Comments on Proposed Rule "Clarifications and Revisions to Military Aircraft, Gas Turbine Engines and Related Items License Requirements," 81 F. Reg. 6791, February 9, 2016

Boeing Company, the Comments

Export Group for Aerospace, Defence & Dual Use (EGADD) Comments

Esterline Technologies Corp. Comments

General Electric Company Comments

**Lockheed Martin Corporation Comments** 

Northrop Grumman Comments

**Rockwell Collins Comments** 

Rolls-Royce North America Comments

Textron Inc. Comments

**United Technologies Corporation Comments** 



March 25, 2016

Regulatory Policy Division
Bureau of Industry and Security
U.S. Department of Commerce, Room 2099B
14th Street and Pennsylvania Avenue NW
Washington, DC 20230

Subject: Clarifications and Revisions to Military Aircraft, Gas Turbine Engines and Related

**Items License Requirements** 

Reference: Federal Register / Vol. 81, No. 26 / Tuesday, February 9, 2016 / Proposed Rules

The Boeing Company ("Boeing") appreciates the opportunity to provide comments on proposed revisions by the Bureau of Industry and Security ("BIS") to Commerce Control List entries for military aircraft and gas turbine engines. We appreciate the level of effort required to accomplish the challenging objectives of Export Control Reform and hope our comments further your intent in this regard. Below we discuss potential control of coated parts on the United States Munitions List ("USML") rather than in ECCN 9A610 or other categories, and on entries in the '.y' sections of ECCNs 9A610 and 9A619.

# 1. Conflicting controls on USML VIII and ECCN 9A610 aircraft parts and components having USML Category XIII coatings, materials and treatments

Boeing's letter to the Directorate of Defense Trade Controls ("DDTC") dated December 8, 2015, with comments to proposed revisions to USML Categories VI, VII, XIII, and XX, discussed an issue regarding the classification of parts that have been coated with materials controlled in USML Category XIII. It has come to our attention that the position of DDTC is that parts coated with XIII(j)(2) materials are themselves classified as XIII(j)(2) items. Boeing will raise this again in our letter to DDTC on USML VIII and XIX, but the issue is also within scope of the BIS Proposed Rule because such parts might otherwise be classified as ECCN 9A610.

USML Category XIII addresses controls for equipment, materials, coatings, and treatments. Industry practice has generally interpreted materials, coatings, and treatments as raw materials. As such, when they are applied, incorporated or modified during manufacturing processes they become so fully integrated as to be indistinguishable or inseparable from the item under manufacture. However, under Export Control Reform, the ITAR and published guidance are unclear about how to determine the jurisdiction and classification for aircraft parts that incorporate these materials. It would seem that, when one of these materials is



incorporated into a commodity controlled by an ECCN such as 9A610.x, the item retains the jurisdiction and classification of the item, 9A610.x.

It has recently come to our attention that this is not a view held by DDTC regarding all materials, coatings, and treatments. Rather, a higher standard has been expressed regarding certain materials in XIII(j)(2) that turns on the ability to discern <u>any</u> property of the material, coating, or treatment through inspection or testing of the commodity after its application to an item is complete (*i.e.*, the paint has dried). This standard requires the commodity to be classified as XIII(j)(2), regardless of the jurisdiction of the commodity to which the material, coating, or treatment was applied, and any discernible properties with respect to these coatings to be controlled as technical data under XIII(I).

This alternative standard presents several challenges. First, it has not been published by DDTC and therefore is not broadly understood or applied under the ITAR. Second, it is a difficult standard to apply and one which requires assessing the ability to discern through inspection or testing *any* property of the material, coating, or treatment for every part, component, or other such commodity incorporating a material or coating controlled under Category XIII. In addition, this interpretation means that many military aircraft parts and components that would otherwise be classified as ECCN 9A610 become ITAR Significant Military Equipment ("SME"). Prior to Export Control Reform these parts were not designated as SME.

 Recommendation: Request DDTC publish guidance to clarify the appropriate standard to use for classification of military aircraft parts incorporating Category XIII materials, coatings, and treatments.

One result of classifying parts or components according to their Category XIII materials, coatings, or treatments is confusion between materials and commodities, which could have farranging implications.

• Recommendation: We recommend the creation of commodity controls in the relevant USML or CCL part and component subcategories. For example, a commodity control could be added to Category VIII to address aircraft parts and components incorporating Category XIII materials, coatings, or treatments. In parallel, a Related Control Note could also be added to ECCN 9A610 to direct exporters to review the proposed control in VIII when considering classification of military aircraft parts and components under the EAR. This would ensure that exporters do not misclassify commodities and associated technical data, given that it is not intuitive to look for aircraft part controls in Category XIII, "Materials and Miscellaneous Articles."

### 2. The term "fluid" in 9A610.y and 9A619.y entries



BIS proposes revisions to several '.y' entries in 9A610 and 9A619 where the term 'fluid' replaces 'hydraulic', 'fuel', and 'oil' (9A610.y.8, y.10, y.31, 9A619.y.3, y.4, and y.8). It is unclear whether the listings are intended to control items used for liquids or gases or both. Both liquids and gases can be considered to be 'fluids'. The Oxford Dictionary of 'fluid' is:

A substance that has no fixed shape and yields easily to external pressure; a gas or (especially) a liquid.

• **Recommendation:** Add a definition applicable to this category as follows:

Fluid – all aircraft liquids and gases including fuels, oils, hydraulic and brake fluids, water, coolants, air, oxygen, and other fluid and gaseous mixes

## 3. <u>Identification plates in 9A610.y and 9A619.y entries</u>

BIS proposes to add a new 9A610.y.31 listing for identification plates, which aligns with the 9A619.y.7 listing for identification plates. Name plates and identification plates are ubiquitous and do not convey any "technology" or militarily important or sensitive information. Typically they convey an item name, a service name (e.g. U.S. Air Force) and a serial number or part number. Boeing does not believe identification plates merit control in the 600 series unless they convey "technology" or "technical data".

• **Recommendation:** Add a qualifier to the 9A601.y.31 and 9A619.y.7 listings as follows: Identification plates **that convey "technology" or "technical data".** 

We hope that these comments and questions will prove helpful in the finalization of the guidelines. Please do not hesitate to contact Janelle Gamble in Boeing's Arlington, VA office at 703-465-3224 or at <a href="mailto:janelle.f.gamble@boeing.com">janelle.f.gamble@boeing.com</a> with any questions.

Sincerely,

Bryon Angvall

Director, Global Trade Controls



Esterline Corporation

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March 25, 2016 16-C-RRB-001

Mr. Thomas DeFee
Department of Commerce
Bureau of Industry and Security
Regulatory Policy Division
14th and Pennsylvania Avenue, N.W.
Room 2099B
Washington, D.C. 20230

Subject: RIN 0694-AG76 (81 FR 6791) Military Aircraft and Gas Turbine Engines

Dear Mr. DeFee:

Esterline Technologies Corporation supports the goals of the Export Control Reform (ECR) Initiative, and submits the following recommendations that would simplify and make the reforms more efficient. Esterline is a manufacturer of a wide variety of parts and components for the aerospace and defense sector. We appreciate the opportunity to comment on the U.S. Department of Commerce's proposed treatment of electronic items formerly controlled under the USML.

## **Summary of Comments and Recommendations**

This section outlines our main comments, each of which is explained more fully in the remainder of this letter.

