surveillance, and reconnaissance missions. The Department has elected to limit revisions to paragraph (a)(7) to those referenced above, in order to capture an appropriate range of capabilities of concern.

One commenting party recommended that paragraph (a)(8) be revised to specifically describe the technical parameters or capabilities that merit ITAR control in this context, asserting that commercial aircraft may be
captured by the existing control. The Department did not accept the recommendation to add technical parameters, but has proposed revisions to the control text in order to better clarify the classes of aircraft subject to this control.

Five commenting parties observed that the control set forth in paragraph (a)(11) created a significant burden for industry, by capturing any aircraft incorporating a mission system already controlled elsewhere in the USML, and thus recommended deletion of the control. Since the mission systems at issue in this paragraph are already subject to ITAR control and there is no other described feature that causes the aircraft at issue in this paragraph to merit ITAR control, the Department accepted these recommendations and deleted the paragraph and the notes to the paragraph.

The Department did not receive public comment on paragraph (a)(12). However, public comment is requested on whether any commercial unmanned aerial vehicles have the capability described in this paragraph. In any public comment submitted in reply to this request, please provide specific examples of the commercial models at issue.

Four commenting parties recommend revision to or deletion of paragraph (a)(13), arguing that the control is overly broad and captures all optionally piloted aircraft, including aircraft that would otherwise be
controlled by the EAR. The Department accepted these comments and deleted the paragraph, while revising paragraph VIII(a) to capture all optionally piloted variants of the aircraft listed in that paragraph.

Two commenting parties recommended revision of paragraph (a)(14) to narrow the scope to capture only those aircraft platforms that provide critical military or intelligence capabilities, as well as to avoid inadvertent capture of commercial aircraft such as the L-100. The Department partially accepted the latter recommendation and excluded L-100 aircraft manufactured prior to 2013 from control under paragraph (a)(14). The Department requests public comment on the scope and effect of this control and exclusion.

Three commenting parties suggested that paragraph (a)(15)(ii) is not sufficiently clear to foreign readers, given its reliance on the military designations in paragraph (a)(15)(i) rather than specific performance criteria. While the Department believes the military designations set forth in paragraph (a)(15)(i) can be researched and understood satisfactorily using publicly available information and the relevant performance criteria can be determined based on this information, public comment is requested on whether paragraph (a)(15) captures articles that are not already controlled by paragraphs (a)(1)-(a)(14). Similar to its request for comments on paragraph
(a)(15), the Department requests public comment regarding whether the scope of controls described in paragraph (a)(16) is redundant given the controls in paragraphs (a)(1)-(a)(14), and whether it effectively precludes any less sensitive aircraft from being controlled in ECCN 9A610.a that, for example, may have been once manufactured with hard points that could be used to deliver munitions.

One commenting party recommended revised control text for paragraph (a)(16), arguing that the word “armed” is ambiguous in its meaning. The Department did not accept this recommendation and believes that this term is sufficiently clear and understood by the public.

Two commenting parties requested clarification on the scope of paragraph (d), with respect to the relationship between this paragraph and paragraph (h)(6), as well as the use of “specially designed” in this paragraph. The Department observes that the reference to “launching systems” in paragraph (h)(6) is limited in scope to launching equipment for unmanned aerial vehicles. Additionally, the Department has revised paragraph (d) to remove the “ship-based” modifiers, as well as to clarify the performance characteristic for which the equipment at issue must be “specially designed.”

One commenting party recommended no change to paragraph (e), while three commenting parties recommended deletion of the paragraph or
removal of its Significant Military Equipment designation. The Department did not accept any recommendation to modify this paragraph in this rulemaking. Since it is anticipated that the concurrent Category XII revision effort may impact controls over related technologies, the Department has elected to refrain from modifying the paragraph (e) control in Category VIII pending the outcome of the Category XII review and revision process.

Three commenting parties suggested revisions to paragraph (f) or the Notes to that paragraph. Where commenting parties recommended technical clarifications or changes of terminology that did not materially alter the control, the Department did not accept these recommendations in order to maintain conformity between this paragraph and the analogous paragraphs that appear in other categories of the USML. The Department also did not accept a recommendation to limit the scope of paragraph (f) to developmental aircraft “of the type described in VIII(a)(1)-(16)” in favor of the existing scope of the paragraph. The Department accepted a recommendation to limit the class of modified contract affected by Note 3 to paragraph (f) to those that initiate the development of a new defense article and are dated April 16, 2014 or later.

One commenting party remarked in numerous instances on the use of “specially designed” with respect to components of components. The
Department received no other indication in the context of this review effort that the referenced control parameter is unclear and did not agree with these comments. Similarly, two commenting parties recommended the addition of technical parameters to remove “specially designed” wherever possible. The Department accepts this edit to the fullest extent possible, but notes that “specially designed” exists in recognition of the fact that an enumeration of specific technical parameters may prove too complex or unwieldy to produce a useful regulation in some cases.