- 1. Improve clarity as to what is a 'military aircraft', what is a 'non-military' aircraft, and what is a "civil aircraft."
- 2. Clarify the meaning of "legitimate civil, private, or business use" in the definition for "civil aircraft" with an explanatory note.
- 3. Clarify BIS' approach to "specially designed" items for "civil aircraft" that also meet the ITAR definition of "defense article".
- 4. Reconsider placing the L100 aircraft in ECCN 9A610.b.
- 5. Do not differentiate country chart reasons for control within a single complete ECCN entry.
- 6. Allow flexibility when items are enumerated in both 3A611.y and either 9A610.y or 9A619.y paragraphs.

7. Treat clamps and brackets under 3A611.y.

## 1. Clarity Regarding Military, Non-Military, and Civil Aircraft

Industry needs clear criteria by which they can determine whether items are enumerated or "specially designed" for a 'military aircraft', a *non-military* aircraft, or a "civil aircraft."

A correct understanding of 'military aircraft' is needed to determine whether items are placed on the 600-series (and also ECCN 9A991.a). A correct understanding of *non-military* aircraft is needed to determine whether items are placed outside the 600-series, and whether decontrol notes in 9A012, 9A101, and 9E101 apply. A correct understanding of "civil aircraft" is needed to determine whether a number of decontrol notes throughout the CCL apply.

BIS could improve clarity by revising Note 1 to ECCN 9A610.a to fully explain what results in a military aircraft, rather than using the undefined qualitative term *military use* that could be easily confused with similar terms for 'military end use' in EAR §§ 744 and 746.

Esterline suggests that Note 1 to ECCN 9A610.a be revised to read:

Note 1: For purposes of the Commerce Control List, the term 'military aircraft' means any aircraft "specially designed" for operation by 'military end users'. The term includes: trainer aircraft; cargo aircraft; utility fixed wing aircraft; military helicopters; observation aircraft; military non-expansive balloons and other lighter than air aircraft; and unarmed military aircraft, regardless of origin or designation. Aircraft with modifications made to incorporate safety of flight features or other FAA or NTSB modifications such as transponders and air data recorders are "unmodified" for the purposes of this paragraph .a. 'Military end users' means national armed services (army, navy, marine, air force, or coast guard), as well as national guard and national police, government intelligence or reconnaissance organizations, international military organizations, or irregular military forces or units. Aircraft that are not enumerated in USML paragraph VIII(a) and are not 'military aircraft' are 'non-military' aircraft for purposes of any aviation-related ECCN . "Civil aircraft" are 'non-military' aircraft for purposes of any aviationrelated ECCN. Additionally, aircraft are 'non-military' aircraft for purposes of any aviation-related ECCN if the person obtaining airworthiness certification has "knowledge" that the aircraft will be a "civil aircraft" after planned designation in published airworthiness certification lists has been obtained.

The changes from the proposed text on 81 FR 6795 are underlined.

This definition may be appropriately place in EAR § 772 definitions rather than Note 1 to ECCN 9A610.a.

The rationale for this suggestion are:

- Ensure the term "military aircraft' always means the same thing throughout the CCL (including other paragraphs within ECCN 9A610) to avoid confusion.
- Retain sufficient commonality with the definitions for 'military end user' in EAR § 744 and "armed forces" on the DDTC DSP-83 form to prevent confusion.
- Add reference to irregular military forces or units for consistency with the ITAR definition of "defense services."

- Focus on operation as the critical element of "use" when deciding an aircraft is for military use.
- Since aircraft are 'end items' they cannot be incorporated into another commodity, so 'military end use' text in in EAR § 744 that is based on incorporation of an aircraft is both meaningless and unnecessary.
- Ensure there is no circular logic where the aircraft classification depends on incorporating a "specially designed" component and the component classification depends on the aircraft classification.
- Provide clarity for decontrol notes that depend on whether an item is related to a *non-military* aircraft (i.e.; 9A001.a, 9A012, 9A101.b, 9E101).
- Clearly prevent the possibility that an aircraft is a 'military aircraft' and a "civil aircraft" at the same time, as this creates excessive confusion for industry, law enforcement, and trading partners.
- Do not alter "civil aircraft" definition as this is specified by the Wassenaar Arrangement (WA).
- Provide clarity with respect to non-military aircraft and their parts and components during the development stage, before a type certificate from a civil aviation authority in a WA participating state is obtained.
- Using "civil aircraft" and future "civil aircraft" as a standard should effectively
  prevent military commercial derivative aircraft per FAA Order 8110.101A from
  being treated as non-military aircraft.

Esterline notes that in 80 FR 29432, BIS adopted in a final rule a revised definition for "civil aircraft" following a change made at the Wassenaar Arrangement 2014 plenary meeting. Under this definition, an aircraft is not a "civil aircraft" if it has not yet received a type certificate from a WA member state, even if the aircraft manufacturer was planning for that civil type certificate, and exclusively marketed the aircraft to and held orders from civil operators. This worsened a wide and poorly defined gap between 'military aircraft' and "civil aircraft." Industry needs to cleary understand how those aircraft are correctly classified.

## 2. Clarity Regarding Legitimate Civil, Private or Business Use

The definition of "civil aircraft" in EAR Part 772 depends on whether an aircraft is listed to fly commercial civil internal and external routes, or for <u>legitimate civil, private or</u> business use.

Since this is a Wassenaar definition agreed to by the U.S., Esterline suggests BIS add a note to the definition of "civil aircraft" explaining what governmental uses fall within 'legitimate civil use.' For example, wildlife and environmental aerial survey, forest fire suppression, and public hospital medevac would reasonably be considered 'legitimate civil use' of aircraft even if flown by governments. Also, given the definitions for "military end user" in EAR parts 744.9, 744.17, 744.21 and "armed forces" on the DDTC DSP-83, industry would reasonably conclude that a national police helicopter is a 'military aircraft' for military uses but that an unarmed city police helicopter with a WA type certificate is a "civil aircraft" put to a 'legitimate civil use.'

## 3. Clarity Regarding "Civil Aircraft" that are "Defense Articles"

Previously, in RIN 1400-AD64 (79 FR 61226) DDTC removed the qualifier "strategic" from 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. This resulted in several transport category aircraft meeting the ITAR definition of "defense article" and the WA and EAR definition of "civil aircraft" at the same time, effective October 10, 2014.

In RIN 1400-AD89 (81 FR 6797) DDTC proposes further changes that could result in aircraft being "civil aircraft" and "defense articles" at the same time. DDTC proposes to explicitly exclude from the USML the L-100 manufactured prior to 2013, but not any other commercial transport aircraft having similar capabilities. DDTC also proposes to enumerate on the USML aircraft in several entries if they incorporate, or are specially designed to incorporate, a defense article.

If an aircraft is a "defense article" and at the same time is a "civil aircraft" per the EAR and the WA, industry has great difficulty understanding how to control its parts and components.

For example, if a foreign privately operated aircraft performing civilian aerial survey operations incorporated a foreign made infrared system described in USML XII but not subject to ITAR, that aircraft might be considered to be enumerated in USML VIII(a)(7). It would also be a "civil aircraft." Equipment specially designed for the aircraft by U.S. manufacturers would now fall under ECCN 9A610 even though intended for civil purposes and even if unrelated to the infrared system. Integration support for the aircraft having nothing to do with the infrared system would be a defense service regulated by the ITAR.

Esterline suggests that commodities and software "specially designed" for current or planned "civil aircraft" should not be enumerated or described in ECCNs 9x610 or 9x619, even if DDTC controls the "civil aircraft" as a "defense article" because of a single incorporated defense article.

For both the EAR and the ITAR, the full complement of "specially designed" items used in or with an aircraft should depend on more than incorporation of a single USML, 600-series, or xA018 commodity into the aircraft. It should also depend on whether the aircraft will be used for a purpose the government deems military, and if not, whether the items are classified in relation to the USML, 600-series, or xA018 commodity.