Several commenters offered recommendations to revise paragraph (h)(1), arguing that the control is overly broad or offering specific examples of technologies that are controlled by the paragraph but may be more appropriately controlled by the EAR. The Department did not accept any recommendation to remove a single technology or product from the paragraph, because such a change would be inconsistent with the national security, foreign policy, and regulatory drafting objectives of the paragraph to control as defense articles all parts and components, regardless of sophistication or similarity to items subject to the EAR, that are specially designed for the stealth and low-observable aircraft platforms of greatest concern referenced in paragraph (h)(1). However, the Department modernized the list of aircraft platforms, and removed the reference to
equipment. A new paragraph (h)(30) is added to capture the limited range of equipment relevant to a defense article described in paragraph (h)(1) and meriting ITAR control. Additionally, the Department notes that not all products designed for a referenced aircraft platform are “specially designed” for that platform. Please refer to ITAR §120.41 for more information.

One commenting party requested confirmation that paragraph (h)(1) does not control articles controlled elsewhere on the USML, such as an F-35 radar that would otherwise be controlled as significant military equipment (SME) under USML Category XI(a)(3). The Department confirms that the higher-level SME control is appropriate in such a scenario. The essence of the Order of Review concept is that when determining whether an item is subject to the ITAR, one must first review the enumerated and other entries on the USML that do not use a "specially designed" catch-all reference to unspecified "parts" and "components." If no such references apply to the product at issue, then one must then review the "specially designed" catch-all provisions in the USML. If none of the USML catch-all provisions apply to the product at issue, then one must perform the same exercise within the 600 series controls of the CCL (or with the 515 controls for satellite-related items). If none of those entries apply, then one reviews the rest of the CCL as described in the EAR.
A commenting party recommended clarification with respect to the Note to paragraph (h)(1), to confirm that the paragraph’s description of specially designed and ITAR §120.41 pertains only to paragraph (h)(1). The Department confirms that notes within the USML are intended only to pertain to the category, paragraph, or paragraph referenced in their heading; as such, the Note to paragraph (h)(1) relates only to that paragraph.

Three commenting parties recommended revision to paragraph (h)(2) to remove the reference to interconnecting drive shafts and to clarify the scope of gearboxes that merit control under this provision. The Department accepted these edits and proposes a rewritten paragraph (h)(2) that controls only certain rotorcraft gearboxes that meet specific technical criteria.

Two commenters recommended deletion of paragraph (h)(2) and an expansion of paragraph (h)(18) to control ballistic resistant gearbox parts and components. The Department partially accepted these comments. The revised control clarifies the narrowed scope of articles that merit control and is intended to address the commenters’ objective of avoiding capture of items in normal commercial use.

One commenting party recommended removal of the “specially designed parts and components therefor” language from paragraph (h)(2).
The Department rejected this comment because the revised control now sets forth specific technical criteria.

A commenter recommended revision of paragraph VIII(h)(3) to control only quick-fold systems designed for maritime operations and the specially designed parts and components thereof. In the interest of retaining the existing scope of control, the Department did not accept this recommendation.

Similarly, the Department did not accept a recommendation to remove paragraph VIII(h)(4)’s control over certain wing folding systems. This paragraph was revised as recently as July 1, 2014 to ensure that wing folding systems for commercial aircraft are not controlled as defense articles, while retaining those systems that warrant ITAR controls for foreign policy and national security reasons. The range of public comments received did not indicate that the paragraph, as revised in July 2014, required further revision at this time.

One commenting party requested clarification regarding the relationship between paragraph (h)(6) and paragraph (d) of the same category. As described above, the Department has revised paragraph (d) to provide more specific performance criteria, and further notes that the
“airborne launching systems” referenced in paragraph (h)(6) pertain only to unmanned aerial vehicles.

A commenting party recommended addition of a Note to paragraph (h)(6) to explain the meaning of “external stores support systems for ordnance or weapons.” In drafting control text the Department intends to avoid the overuse of clarifying notes to the extent possible, and did not believe that the recommended Note added sufficient clarity to merit its addition.

One commenting party requested the addition of technical parameters to allow for the removal of “specially designed” language from paragraph (h)(7). The Department did not accept this comment but added a clarifying revision to the text of the paragraph, in order to better identify the intended scope of control, and added a control for parts and components of the systems described in this paragraph.

Similarly, the Department did not accept a recommendation to add a Note to paragraph (a)(10) to indicate that the paragraph does not control radar or radio altimeter equipment conforming to Federal Aviation Administration Technical Standard Order C87. The Department made a minor clarifying revision to the paragraph, but the balance of comments
received did not indicate a degree of confusion that would require the addition of the recommended Note.

Two commenting parties recommended deletion of paragraph (h)(13), arguing that it does not control a uniquely military capability. The Department accepted these recommendations, deleted the control text of paragraph (h)(13), and placed the paragraph into reserve.

One commenter recommended the removal of text in paragraph (h)(15) relating to “specially designed parts, components, accessories, and attachments therefor” and moving certain connectors, cables, and cable assemblies to ECCN 9A610. The commenter argued that the only differences between the EAR and apparent ITAR variants of the subject cables are the number of connectors on the cable and the wire length between connectors. The Department did not accept this recommendation because the cables as described would not be captured by the definition of specially designed in ITAR §120.41. The Department did not accept a similar recommended refinement of the same text to control only those specially designed parts, components, and accessories for the optical sights or slewing device of the integrated helmet. The relevant control extends to those parts, components, or accessories that meet the definition of specially designed with respect to the components described in the paragraph.
A commenting party requested clarification with respect to the words “and computers” in paragraph (h)(16). The Department accepted this recommendation and made a minor revision to clarify that the words “aircraft-weapon interface units and computers” should be read together as one concept.