Esterline is commenting separately to DDTC that aircraft should not be "defense articles" and "civil aircraft" at the same time,

## 4. Reconsider ECCN 9A610.b

Esterline suggests that it is not appropriate to enumerate under ECCN 9A610 (military aircraft and related commodities) a "civil aircraft" that has been operated by commercial aircraft operators since the 1960's, has been operated by more than one U.S. commercial airline, and has been out of production for nearly a quarter century.

Production ended in 1992, not just prior to 2013. The replacement LM-100 is not yet in production.

It would be appropriate to enumerate or describe under ECCN 9A610 L100 aircraft that are modified for military end users and no longer meet the definition of "civil aircraft."

Esterline notes that BIS already has flexibility to control exports, re-exports, and retransfers of L100 aircraft and their parts and components to undesired recipients in through end user/end use and embargo controls in EAR §§ 744 and 746.

## 5. Do Not Differentiate Country Chart Controls Within One ECCN

BIS' proposal to differentiate NS and RS controls for items sharing an identical ECCN (9A610.x) depending on the end item they are exported to support causes significant difficulties for compliance automation. Automated export compliance systems generally look up a complete ECCN entry, find its country chart controls and compare them to the country chart. End user and end use controls normally follow separate logic.

Industry must implement special work-around adaptations when a single complete ECCN entry can have more than one set of country chart controls.

If two items are to have distinct country chart controls, they should have distinct complete ECCN entries.

If an item is to be controlled differently based on end user or end use, those controls are properly addressed in EAR § 744 and not through the country chart.

### 6. Equivalent 600-Series .y Entries

By deleting "cockpit" from certain entries under 9A610.y the proposed rule will move items from both 9A610.x and 3A611.y to 9A610.y. Esterline agrees it is not sensible to control items such as "specially designed" aircraft indicator lights under 9A610.y if they are in the cockpit and 9A610.x if they are at any other crew workstation such as a galley or loadmaster workstation.

On the other hand, moving items such as "specially designed" switches between various 600-series .y lists over time does create considerable labor for industry without any corresponding change in licensing policy.

Esterline suggests that if an item is enumerated in 9A610.y or 9A619.y, and has an equivalent enumeration in 3A611.y, then either ECCN could be used. They are handled the same way for export policy purposes. This would allow appropriate policy treatment of the item without creating an undue burden on industry.

## 7. 3A611.y Treatment for Clamps

Esterline agrees that "specially designed" clamps and brackets for fluid hoses warrant treatment as 600-series ".y" items for both military aircraft and military engines.

Esterline notes that the same clamps and brackets may also be used for wire harnesses, conduit, pipes, and pneumatic lines or tubes. The same "specially designed" clamp or

bracket may be used on both aircraft and engines. Further, these items commonly used in multiple 600-series end items and do not warrant NS control, so placement in 3A611.y is more appropriate.

Esterline suggests adding 3A611.y.36 for "clamps and brackets (including block clamps, also called line blocks, tube supports, or fairlead blocks) for wire harnesses, conduit, fluid or pneumatic hoses, lines, tubes, or pipes."

Alternately, these items would be appropriate for inclusion in the (b)(2) release within the "specially designed" definition.

# Summary

Thank you for the opportunity to comment on the proposed rule. Please feel free to contact me if you have any questions concerning the recommendations outlined above.

Regards,

Richard R. Baldwin

Director, Trade Compliance Technology

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**Esterline Technologies Corporation** 



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25<sup>th</sup> March 2016

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# RIN 0694-AG76: Clarifications and Revisions to Military Aircraft, Gas Turbine Engines and Related Items License Requirements

Dear Sir,

I write to you on behalf of the Export Group for Aerospace, Defence & Dual-Use (EGADD), which is a not-for-profit-making special interest industry group, focusing exclusively on all aspects of export and trade control compliance matters, and is the only dedicated national industrial body in the UK dealing exclusively with export and trade control issues. EGADD operates under the joint auspices of ADS Group Ltd (ADS), British Marine, the British Naval Equipment Association (BNEA), the Society of Maritime Industries (SMI), and TechUK.

This is in response to the consultations which were launched by the US Department of Commerce on 9<sup>th</sup> February 2016 (https://www.gpo.gov/fdsys/pkg/FR-2016-02-09/html/2016-02591.htm) on the proposals to modify and clarify the Commerce Control List (CCL) entries for two types of items: Military aircraft and related items, and military gas turbine engines and related items.

We have been keenly watching from the UK as the on-going overhaul of US export controls has been developing with considerable interest, and are now delighted that, contrary to the pessimistic predictions of some, these efforts have progressed so far. We have always strongly supported the plans for the proposed reforms, from the viewpoint of UK Industry, and are aware that other companies and Industry trade bodies from around the World have equally been watching what has been happening with ECR in the US with equally great interest.

On behalf of UK Industry we would like to submit the following comments and observations to you, for your consideration. This letter seeks to comment on any proposals which are being published for consultation.

We trust that the BIS will be receiving informed and constructive technical input and considered views on the series of questions and queries that it has posed in this consultation exercise from other Industry respondees, such as to have the answers that it needs and has sought.

Our own more general and generic comments and observations are as follows:

One of the most fundamentally important aspects of the whole ECR process has been the provision of greater clarity and precision on those items which are deemed to be still on the USML, and, thus, still subject to ITAR control, and the US Government is to be commended for its efforts in this regard, as this instils greater certainty for US exporters, as well as for their overseas industrial and governmental customers and partners. We believe that the Department of Commerce is to be warmly congratulated for its role in this, for consulting on where further clarification and certainty was perceived to be needed, and for seeking to provide yet further precision on the ECR process, which has been invaluable. We are also deeply and profoundly grateful to the Bureau of Industry & Security for its continued willingness to engage constructively with overseas companies and other organisations who are seeking to have a better understanding of post-ECR US export control compliance, and their resulting regulatory responsibilities.

However, we are strongly led to believe from comments that we have received that some UK companies who are deeply concerned (we hope incorrectly), from some of the proposals and the tone of this proposed rule change announcement, that there might be some perceptions relating to the significant reconsideration and/or possible reversal of the whole concept behind the ECR process.

We are extremely keen for the fundamental and (in our view) sound reasoning and justification behind the underlying principles of the ECR should not be undermined and potentially fall prey to any aspirations on the part of some who may have a secret desire to try to constrain at least part of it. In our view, this would merely serve to threaten the potential undercutting of many of the intended commercial benefits from ECR process.

If some aspects of the ECR process were able to be reversed, this could force on companies, based both in the US as well as overseas, and their customers, the essential need to re-classify their items and re-assess what the impacts of the regulations are on their classification. Then, in instances where their interpretation is that their status has changed, potentially re-apply for the necessary licensing permissions that they would need, as well as re-configure their internal enterprise resource planning (ERP) systems, etc, as items which had moved from the ITAR to the EAR only since October 2013, were now moved back again. This would be deeply frustrating and resource-intensive for the companies concerned, and add considerably to their operational costs, which would have the potential negative ramification of thereby adding to their overhead costs, with the result of negatively affecting their overall competitiveness. This could also, thereby, generate some confusion, and, with confusion, comes uncertainty, and greater resulting potential threat of inadvertent non-compliance by perfectly responsible and law-abiding companies.

We sincerely hope and pray that the above perception is incorrect.

Thank you in advance for your consideration of these comments. If you have any questions about this correspondence please contact me.

Brinley Salzmann - Secretary, EGADD



March 23, 2016

Hillary Hess
Director, Regulatory Policy Division
Office of Exporter Services
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Washington, D.C.

GE

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Regulation ID: RIN 0694-AG76; Docket No. 151030999-5999-01

Subject: Comments on Proposed Clarifications and Revisions to Military Aircraft, Gas

Turbine Engines and Related Items License Requirements

Dear Ms. Hess:

On behalf of General Electric Company (GE), the undersigned submits the following comments in response to the Department of Commerce, Bureau of Industry & Security's (BIS's) February 9, 2016 Proposed Rule to modify the Commerce Control List (CCL) entries for Military aircraft, military gas turbine engines and related items (Proposed Rule) in the Export Administration Regulations (EAR), (81 Fed. Reg. 6791). GE welcomes the opportunity to comment on the Proposed Rule.

## SPECIFIC COMMENTS PERTAINING TO ECCN 9A610 AND 9A619

GE appreciates the effort to unify the language between 9A610.y and 9A619.y where related to the same types of parts. While GE has benefitted from the '.y' series, particularly the 9A619.y category, GE believes the regulation can further improve the goals of Export Control Reform with some adjustments in structure and potential expansion of scope, and submits the following suggestions:

Industry generally considers fluids to include fuel, oil, and air. The design practices and manufacturing techniques related to components that transmit these fluids in an engine are similar, and the resulting products are of similarly low regulatory importance. However, the Proposed Rule assigns higher control to certain items such as bent lines when related to fluids other than oil, while allowing .y benefits to all lines (straight or bent) when related to oil (see proposed 9A619.y.3 vs 9A619.y.2). There appears to be a similar discrepancy between clamps related to oil lines and clamps related to non-oil fluids. GE does not believe that bent lines are significantly more important than straight lines, or that clamps for oil lines are more important than clamps for non-oil fluid lines. All fluid lines and related components should be treated similarly in the same paragraph.

In the Proposed Rule, a particular set of clamp types¹ have been removed from 9A619.y.5 and unspecified clamps have been added to 9A619.y.3 creating a new ambiguity. It is not clear whether the clamps from the previous 9A619.y.5 that are not for fluid lines now are covered by 9A619.x, or whether all clamps are now to be covered by 9A619.y.3. In either interpretation, GE has thousands of parts that would need reclassification for that change, at significant cost and distraction of engineering resources.

In the current rule, 9A619.y.6 identifies shims specially designed for engines controlled under 9A619 or the USML. There is no parallel control in 9A610.y, and it appears that shims specially designed for aircraft may only be released if they are 'spacers' identified in the release portions of the 'specially designed' definition.

GE also recommends simplifying the 9A610.y and 9A619.y categories to eliminate unnecessary reclassification efforts and allow flexibility to accommodate future changes.

Based on the above, GE recommends that 9A619.y.2 and 9A619.y.6 be deleted, that the list in 9A619.y.3 be clarified, that the last sub-paragraph numbers in the .y category be dropped, and that clamps and brackets in general be added back to 9A619.y classification, as follows:

"y. Specific . . . therefore:
Oil tank and reservoirs
Fluid lines, tubes, and hoses, and related fittings
Clamps and brackets
Fluid filters and filter assemblies

Check valves for hydraulic and pneumatic systems Identification plates

identification plates

Fluid manifolds."

If shims are to be retained in 9A619, GE asks that shims be clearly differentiated from spacers.

Lastly, because of the order of review and the language in USML Categories XIX.f.1 and VIII.h.1, certain types of parts recognized as being of low regulatory value when dropped to ECCN 9A619. $y^2$  continue to controlled as USML defense articles when used on an ITAR XIX.f.1 listed engine or and VIII.h.1 listed aircraft. For ECR to achieve the goal of easing the burden on smaller manufacturers of these items, those parts identified in 9A610.y or 9A619.y but unique to XIX.f.1 listed engines and VIII.h.1 listed aircraft should be similarly excluded from the ITAR and covered by the y paragraph, because they are not critical to national security.

<sup>&</sup>lt;sup>1</sup> V-band, cushion, broomstick, hinged and hoop clamps.

<sup>&</sup>lt;sup>2</sup> Oil tank and reservoirs; Oil lines and tubes; Fluid hoses, straight and unbent lines, fittings, couplings, clamps and brackets; Fluid filters and filter assemblies; Check valves for hydraulic and pneumatic systems; shims; Identification plates; Fluid manifolds."

GE appreciates the opportunity to provide comments on the Proposed Rule. If you have any questions or require additional information concerning this submission, please contact the undersigned at (781) 594-3406 or by email at: <a href="mailto:qeorge.pultz@ge.com">qeorge.pultz@ge.com</a>, or Kathleen Palma (202) 637-4206 or by email at: <a href="mailto:kathleen.palma@ge.com">kathleen.palma@ge.com</a>.

Sincerely,

George S. Pultz

International Trade Compliance

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Gerald Musarra

Vice President, Government & Regulatory Affairs

March 25, 2016

Submitted Via E-Mail (DDTCPublicComments@state.gov)

Mr. Edward Peartree
Director, Office of Defense Trade Controls Policy
Directorate of Defense Trade Controls
U.S. Department of State
Washington, D.C.

## ATTN: ITAR Amendment – USML Categories VIII and XIX (RIN 1400-AD89)

Lockheed Martin Corporation (Lockheed Martin) is pleased to submit the following comments in response to the February 9, 2015 proposed rule regarding Categories VIII and XIX of the U.S. Munitions List (USML). The proposed rule follows the March 2, 2015 notice of inquiry that initiated a review of these USML categories to "ensure 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." We appreciate this categorical review as part of the control list "refresh process." Comprehensive reviews of the USML categories and Commerce Control List (CCL) will greatly help to ensure the objectives of the Export Control Reform (ECR) initiative are achieved.

In particular, regulatory clarifications provided in the proposed rule for the notes, comments related to the order of review, and the interpretation of specially designed parts and components as they pertain to connectors, cables, and cable assemblies are valuable to our export control implementation and compliance program. Proposed changes to the section addressing aircraft-weapon interface units and computers also provides important clarity.

However, the proposed rule does not adequately address several issues that were raised in Lockheed Martin's May 1, 2015 response to the notice of inquiry, including jurisdiction for the commercial LM-100J aircraft. As discussed below, the LM-100J, as a modern replacement to the aging L-100 commercial aircraft, has a long history of "normal commercial use." In fact, the proposed revisions to Category VIII acknowledge that the L-100 does not warrant control as a defense article. Controlling the LM-100J, which has similar performance capabilities, on the USML is not in keeping with the stated reform objectives.

Similarly, the proposed control parameters in Categories VIII would capture a number of other commercial items, including civil rotorcraft gearboxes, which do not warrant control on the USML. The following comments also address concerns related to multiple transfers of jurisdictional control and other proposed revisions that warrant further review and clarification.

## I. <u>UMSL Category VIII(a)(14): Military Airlift</u>

Under the current Category VIII(a)(14), "aircraft with a roll-on/roll-off [RO/RO] 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" are deemed to be military aircraft worthy of control as defense articles. As discussed in our March 2015 comments, Lockheed Martin does not consider these capabilities – which are inherent to existing commercial aircraft and important for many commercial/civil applications – to be sufficient criteria for controlling military aircraft on the USML.