One commenting party remarked that paragraphs (h)(17), (h)(19), and (h)(23) described general purpose items and thus should be deleted. As noted above, paragraph (h)(23) is placed into reserve in this rule. With respect to paragraphs (h)(17) and (h)(19), the Department did not accept these recommendations because the commenter did not provide sufficient justification or explanation for these assertions.

A commenter asked whether paragraph (h)(20) controlled all relevant classified parts, components, accessories, attachments, equipment, or systems, or if the paragraph only controlled those classified items not enumerated elsewhere in the subject category. This paragraph functions as a catch-all for classified defense articles not described elsewhere in the USML. Articles described elsewhere on the USML that are classified are controlled as specifically enumerated elsewhere in the subchapter, if applicable, or by USML Category XVII.
One commenter recommended minor revisions to paragraph (h)(20) to match the analogous entries in USML Categories IV, V, IX, X, XI, and XV. The Department accepted this comment.

Four commenting parties requested clarification of the terms “thermal engine” and “thermal batteries” as they appear in paragraphs (h)(24) and (h)(25), respectively. The Department notes that those paragraphs are deleted in this proposed rule.

A commenting party observed that paragraph VIII(k) is reserved, but in §121.16 of this subchapter, Item 10 - Category II of the Missile Technology Control Regime (MTCR) Annex references the paragraph. The MTCR Annex is beyond the scope of this review effort but the Department acknowledges the observation of an error. Once all revised USML categories are published as final rules, ITAR §121.16 will be placed in reserve, and the parenthetical “(MT)” will be used at the end of each USML section containing such articles.

One commenter suggested that the reference to ECCN 9A610 in the Note to Category VIII is not helpful, because most EAR-controlled aircraft that incorporate a defense article are classified under ECCN 9A991.b. The Department did not accept the recommendation because it is not prepared to extend a per se exclusion from ITAR coverage to relevant aircraft controlled
under the latter ECCN. Moreover, the Department believes that a very small number of USML articles are typically incorporated into ECCN 9A991.b aircraft. Any examples to the contrary should be identified in a public comment.

A commenting party suggested that it is logically inconsistent to subject to ITAR control any spare or replacement parts for aircraft covered by the Note to Category VIII, where the spare or replacement parts are controlled by any of the USML paragraphs referenced in that Note. The Department does not agree with this comment because it continues to value the control of exports of unincorporated parts and components that would independently merit ITAR control under normal circumstances.

**Revision of Category XIX**

This proposed rule revises USML Category XIX, covering gas turbine engines and associated equipment, to describe more precisely the articles warranting control on the USML.

Paragraph (a) is modified to clarify the scope of controlled engines and to incorporate technical corrections. Paragraph (b) is revised to provide additional technical parameters to clarify the scope of controlled engines. With respect to paragraph (b)(1), public comment is requested on whether any commercial models exceed the capability described in this paragraph.
In any public comment submitted in reply to this request, please provide specific examples of the commercial models at issue.

Paragraph (c) is modified to incorporate conforming changes and to make clear that the paragraph applies only to gas turbine engines, while paragraph (d) is modified to update the list of subject engines. The Note to paragraph (e) is modified to incorporate a conforming change.

Several changes are proposed within paragraph (f). Paragraph (f)(1) is modified to incorporate technical corrections and to update the list of subject engines. Paragraph (f)(2) introduces additional text to clarify the scope of controlled hot section components. New controls are proposed for paragraphs (f)(7) through (f)(16).

A commenting party observed that Category XIX does not currently capture developmental engines that do not meet the performance criteria of paragraphs (a) through (e), and that paragraph (g) only covers technical data directly related to defense articles. A second commenter recommended the addition of a paragraph to specifically control developmental gas turbine engines, in a manner similar to development-related paragraphs in other USML categories. The Department has revised paragraphs (a) through (c) to specifically control developmental engines that meet the technical criteria specified in those paragraphs that merit ITAR control.
Two commenting parties recommended the addition of a Note to Category XIX that would allow the Department of Commerce to license the export of certain ITAR-controlled gas turbine engines when incorporated in a military aircraft subject to the EAR and classified under a “600 series” ECCN. The Department accepted this recommendation. If examples exist of non-600 series production aircraft that are subject to the EAR and incorporate, in the ordinary course of civil applications, engines subject to the ITAR, please identify them in a public comment.

A commenting party recommended the deletion of “specially designed” in various instances throughout the category. The Department has not received information indicating that the employment of the term has frustrated the application of the controls in this category, but will closely review any relevant comments received in reply to this proposed rule.

One commenting party stated that the control text of paragraph (b), in concert with Category VIII(h)(2), frustrated commercial tilt rotor aircraft development. The Department has revised both categories to more specifically describe the parameters or characteristics that merit ITAR control. One commenter requested the removal of the T700 engine from control under paragraph (d). The Department did not accept this
recommendation but has revised the list of engines subject to ITAR control under this paragraph.