We welcome the proposed change that corrects the inadvertent and unanticipated control of commercial L-100 aircraft (and associated parts & components) on the USML by explicitly excluding the aircraft from (a)(14) controls. The Department has asked for "public comment on the scope and effect of this control and exclusion." We do not find the rationale for capturing other modern commercial aircraft, which have the same inherent capabilities as the L-100, on the UMSL simply because they were manufactured after 2013 to be compelling. Accordingly, we have provided new information to assist the Department reassess and modify these proposed controls.

## LM-100J: A Modern L-100

L-100 aircraft have been in commercial service and controlled under the jurisdiction of the Department of Commerce for decades. From 1965-1992, Lockheed Martin produced over 100 of these commercial freighters. More than 50 of these legacy L-100s remain in operation today, all of which all have the capability of "airlifting a payload over 35,000 lbs over 2,000 nm," come equipped with RO/RO, and are capable of "landing onto short or unimproved runways." The proposed rule acknowledges that the Department "partially accepted" public comments to avoid inadvertent capture of commercial aircraft by excluding "L-100 aircraft manufactured prior to 2013." Unfortunately, this approach is not sufficient to avoid the inadvertent capture of other commercial U.S. aircraft that are capable of achieving the (a)(14) control parameters, including the LM-100J.

In addition to their age, the L-100 aircraft face other operational challenges, such as complying with air safety and noise/emissions standards and high direct-operating costs relative to newer aircraft. The Lockheed Martin LM-100J is the multi-role commercial aircraft freighter designed to replace these aircraft and serve multiple global markets, including freight transport; heavy equipment and fuel delivery; firefighting; and search & rescue. Although the L-100 requires more manpower and has higher operating and support costs, it is just as capable as the LM-100J in carrying payloads over 35,000 lbs. to ranges over 2,000 nm with the same RO/RO and landing/takeoff capability. The L-100 is simply older and at the end of life-cycle. Accordingly, delineating controls based on manufacture date makes little sense from a national security perspective.

According to the Department of State: "With limited exceptions, the defense articles that warranted control on the USML were those that provided the United States with a critical military or intelligence advantage. All other items were to become subject to the Export Administration Regulations [EAR]." In defining military airlift platforms worthy of control on the USML, the current broad criteria does not meet this objective. The LM-100J offers no unique or sensitive military capability that would warrant control on the USML. The range/payload, austere operating capability, and RO/RO capacities identified as the rationale for inclusion on the USML are all common attributes that commercial aircraft operators around the world are looking for to fulfill their civil, commercial, and humanitarian requirements.

Lockheed Martin is not aware of commercial aircraft other than the LM-100J manufactured in the United States that satisfy these requirements. But that does not mean it is unique. The LM-100J will compete in a class of 16-25 ton aircraft with offerings from numerous foreign competitors – including Russia, Europe, Brazil, and China. All of these competitive aircraft are not identical, and some capabilities (e.g., jet propulsion, expanded cargo space) may be more suitable for certain customer requirements. Lockheed Martin believes the LM-100J is an attractive platform for domestic and international customers looking to fulfill civil, commercial, and humanitarian requirements. Yet, controlling the LM-100J as a military aircraft will greatly complicate the sale, operation, and servicing of these aircraft in a commercial environment making these foreign offerings more attractive.

Control on the ITAR presents substantial obstacles to the potential civil operators, including additional restrictions on marketing and financing, complicating the provision of parts and maintenance to broken aircraft, increased licensing requirements for related services, and temporary import license requirements for repair of spares serviced in the United States. These complications not only increase the cost of commercial operations, but also add time in a fast-paced, profit-driven market that places a premium on efficiency. As we noted in previous comments, the ease of repair and maintenance on the LM-100J is one of its most attractive commercial qualities, but this market advantage will be diminished if subjected to the extensive licensing requirements that accompany USML control. Simply put, international customers looking to fulfill commercial aircraft requirements are more likely to prefer commercial aircraft.

As noted in the March 2, 2015 notice of inquiry, one of the objectives of reviewing the control list is to "strengthen the U.S. industrial base by, among other things, reducing incentives for foreign manufacturers to design out and avoid U.S.-origin content and services." Ensuring that the L-100/LM-100J are able to be sold and maintained as commercial aircraft is in the U.S. national interest and will bring economic gain for the United States – as well as reduce costs for aircraft sold to the U.S. Government.

### Defining Military vs. Civilian Airlift Capabilities:

Lockheed Martin has argued that what makes an aircraft useful for military purposes is not a set of generic airframe flight characteristics and capabilities — many of which are shared with commercial aircraft. For example, the ability of the L-100 and LM-100J to land on dirt/unimproved runways is a key aspect of the utility of the aircraft, but not an inherently military capability or a critical military advantage. There are many other civil aircraft that have a proven capability to operate out of unimproved runways. Similarly, RO/RO is not unique to military aircraft, but attractive to any customer that is interested in the efficient loading of oversize payloads. This is a critical feature for many commercial customers that do not have pre-positioned loading equipment in remote areas. In addition to the L-100 operating commercially around the globe, both the Russian AN-12 and IL-76 aircraft have RO/RO ramps and are capable of landing on short or unimproved airfields. These aircraft are flown by many commercial transport operators.

Moreover, it is not unusual for aircraft to have a military and a civilian variant. While the LM-100J traces its origins to the military C-130J, it is a significantly different aircraft. There are many examples of aircraft – both U.S. and foreign made – that have military and commercial versions of the same basic platform. For example, the latest USAF tanker aircraft, the KC-46A Pegasus, is a militarized version of the Boeing 767. One of the most attractive operational benefits for this aircraft is the commercial origin and commonality of many of the major structures of the aircraft. Yet, no one who would argue that a 767 is inherently a military aircraft.

Whether a commercial aircraft is derived from a military aircraft or vice versa is no longer relevant to export control jurisdiction. Control list reform was specifically intended to move away from design-origin as the basis for control and focus on critical and sensitive military capabilities. In fact, it is the integrated military systems/equipment that transforms a commercial aircraft into a viable military aircraft, not the basic airframe or performance parameters.

All of the systems and functions that make the C-130J a sophisticated military platform, including self-defense systems, aircraft survivability systems, military IFF transponder modes, military mission equipment, military tactical radios, targeting systems, electronic counter measures, and ballistic protection, have all been removed. In this way, the LM-100J is more like the legacy L-100 aircraft than its modern military variant. The demilitarization process for the LM-100J was necessary to remove unneeded functionality, but also to reduce the cost of the aircraft. Additionally, some of the equipment not certified by the FAA for use in commercial aircraft was removed as well. Here are several examples:

- The sophisticated APN-241 Radar, a very high resolution radar, was replaced with a commercial color weather radar for lower cost and increased reliability.
- There are no military-specific radios, data links, or encryption capabilities. The military functionality of these radios to frequency hop and encrypt transmissions was neither required nor desired by our customer set.
- Foam in the fuel tanks has also been removed. The foam, which prevents a spark from exploding the fuel fumes in the aircraft fuel tanks, is a proven safety feature of the C-130 protecting the aircraft from ground fire. Ground fire is not a design factor for the LM-100J, but the threat of sparks from electrical wiring in the fuel tanks is. Working with the FAA, Lockheed Martin implemented a new design of wiring and circuit breakers that meets modern safety standards and allows up to 3,000 lbs of additional fuel to be carried in the aircraft.
- The traditional red nylon paratroop seats have been removed. The densely packed seating (which can hold 128 passengers or 92 paratroopers,) while acceptable for military use, does not meet FAA standards for passenger restraint. End users interested in carrying passengers will have to get an FAA Supplemental Type Certificate (STC) to use airline style palletized seating.
- Other airdrop equipment, such as static line cables, static line retriever winches, airdrop warning lights, and paratroop platforms have been removed. The paratroop air deflector doors are still part of the aircraft, but they have been deactivated through software not to open in flight.
- Military GPS receivers were retained, because they are part of the embedded GPS/INS of the aircraft. The ability to load the "military only" codes and use "military only" modes has been removed, and the receivers operate like a normal civil GPS, except they lack several key civilian features. Two WAAS enabled civil GPS systems have been added to the aircraft so that it can have an FAA compliant navigation solution and enable the aircraft to achieve compliance with US and international civil airspace mandates for Communication, Navigation and Surveillance/Air Traffic Management (CNS/ATM).

These are just several examples of the extensive effort Lockheed Martin has undertaken to ensure that military functionality has been removed. Without these systems, the LM-100J is just a proven commercial aircraft designed to replace an aging fleet of L-100 aircraft that have been operating successfully as commercial air freighters for over 40 years.

## Militarizing Civilian Platforms

Another factor in determining military significance is the ability and ease in transforming a civilian platform into a militarily significant system. Again, context is important. A civilian pickup truck can be easily transformed into a transport for a large caliber machine gun. It is not so simple to militarize a modern aircraft. Due to the integrated nature of the LM-100J avionics, an unauthorized third-party would find it very difficult to integrate military systems onto the aircraft.

The LM-100J is specifically designed to be a highly-integrated aircraft to improve automation and ensure control over modifications. Unlike older aircraft, the technology and automation of the LM-100J, handled by the central mission computer, requires modifications to be performed by the original equipment manufacturer (OEM). The intent of the central mission computer is to eliminate wiring, improve fault reporting, control the thrust of the engines, and eliminate the need for a flight engineer. The aircraft knows when a light bulb is burnt out or a piece of equipment has failed, which results in improved reliability. But that level of complexity means that it is extremely difficult to add or take away capabilities of the aircraft, even for the OEM. The software that runs the mission computers is proprietary and exclusive to Lockheed Martin; it has never been provided to another party.

There are modifications that a purchaser could make to the aircraft without the involvement of the OEM, but the end user would not be able to integrate or take advantage of the full capabilities of the aircraft. In addition, modifications could potentially endanger the flight safety of the aircraft and crew.

If export licensing jurisdiction for the LM-100J is transferred to the CCL, the export of military mission systems suitable for militarizing the aircraft would still be controlled under the ITAR, further helping to prevent unauthorized modifications to the aircraft. Similarly, foreign mission systems with U.S. ITAR content will continue to require USG authorization for integration into the aircraft. And under Commerce control, the aircraft themselves would still require an export license to most destinations and be prohibited from export to countries of concern. With all of these stops in place, and the inherent difficulty with modifying the aircraft without OEM assistance, the risk of militarization is extremely low.

## Recommendations:

There are a several revisions to Category VIII(a)(14) that could effectively address this issue. In our May 2015 comments, Lockheed Martin identified options, including deleting Paragraph VIII(a)(14) in its entirety, since controls on integrated military mission systems would have effectively controlled the C-130J and other military airlift platforms. However, with the removal of mission system controls in Category VIII by deleting paragraph (a)(11) in the proposed rule, this is no longer a viable option.

Based on its long history of success as a commercial aircraft, the Department has acknowledged that the commercial L-100 does not warrant control on the USML, even though it is inherently capable of achieving the parameters identified in Category VIII(a)(14). This same rationale should apply to other commercial aircraft as well. The intent of the options outlined below is to ensure

that military aircraft, including the C-130J, remain controlled on the USML, while enabling other commercial aircraft with similar performance capabilities, such as the LM-100J, to transition to Commerce Export Commodity Classification Number (ECCN) 9A610. This would ensure continued USG oversight for the export of these aircraft, but enable them to be operated and serviced as commercial aircraft.

1) Revise Paragraph (a)(14) with a specific exclusion for LM-100J aircraft. This option is unambiguous and ensures affected commercial aircraft are not controlled on the USML.

"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 and LM-100J aircraft manufactured prior to 2013."

As discussed above, manufacturing date should not be a factor in determining the military utility of an operational aircraft. There is no logical reason for not excluding other commercial aircraft from (a)(14) with similar capabilities. The LM-100J is the only commercial aircraft manufactured in the United States that meets these criteria. Moreover, identification of specific aircraft for exclusion in (a)(14) is not unique in this Category as multiple other aircraft are listed throughout Category VIII. Accordingly, a specific exclusion is the easiest and most logical approach to ensure that military aircraft with these capabilities continue to be controlled without adversely affecting the commercial operations of the LM-100J.

2) Revise Paragraph (a)(14) to reference integrated military functions: This option maintains the explicit control of military airlift aircraft, but limits controls to those with one or more military mission systems. With the deletion of paragraph (a)(11), integrated mission systems would need to be specifically identified or referenced in the USML for this option to be effective.

"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 and incorporating systems, equipment, assemblies, modules, and/or components that provides one or more of the following functions:

- (i) Aircraft Missile/Self Protection Systems, including:
  - (A) Radar Warning
  - (B) Missile Warning
  - (C) Infrared Countermeasure
  - (D) Flare/Chaff Countermeasures
- (ii) Electronic Warfare (EW) and/or Electronic Counter Measure (ECM)
- (iii) Voice and/or Data Communications that includes Electronic Counter-Counter Measure (ECCM) (i.e. HAVEQUICK I/II, SINCGARS, SATURN)
- (iv) U.S. government Identification Friend or Foe (IFF) Modes 4 or 5
- (v) Military and/or intelligence cryptographic (including encryption, decryption, and key management)
- (vi) Protective/Self-protection armor (for crewmembers and critical systems)
- (vii) Global Positioning System (GPS) receiving equipment that can decrypt precise positioning service (PPS) signals and/or used with antenna designed to reduce or avoid jamming signals."

This option would ensure clarity in the controls to ensure the mission systems of greatest concern are identified. Moreover, as discussed in the analysis above, these are military mission systems that are not easily integrated into the aircraft without the assistance of Lockheed Martin as the OEM. Accordingly, explicitly controlling their integration at the time of

export would help to ensure future military modernization could not happen without explicit authorization from the USG.

3) Revise Category VIII(a)(14) to include a negative list of excluded aircraft: This option would rely on civil certification to exempt commercial aircraft as follows:

"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, excluding aircraft that have both a Civil Aircraft Design Type certificate and a Standard Certificate of Airworthiness that are FAA approved, active, current, and valid;"

As a general matter, it would be difficult for any military aircraft to be eligible for this type of certification. Military equipment would need to be converted to FAA approved equivalent, essentially requiring that any aircraft undertake the same demilitarization process as the LM-100J.

## II. USML Category VIII(h)(2): Commercial Gearboxes

Another example where the proposed rule inadvertently controls items in normal commercial use is rotorcraft gearboxes. Lockheed Martin expects Category VIII(h)(2) of the proposed rule to capture a number of U.S and non-U.S. civil rotorcraft gearboxes capable of operating for 30 minutes with loss of lubrication without an emergency or auxiliary lubrication system.

## Loss of Lubrication

Military and commercial helicopters have the capability to continue operating after a loss of lubrication – often (erroneously) referred to as "run-dry." Although run-dry capability is prevalent in the civil market, the performance requirements for military rotorcraft gearboxes differ significantly from the civil requirements. In the case of military aircraft, the requirement is to provide the ability to escape from enemy territory and return to base or a safe zone after a total loss of lubrication. For commercial aircraft, the rationale is to fly to the nearest safe landing area. Many civil aircraft manufacturers are advertising civil aircraft with gearboxes capable of meeting or exceeding a 30 minute run-dry scenario. For example, the Sikorsky model S-92A commercial helicopter in the offshore oil transport configuration is sized to carry 19 passengers plus crew and provides a run-dry capability of at least 30 minutes.