Several commenters offered recommendations to revise paragraph (f)(1), arguing that the control is overly broad or offering specific examples of technologies that are controlled by the paragraph but may be more appropriately controlled by the EAR. The Department did not accept any recommendation to remove the catch-all structure of the paragraph because such a revision would be inconsistent with the national security, foreign policy, and regulatory draft objectives of the paragraph to control as defense articles all parts and components specially designed for gas turbine engines of greatest concern and as identified in paragraph (f)(1). However, the Department modernized the list of gas turbine engines, and removed the reference to equipment. Several new paragraphs are added to capture the limited range of equipment relevant to a defense article described in paragraph (f)(1) and meriting ITAR control. Additionally, the Department notes that not all products designed for a referenced gas turbine engine are “specially designed” for that engine. Please refer to ITAR §120.41 for more information.

A commenting party remarked that paragraph (f)(2) does not control augmenter parts and components. The Department confirms this
observation and notes that parts and components specially designed for hot section components not controlled by paragraph (f)(2) are controlled by ECCN 9A619.x.

A commenter asked whether paragraph (f)(6) controlled all relevant classified parts, components, accessories, attachments, equipment, or systems, or if the paragraph only controlled those classified items not enumerated elsewhere in the subject category. The Department observes that the paragraph functions as a catch-all for classified defense articles not described elsewhere in the USML. Articles described elsewhere on the USML that are classified are controlled as specifically enumerated elsewhere in the subchapter, if applicable, or by USML Category XVII.

**REGULATORY ANALYSIS AND NOTICES**

*Administrative Procedure Act*

The Department of State is of the opinion that controlling the import and export of defense articles and services is a foreign affairs function of the United States Government and that rules implementing this function are exempt from sections 553 (Rulemaking) and 554 (Adjudications) of the Administrative Procedure Act. Although the Department is of the opinion that this rule is exempt from the rulemaking provisions of the APA, the Department is publishing this rule with a 45-day provision for public
comment and without prejudice to its determination that controlling the import and export of defense services is a foreign affairs function. As noted above, and also without prejudice to the Department position that this rulemaking is not subject to the APA, the Department previously published a related Notice of Inquiry on March 2, 2015 (80 FR 11314), and accepted comments for 60 days.

_**Regulatory Flexibility Act**_

Since the Department is of the opinion that this rule is exempt from the provisions of 5 U.S.C. 553, there is no requirement for an analysis under the Regulatory Flexibility Act.

_**Unfunded Mandates Reform Act of 1995**_

This rulemaking does not involve a mandate that will result in the expenditure by State, local, and tribal governments, in the aggregate, or by the private sector, of $100 million or more in any year and it will not significantly or uniquely affect small governments. Therefore, no actions were deemed necessary under the provisions of the Unfunded Mandates Reform Act of 1995.

_**Small Business Regulatory Enforcement Fairness Act of 1996**_

For purposes of the Small Business Regulatory Enforcement Fairness Act of 1996 (the “Act”), a “major” rule is a rule that the Administrator of the
OMB Office of Information and Regulatory Affairs finds has resulted or is likely to result in 1) an annual effect on the economy of $100,000,000 or more; 2) a major increase in costs or prices for consumers, individual industries, federal, state, or local government agencies, or geographic regions; or 3) significant adverse effects on competition, employment, investment, productivity, innovation, or on the ability of United States-based enterprises to compete with foreign-based enterprises in domestic and foreign markets.

The Department does not believe this rulemaking will have an annual effect on the economy of $100,000,000 or more. Articles that are being removed from coverage in the U.S. Munitions List categories contained in this rule will still require licensing for export, but from the Department of Commerce. While the licensing regime of the Department of Commerce is more flexible than that of the Department of State, it is not expected that the change in jurisdiction of these articles will result in an export difference of $100,000,000 or more.

The Department also does not believe that this rulemaking will result in a major increase in costs or prices for consumers, individual industries, federal, state, or local government agencies, or geographic regions, or have significant adverse effects on competition, employment, investment,
productivity, innovation, or on the ability of United States-based enterprises to compete with foreign-based enterprises in domestic and foreign markets.

Executive Orders 12372 and 13132

This rulemaking will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, in accordance with Executive Order 13132, it is determined that this rulemaking does not have sufficient federalism implications to require consultations or warrant the preparation of a federalism summary impact statement. The regulations implementing Executive Order 12372 regarding intergovernmental consultation on Federal programs and activities do not apply to this rulemaking.

Executive Orders 12866 and 13563

Executive Orders 12866 and 13563 direct agencies to assess 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, distributed impacts, and equity). These executive orders stress the importance of quantifying both costs and benefits, of reducing costs, of harmonizing rules, and of promoting flexibility. This rulemaking has been designated a
“significant regulatory action,” although not economically significant, under section 3(f) of Executive Order 12866. Accordingly, this rule has been reviewed by the Office of Management and Budget (OMB).

Executive Order 12988

The Department of State has reviewed this rulemaking in light of sections 3(a) and 3(b)(2) of Executive Order 12988 to eliminate ambiguity, minimize litigation, establish clear legal standards, and reduce burden.

Executive Order 13175

The Department of State has determined that this rulemaking will not have tribal implications, will not impose substantial direct compliance costs on Indian tribal governments, and will not preempt tribal law. Accordingly, the requirements of Executive Order 13175 do not apply to this rulemaking.

Paperwork Reduction Act

This rule does not impose any new reporting or recordkeeping requirements subject to the Paperwork Reduction Act, 44 U.S.C. Chapter 35; however, the Department of State seeks public comment on any unforeseen potential for increased burden.

List of Subjects in 22 CFR 121

Arms and munitions, Classified information, Exports.

PART 121 – THE UNITED STATES MUNITIONS LIST
1. The authority citation for part 121 continues to read as follows:


2. Section 121.1 is amended by revising U.S. Munitions List Categories VIII and XIX, to read as follows:

§121.1 The United States Munitions List.

* * * * *

Category VIII—Aircraft and Related Articles

(a) Aircraft, whether manned, unmanned, remotely piloted, or optionally piloted, as follows (MT if the aircraft, excluding manned aircraft, has a range equal to or greater than 300 km):

*(1) Bombers;

*(2) Fighters, fighter bombers, and fixed-wing attack aircraft;

*(3) Turbofan- or turbojet-powered trainers used to train pilots for fighter, attack, or bomber aircraft;

*(4) Attack helicopters;

*(5) Unmanned aerial vehicles (UAVs) incorporating or specially designed to incorporate a defense article;

*(6) [Reserved]
*(7) Intelligence, surveillance, and reconnaissance aircraft incorporating or specially designed to incorporate a defense article;
*(8) Electronic warfare aircraft, or airborne warning and control aircraft; or command, control, and communications aircraft incorporating or specially designed to incorporate a defense article;
(9) Air refueling aircraft;
(10) Target drones;
(11) [Reserved]
(12) Aircraft capable of being refueled in-flight including hover-in-flight refueling (HIFR);
(13) [Reserved]
(14) Aircraft with a roll-on/roll-off ramp, capable of airlifting payloads over 35,000 lbs. to ranges over 2,000 nm without being refueled in-flight, and landing onto short or unimproved airfields, other than L-100 aircraft manufactured prior to 2013;
*(15) Aircraft not enumerated in paragraphs (a)(1) through (a)(14) as follows:
(i) U.S.-origin aircraft that bear an original military designation of A, B, E, F, K, M, P, R, or S; or
(ii) Foreign-origin aircraft specially designed to provide functions equivalent to those of the aircraft listed in paragraph (a)(15)(i) of this category; or

(16) Aircraft that are armed or are specially designed to be used as a platform to deliver munitions or otherwise destroy targets (e.g., firing lasers, launching rockets, firing missiles, dropping bombs, or strafing);

Note 1 to paragraph (a): Aircraft specially designed for military applications that are not identified in paragraph (a) of this section are subject to the EAR and classified as ECCN 9A610, including any model of unarmed military aircraft manufactured prior to 1956, regardless of origin or designation, and unmodified since manufacture. Aircraft with modifications made to incorporate safety of flight features or other FAA or NTSB modifications such as transponders and air data recorders are considered “unmodified” for the purposes of this paragraph.

Note 2 to paragraph (a): “Range” is the maximum distance that the specified aircraft system is capable of traveling in the mode of stable flight as measured by the projection of its trajectory over the surface of the Earth. The maximum capability based on the design characteristics of the system, when fully loaded with fuel or propellant, will be taken into consideration in determining range. The range for aircraft systems will be determined independently of any external factors such as operational restrictions,
limitations imposed by telemetry, data links, or other external constraints. For aircraft systems, the range will be determined for a one-way distance using the most fuel-efficient flight profile (e.g., cruise speed and altitude), assuming International Civil Aviation Organization (ICAO) standard atmosphere with zero wind, but with no fuel reserve.

(b)-(c) [Reserved]

d) Launching and recovery equipment specially designed to allow an aircraft described in paragraph (a) of this category to take off or land on a vessel described in Category VI paragraphs (a) through (c) (MT if the launching and recovery equipment is for an aircraft, excluding manned aircraft, that has a range equal to or greater than 300 km).

Note to paragraph (d): For the definition of “range,” see note to paragraph (a) of this category.

*(e) Inertial navigation systems (INS), aided or hybrid inertial navigation systems, Inertial Measurement Units (IMUs), and Attitude and Heading Reference Systems (AHRS) specially designed for aircraft controlled in this category or controlled in ECCN 9A610 and all specially designed components, parts, and accessories therefor (MT if the INS, IMU, or AHRS is for an aircraft, excluding manned aircraft, or missile that has a “range”
equal to or greater than 300 km). For other inertial reference systems and related components refer to USML Category XII(d).

(f) Developmental aircraft funded by the Department of Defense via contract or other funding authorization, and specially designed parts, components, accessories, and attachments therefor.

Note 1 to paragraph (f): This paragraph does not control aircraft and specially designed parts, components, accessories, and attachments therefor (a) in production; (b) determined to be subject to the EAR via a commodity jurisdiction determination (see § 120.4 of this subchapter), or (c) identified in the relevant Department of Defense contract or other funding authorization as being developed for both civil and military applications.