Both military and civilian requirements specify a minimum 30-minute capability. (See 14 CFR 29.927(c) Lubrication system failure. Per FAA regulations, normal use lubrication system will not prevent continued safe operation for at least 30 minutes.) A number of approaches have been developed by helicopter OEMs to provide additional run time after failure of the primary lubrication system: auxiliary lubrication recirculating systems, residual oil management systems, leak isolation valves, and single-pass emergency lubrication systems. Materials, finishing, and coatings have been developed and incorporated specifically into gear and bearing designs, producing improved performance in low or residual lubrication situations. None of these technologies are specifically military in nature, and all serve to provide a capability to operate after a loss of lubrication event (including operation with an emergency lubrication system and following the complete loss of all oil).

There are, however, significant differences in the elements of these capabilities. These differences are best seen in the actual civil and military testing requirements, outlined in AC-29-2C, MIL-HDBK-516C, and JSSG-2009. Specific details of the military and civil requirements for the 30-minute loss of lubrication testing are outlined in Table 1. Power Condition (Row 4) presents the clearest and most substantial difference between the two levels of requirements. The military requirement of "2 minutes at max rated power (10 minute rating)" is a significantly more stringent and difficult capability to achieve than the civil requirement of "max continuous power" at max GW. Accordingly, a gearbox may be civilly certified for a 30-minute loss of lubrication capability yet not meet the military requirements found in MIL-HDBK-516C.

	Military (MIL-HDBK-516C)	Commercial (AC-29-2C)
Number of Test Specimens	2	1
Gearbox	All Gearboxes – pressurized and splash	Pressurized Oil System only
<b>Power Condition</b>		
-Starting Point	2 minutes at rated Max Power (10 minute rating) *Most severe Power rating	Max continuous power at max GW
	26 minutes at cruise	29.6 minutes at power to sustain flight
	2 minutes at vertical landing	25 sec auto rotation with 10 sec of power landing.
Starting Temperature	No requirement	Highest temperature limit for continual operation
Pass Condition	30 minutes with No Imminent Failure	30 minutes minimum - extended beyond is highly desired - A time interval should be established and reduced significantly when compared to the bench test.
Oil Cut-Off Point	Down Stream of Pump to exit gearbox - No recirculation only scavenge	Down Stream of Pump to exit gearbox - No recirculation only scavenge
Rational	Egress from hostile area from ballistic damage	Internal or external failure Unless such failures are extremely remote*  Aux system must be independent to not have a common point with the main system

Table 1: Comparison of Military and Civil 30-minute lubrication loss requirements

We recognize that government aviation authorities, such as the FAA and EASA, have considered eliminating the provision for "remote possibility" failures (such as that found in 14 CFR 29.927(c)) and instead enforce the testing with merely residual oil in the gearbox. Under these circumstance, the difference between the military and the civil requirements will further shrink.

## **Emergency Lubrication**

Neither military qualification nor civil certification requirements mandate the installation of an emergency or auxiliary lubrication system. Our research indicates that there are at least six (6) civil helicopter manufacturers with over ten (10) models in flight test or production that do not have an auxiliary lubrication system yet meet or exceed the 30 minute criteria – including the S-92 and S-76 Sikorsky helicopters.

## Recommendation:

The civil rotorcraft market has pursued gearbox improvements to address safety of operation (*i.e.*, designed to fly to the nearest safe landing area.) Controlling commercial gearboxes under the USML greatly complicates the commercial sale, operation, and servicing of these aircraft. The proposed regulatory revisions would tailor USML control criteria to those gearboxes that are qualified to published U.S. military gearbox standards – effectively ensuring that only rotorcraft gearboxes specially designed for military applications are captured on the USML. We recommend that the note on military qualification be amended in (h)(2) to differentiate the civil vs. military capabilities. This addition will remove any current or future conflicts as civil and military aviation specifications continue to evolve.

"(2) Rotorcraft gearboxes with internal pitch line velocities exceeding 20,000 feet per minute and *qualified to military requirements* (i.e. MIL-HDBK-516-C or equivalent) 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 (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 and is qualified to military requirements only. Loss of lubrication certified to FAA/EASA (or other civil aviation authority) is not subject to this control."

## III. USML Category VIII(h)(10): Radar Altimeters

Category VIII(h)(10) controls "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 unmanned aerial vehicle, drone, or missile that has a "range" equal to or greater than 300 km)." Export control parameters applicable to radar altimeters are contained in both Category VIII(h)(10) and Category XI(a)(3). Category XI(a)(3) includes the following note: "Note to paragraph (a)(3): This paragraph does not control: . . .(c) radio altimeter equipment conforming to FAA TSO C87."

Lockheed Martin requests a similar note be added to Category VIII(h)(10) for consistency of application with regard to radar altimeters that conform to and are certified to FAA TSO C87. This approach is already used in other revised categories of the USML. For example, in a note to Category XI(a)(3), the USML excludes control of various specific radar/radio systems, including

radar altimeter equipment conforming to FAA TSO-C87. The Department has made similar corrections in the past, including language added to Category VIII(h)(20). Referencing commercial standards for radar/radio altimeter equipment, as contained in FAA TSO-C87, would ensure that paragraph (h)(10) does not inadvertently capture commercial civil-certified avionics equipment.

<u>Recommendation</u>: Lockheed Martin recommends adding a note to (h)(10) to match analogous entries in USML Category XI(a)(3):

"NOTE TO PARAGRAPH (h)(10): This paragraph does not control radar/radio altimeter equipment conforming to FAA TSO C87."

# IV. USML Category VIII(h)(18): Addition of Specially-Designed Parts and Components

The proposed rule adds controls on "specially designed parts and components" for "drive systems and flight control systems specially designed to function after impact of a 7.62mm or larger projectile" in Category VIII(h)(18). Currently, these items are controlled under ECCN 9A610.x of the Commerce Control List (CCL). The proposed rule provides no justification for the additional controls, other than to note that "Paragraph (h)(18) is modified to control specially designed parts and components of the subject systems."

Prior to the ECR effort to restructure the USML, parts and components of drive and flight control systems were controlled in Category VIII(h). Several foreign suppliers produced these parts and components for Sikorsky, now a Lockheed Martin company, pursuant to ITAR agreements. When these items transitioned to the CCL in October 2013, these ITAR agreements were no longer required, and Sikorsky either obtained BIS licenses for the export of technology (as well as the export of the items themselves) or modified existing ITAR agreements. We estimate that approximately 60-70 percent of the Sikorsky H-60 Drive/Flight Control System is currently controlled on the 600-series. Under the proposed rule, approximately 20-25 percent of those 600-series items would revert back to ITAR control under Category VIII(h)(18).

Accordingly, the proposed rule will require Sikorsky to implement a second comprehensive analysis of all military drive & flight control systems to determine whether attendant parts and components will move from the 600 series back to the ITAR, modify numerous "mixed" ITAR agreements, and in some cases, replace current BIS licenses with ITAR authorizations. This spans all of Sikorsky's military platforms and will require a significant amount of planning and man hours, and engagement of engineers/experts outside of the compliance organization.

In addition, we expect that some U.S. exporters to have shipped items NLR to Canada and potentially under license exceptions. Under the proposed rule, exporters would be required to conduct outreach to customers (and potentially customers to their end users) and notify them that the exported items are now subject to the ITAR. This will be a difficult, time-consuming, and costly task.