Note 2 to paragraph (f): Note 1 does not apply to defense articles enumerated on the U.S. Munitions List, whether in production or development.

Note 3 to paragraph (f): This paragraph is applicable only to those contracts, other funding authorizations, or modifications initiating development of a new defense article that are dated April 16, 2014, or later.

(g) [Reserved]

(h) Parts, components, accessories, attachments, associated equipment and systems, as follows:
(1) Parts, components, accessories, and attachments specially designed for the following U.S.-origin aircraft: the B-1B, B-2, F-15SE, F/A-18 E/F, EA-18G, F-22, F-35, and future variants thereof; or the F-117 or U.S. Government technology demonstrators. Parts, components, accessories, and attachments of the F-15SE and F/A-18 E/F that are common to earlier models of these aircraft, unless listed in paragraph (h) of this category, are subject to the EAR;

Note to paragraph (h)(1): This paragraph does not control parts, components, accessories, and attachments that are common to aircraft described in paragraph (a) of this category but not identified in paragraph (h)(1), and those identified in paragraph (h)(1). For example, when applying § 120.41(b)(3), a part common to only the F-16 and F-35 is not specially designed for purposes of this paragraph. A part common to only the F-22 and F-35 — two aircraft models identified in paragraph (h)(1) — is specially designed for purposes of this paragraph, unless one of the other paragraphs is applicable under § 120.41(b).

(2) Rotorcraft gearboxes with internal pitch line velocities exceeding 20,000 feet per minute and able to operate 30 minutes with loss of lubrication without an emergency or auxiliary lubrication system, and specially designed parts and components therefor;
Note to paragraph (h)(2): Loss of lubrication means a situation where oil/lubrication is mostly or completely lost from a transmission/gearbox such that only a residual coating remains due to the lubrication system failure.

(3) Tail boom folding systems, stabilator folding systems or automatic rotor blade folding systems, and specially designed parts and components therefor;

(4) Wing folding systems, and specially designed parts and components therefor, for:

(i) Aircraft powered by power plants controlled under USML Category IV(d); or

(ii) Aircraft with any of the following characteristics and powered by gas turbine engines:

(A) The portion of the wing outboard of the wing fold is required for sustained flight;

(B) Fuel can be stored outboard of the wing fold;

(C) Control surfaces are outboard of the wing fold;

(D) Hard points are outboard of the wing fold;

(E) Hard points inboard of the wing fold are capable of in-flight ejection; or

(F) The aircraft is designed to withstand maximum vertical maneuvering accelerations greater than +3.5g/−1.5g.
(5) On-aircraft arresting gear (e.g., tail hooks and drag chutes) and specially designed parts and components therefor;

(6) Bomb racks, missile launchers, missile rails, weapon pylons, pylon-to-launcher adapters, unmanned aerial vehicle (UAV) airborne launching systems, external stores support systems for ordnance or weapons, and specially designed parts and components therefor (MT if the bomb rack, missile launcher, missile rail, weapon pylon, pylon-to-launcher adapter, UAV airborne launching system, or external stores support system is for an aircraft, excluding manned aircraft, or missile that has a “range” equal to or greater than 300 km);

(7) Damage or failure-adaptive flight control systems, that do not consist solely of redundant internal circuitry, specially designed for aircraft controlled in this category, and specially designed parts and components therefor;

(8) Threat-adaptive autonomous flight control systems, where a “threat-adaptive autonomous flight control system” is a flight control system that, without input from the operator or pilot, adjusts the aircraft control or flight path to minimize risk caused by hostile threats;

(9) Non-surface-based flight control systems and effectors (e.g., thrust vectoring from gas ports other than main engine thrust vector);
(10) Radar altimeters with output power management LPI (low probability of intercept) or signal modulation (i.e., frequency hopping, chirping, direct sequence-spectrum spreading) LPI capabilities (MT if for an aircraft, excluding manned aircraft, or missile that has a “range” equal to or greater than 300 km);

(11) Air-to-air refueling systems and hover-in-flight refueling (HIFR) systems, and specially designed parts and components therefor;

(12) Unmanned aerial vehicle (UAV) flight control systems and vehicle management systems with swarming capability (i.e., UAVs interact with each other to avoid collisions and stay together, or, if weaponized, coordinate targeting) (MT if for an aircraft, excluding manned aircraft, or missile that has a “range” equal to or greater than 300 km);

(13) [Reserved]

(14) Lift fans, clutches, and roll posts for short take-off, vertical landing (STOVL) aircraft and specially designed parts and components for such lift fans and roll posts;

(15) Integrated helmets incorporating optical sights or slewing devices, which include the ability to aim, launch, track, or manage munitions (e.g., Helmet Mounted Cueing Systems, Joint Helmet Mounted Cueing Systems (JHMCS), Helmet Mounted Displays, Display and Sight Helmets (DASH)),
and specially designed parts, components, accessories, and attachments therefor;

(16) Fire control computers, stores management systems, armaments control processors, and aircraft-weapon interface units and computers (e.g., AGM-88 HARM Aircraft Launcher Interface Computer (ALIC));

(17) Mission computers, vehicle management computers, and integrated core processors specially designed for aircraft controlled in this category;

(18) Drive systems and flight control systems specially designed to function after impact of a 7.62mm or larger projectile, and specially designed parts and components therefor;

(19) Thrust reversers specially designed to be deployed in flight for aircraft controlled in this category;

*(20) Any part, component, accessory, attachment, equipment, or system that:

(i) Is classified;

(ii) Contains classified software directly related to defense articles in this subchapter or 600 series items subject to the EAR; or

(iii) Is being developed using classified information.

Note to paragraph (h)(20): Classified means classified pursuant to Executive Order 13526, or predecessor order, and a security classification guide
developed pursuant thereto or equivalent, or to the corresponding classification rules of another government or international organization;

(21) – (26) [Reserved]

(27) Variable speed gearboxes capable of varying output speed by 50% or greater and providing power to rotors, proprotors, propellers, propfans, or liftfans; and specially designed parts and components therefor;

(28) Electrical power or thermal management systems integrated with an engine controlled in Category XIX 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;

(ii) Heat exchangers that exchange 200 kW of heat or greater into the gas turbine engine flow path;

(iii) Logic controls that maintain gas turbine engine operability during pneumatic and shaft power extraction of 2kW/pound; or

(iv) Direct-cooling thermal electronic package heat exchangers that transfers 20kW of heat or greater at 100W/cm² or greater;

(29) Flight control algorithms or software that aid in landing a fixed-wing aircraft on any vessel controlled in Category VI(a)-(c); or
(30) The following, if specially designed for a defense article described in paragraph (h)(1):

(i) Wind tunnel and other scale test models;

(ii) Full scale iron bird ground rigs used to test major aircraft systems;

(iii) Autonomic logistics information system (ALIS); or

(iv) Jigs, locating fixtures, templates, gauges, molds, dies, and caul plates, for production of airframe parts and components.

Note to paragraph (h)(30)(iv): “Airframe” means an assembled structure influencing strength, integrity or shape and also includes transparencies, flush antennas, radomes, fairings, doors, internal ducts, pylons for external stores but does not include landing gear or other readily removable items.

(i) Technical data (see § 120.10 of this subchapter) and defense services (see § 120.9 of this subchapter) directly related to the defense articles described in paragraphs (a) through (h) of this category and classified technical data directly related to items controlled in ECCNs 9A610, 9B610, 9C610, and 9D610 and defense services using classified technical data. (See § 125.4 of this subchapter for exemptions.) (MT for technical data and defense services related to articles designated as such.)

(j)-(w) [Reserved]
(x) Commodities, software, and technical data subject to the EAR (see § 120.42 of this subchapter) used in or with defense articles controlled in this category.

Note to paragraph (x): Use of this paragraph is limited to license applications for defense articles controlled in this category where the purchase documentation includes commodities, software, or technical data subject to the EAR (see § 123.1(b) of this subchapter).

*Note:* Inertial navigation systems, aided or hybrid inertial navigation systems, Inertial Measurement Units, and Attitude and Heading Reference Systems in paragraph (e), and parts, components, accessories, and attachments in paragraphs (h)(3)-(5), (7), (14), (17), or (19) are licensed by the Department of Commerce when incorporated in an aircraft subject to the EAR and classified under ECCN 9A610. Replacement systems, parts, components, accessories and attachments are subject to the controls of the ITAR.

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Category XIX—Gas Turbine Engines and Associated Equipment
*(a) Turbofan and Turbojet engines (including those that are technology
demonstrators, developmental engines, or variable cycle engines) capable of
15,000 lbf (66.7 kN) of thrust or greater that have any of the following:
(1) With or specially designed for thrust augmentation (afterburner);
(2) Thrust or exhaust nozzle vectoring;
(3) Parts or components controlled in paragraph (f)(6) of this category;
(4) Specially designed for sustained 30 second inverted flight or negative g
maneuver; or
(5) Specially designed for high power extraction (greater than 50 percent of
ingine thrust at altitude) at altitudes greater than 50,000 feet.
*(b) Turboshaft and Turboprop engines (including those that are technology
demonstrators or developmental engines) that have any of the following:
(1) Capable of 1500 mechanical shp (1119 kW) or greater and specially
designed with oil sump sealing when the engine is in the vertical position; or
(2) Capable of 225 specific power or greater and specially designed for
armament gas ingestion and transient maneuvers, where specific power is
defined as maximum takeoff shaft horsepower divided by compressor inlet
flow (lbm/sec).
*(c) Gas turbine engines (including technology demonstrators,
developmental engines, and variable cycle engines) specially designed for
unmanned aerial vehicle systems controlled in this category, cruise missiles, or target drones (MT if for an engine used in an aircraft, excluding manned aircraft, or missile that has a “range” equal to or greater than 300 km).

*(d) GE38, AGT1500, CTS800, MT7, T55, TF60, HPW3000, GE3000, T408, and T700 engines.

Note to paragraph (d): Engines subject to the control of this paragraph are licensed by the Department of Commerce when incorporated in an aircraft subject to the EAR and controlled under ECCN 9A610. Such engines are subject to the controls of the ITAR in all other circumstances.

*(e) Digital engine control systems (e.g., Full Authority Digital Engine Controls (FADEC) and Digital Electronic Engine Controls (DEEC)) specially designed for gas turbine engines controlled in this category (MT if the digital engine control system is for an aircraft, excluding manned aircraft, or missile that has a range equal to or greater than 300 km).

Note to paragraph (e): Digital electronic control systems autonomously control the engine throughout its whole operating range from demanded engine start until demanded engine shut-down, in both normal and fault conditions.

(f) Parts, components, accessories, attachments, associated equipment, and systems as follows:
(1) Parts, components, accessories, and attachments specially designed for the following U.S.-origin engines (and military variants thereof): F101, F107, F112, F118, F119, F120, F135, F136, F414, F415, and J402;

Note to paragraph (f)(1): This paragraph does not control parts, components, accessories, and attachments that are common to engines enumerated in paragraph (a) through (d) of this category but not identified in paragraph (f)(1), and those identified in paragraph (f)(1). For example, a part common to only the F110 and F136 is not specially designed for purposes of this paragraph. A part common to only the F119 and F135 — two engine models identified in paragraph (f)(1) — is specially designed for purposes of this paragraph, unless one of the other paragraphs is applicable under §120.41(b).

*(2) Hot section components (i.e., combustion chambers and liners; high pressure turbine blades, vanes, disks and related cooled structure; actively cooled low pressure turbine blades, vanes, disks and related actively cooled structures; actively cooled power turbine blades, vanes, disks and related actively cooled structures; actively cooled intermediate turbine blades, vanes, disks and related actively cooled structures; actively cooled augmenters; and actively cooled nozzles) specially designed for gas turbine engines controlled in this category;
(3) Uncooled turbine blades, vanes, disks, and tip shrouds specially designed for gas turbine engines controlled in this category;

(4) Combustor cowls, diffusers, domes, and shells specially designed for gas turbine engines controlled in this category;

(5) Engine monitoring systems (i.e., prognostics, diagnostics, and health) specially designed for gas turbine engines and components controlled in this category;

*(6) Any part, component, accessory, attachment, equipment, or system that:

(i) Is classified;

(ii) Contains classified software directly related to defense articles in this subchapter or 600 series items subject to the EAR; or

(iii) Is being developed using classified information.

Note to paragraph (f)(6): “Classified” means classified pursuant to Executive Order 13526, or predecessor order, and a security classification guide developed pursuant thereto or equivalent, or to the corresponding classification rules of another government or international organization;

(7) Test cells or test stands specially designed for technology demonstrator engines, developmental engines, or variable cycle engines controlled in this category;
(8) Investment casting cores, core dies, or wax pattern dies for parts or components enumerated in paragraphs (f)(1), (f)(2), or (f)(3) of this category;

(9) Pressure gain combustors specially designed for engines controlled in this category, and specially designed parts and components therefor;

(10) Three-stream fan systems that allow the movement of airflow between the streams to control fan pressure ratio or bypass ratio (by means other than use of fan corrected speed or the primary nozzle area to change the fan pressure ratio or bypass ratio), and specially designed parts, components, accessories, and attachments therefor;

(11) High pressure compressors with core-driven bypass streams that have a pressure ratio greater than one, occurring across any section of the bypass duct, and specially designed parts, components, accessories, and attachments therefor;

(12) Intermediate compressors of a three-spool compression system with an intermediate spool-driven bypass stream that has a pressure ratio greater than one, occurring across any section of the bypass duct, and specially designed parts, components, accessories, and attachments therefor;
(13) Powders specially designed for thermal or environmental barrier coating of defense articles enumerated in paragraphs (f)(1) – (f)(4) of this category;

(14) Superalloys (i.e., nickel, cobalt or iron based), used in directionally solidified or single crystal casting, specially designed for defense articles enumerated in paragraphs (f)(1) – (f)(4) of this category;

(15) Imide matrix, metal matrix, or ceramic matrix composite material (i.e., reinforcing fiber combined with a matrix) specially designed for defense articles enumerated in paragraphs (f)(1) – (f)(4) of this category; or

(16) The following, if specially designed for a defense article in paragraph (f)(1):

(i) Jigs, locating fixtures, templates, gauges, molds, dies, or caul plates, for production of engine parts and components; or

(ii) Test cells or test stands.

(g) Technical data (see §120.10 of this subchapter) and defense services (see §120.9 of this subchapter) directly related to the defense articles described in paragraphs (a) through (f) of this category and classified technical data directly related to items controlled in ECCNs 9A619, 9B619, 9C619, and 9D619 and defense services using the classified technical data. (See §125.4
of this subchapter for exemptions.) (MT for technical data and defense services related to articles designated as such.)

(h)-(w) [Reserved]

(x) Commodities, software, and technical data subject to the EAR (see §120.42 of this subchapter) used in or with defense articles controlled in this category.

Note to paragraph (x): Use of this paragraph is limited to license applications for defense articles controlled in this category where the purchase documentation includes commodities, software, or technical data subject to the EAR (see §123.1(b) of this subchapter).

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