The USML/CCL "refresh process" provides the opportunity to ensure that the controls 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," as stated in the proposed rule. It also enables the Department to correct inadvertent omissions in previous rules and harmonize controls. However, multiple jurisdictional

reversions, such as that occurring in Category VIII(h)(18), could result in less clarity and have a significant impact on U.S. industry operations and compliance efforts.

The return of specially designed parts and components for drive systems and flight control systems to the ITAR is unnecessary. The systems will remain controlled on the ITAR, and the control of the parts and components in the "600 Series" ensures sufficient USG licensing oversight.

If the USG proceeds with the proposed regulatory change, Lockheed Martin recommends a 24 month transition period, which has been used for similar ECR rule changes, to prevent any disruption in international business activities. In addition, the Departments should consider a grandfathering provision for all affected items exported prior to the effective date of the final rule. This would allow U.S. companies to avoid the need to unwind completed transactions with foreign customers located in allied and partner nations.

<u>Recommendation</u>: Delete the addition of new controls on specially designed parts and components.

(h)(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;

## V. USML Category VIII(30)

The proposed rule removes the reference to "equipment" in Category VIII(h)(1) and creates a new paragraph (h)(30) to "capture the limited range of equipment relevant to a defense article described in paragraph (h)(1) and meriting ITAR control." Lockheed Martin recognizes that there are certain types of production and test equipment for the aircraft identified in (h)(1) that should be controlled on the USML because they are of a nature that inherently reveals technical data directly related to the controlled defense article. However, the proposed control structure in (h)(30) poses several challenges.

Due to the changes to Category VIII implemented in 2013, Lockheed Martin undertook a review of approximately 50,000 parts and equipment that fell under the definition of equipment specially designed for use on aircraft identified in (h)(1) (e.g., F-35 and F-22.) From an implementation perspective, the proposed change would place additional burden on limited resources to reclassify these items to (h)(30) or ECCN 9B610 and amend approximately 200+ TAAs/MLAs to include updated language (including paragraph VIII.x in order to allow export of 9B610 hardware.)

Moreover, the proposed Category VIII(h)(30) includes several specific controls on items that do not warrant control on the USML, create confusion, and/or are redundant. For example, paragraph (h)(30)(iii) controls autonomic logistics information systems (ALIS) for platforms in (h)(1). The majority of hardware that makes up ALIS for these aircraft is Commerce-controlled computers, server racks, and networking components. The software associated with ALIS, however, is technical data already controlled under Category VIII(i). The only USML controlled hardware is encryption/decryption components that are called out under Category XIII. Accordingly, controlling the ALIS as a complete system in (h)(30) is both overbroad and redundant.

In addition, the note to (h)(30) creates confusion regarding the definition of "airframe," which is otherwise not defined in the ITAR/USML. An "airframe" is more than just a shape, elsewhere defined as "a mechanical structure typically considered to include fuselage, wings and undercarriage and exclude the propulsion system." The proposed language includes other vague terms, including "readily removable items." On the one hand, "pylons for external stores," which we would consider to be a readily removable item, is called out as part of the "airframe." On the other hand, we would consider landing gear, which are expressly not included in the definition, to be part of the assembled structure that influences the strength of the "airframe."

Recommendation: As a general matter, Lockheed Martin would view the jigs, locating fixtures, and other items identified in paragraph (h)(30)(iv) to be controlled under paragraph (h)(1) as parts and components of those controlled aircraft. Accordingly, we recommend deleting paragraph (h)(30) and the associated note for the reasons discussed above.

## CONCLUSION

Thank you for the opportunity to provide comments in response to the notice of inquiry regarding USML Categories VIII and XIX. Lockheed Martin remains committed to supporting the ongoing effort to reform and improve the U.S. export control system. We are confident that the changes recommended above will have a positive impact on our ability to support U.S. national security and foreign policy priorities.

If you have any questions related to these comments or would like additional information related to the issues discussed above, please contact Mark Webber, Director, International Trade Policy, Government & Regulatory Affairs at 703-413-5951 or <a href="mark.J.Webber@Imco.com">Mark.J.Webber@Imco.com</a>.

For Lockheed Martin Corporation,

Gerard Muson

Gerald Musarra

Vice President, Government & Regulatory Affairs

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Bureau of Industry and Security
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Northrop Grumman Corporation Corporate Office

**Global Trade Management** 2980 Fairview Park Drive Falls Church, VA 22042

March 25, 2016

Regulatory Policy Division Bureau of Industry and Security Room 2099B U.S. Department of Commerce Washington, D.C. 20230

SUBJECT: RIN 0694–AG76 - Clarifications and Revisions to Military Aircraft, Gas Turbine Engines and Related Items License Requirements

Dear Mr. DeFee:

Northrop Grumman Corporation (NGC) wishes to thank the Department of Commerce for the opportunity to submit comments in review of the above proposed rules as we support the Department's implementation of Export Control Reform. In response, NGC provides the following recommendations:

### 9A610.f - "Ground Equipment."

In effort to reconcile entries with duplicate controls, we recommend removing and reserving 9A610.f and deferring control of these articles to the more appropriate category 9B610. The items considered "ground equipment" already meet the threshold of 9B610 which controls "test, inspection, and production "equipment" "specially designed" for the "production," "development," operation, installation, maintenance, repair, overhaul, or refurbishing of commodities enumerated or otherwise described in ECCN 9A610 (except 9A610.y) or USML Category VIII, etc.

## 9A610.x.

We recommend changing the language in this proposed entry from "...not elsewhere specified on the USML, in 9A610.y, or 3A611.y" to read "...not elsewhere specified on the USML or in another 600 series entry." This minor administrative update brings this entry in line with Supplement No. 4 to Part 774 – Commerce Control List Order of Review.

### 9A610.y.8.and 9A619.y.4.

We recommend deleting "fluid" from these entries and not limiting ".y" controls to "fluid" filters and assemblies as "pneumatic" filters and assemblies are of same or lesser technology and should enjoy "AT" only controls as well.

### 9A610.y.15.

We recommend deleting the descriptive language of "cockpit or cabin" and simply leave the entry as "aircraft mirrors" since the technology for mirrors does not change. For example, mirrors in an air refueling station are not necessarily in a cabin, but provide no technological advantage over other mirrors and therefore should not warrant ".x" over ".y" controls.

### 9A610.y.23 & 31 and 9A619.y.7.

We recommend reserving these entries as they are duplicates to entries in 3A611.y.

### 9A620.y.32 and 9A619.y.8.

We recommend deleting "fluid" from this entry as pneumatic manifolds are of equal or lesser technology and should also be controlled under ".y" controls.

## 9A619.y.6 - "Shims."

We recommend deleting 9A619.y.6 (and similar ECCNs) as "shims" by definition are "spacers" and meet the release criteria in §772.1 Specially designed, paragraph (b)(2). Should DOC disagree that shim are not spacers then we recommend "shim" be explicitly added to the (b)(2) release criteria.

Should clarification or subsequent technical discussions be necessary, please contact either Steve Headley at <a href="mailto:james.headley@ngc.com">james.headley@ngc.com</a>, (703-280-4806), or myself at <a href="mailto:thomas.p.donovan@ngc.com">thomas.p.donovan@ngc.com</a>, (703-280-4045).

Sincerely,

Thomas P. Donovan Director, Export Management Global Trade Management

Perry A Smith

Director Export and Import Compliance Office of the General Counsel

# Rockwell

400 Collins Road NE Cedar Rapids, IA 52498 319.295.5396 Fax 319.295.8909 perry.smith@rockwellcollins.com

March 21, 2016

Mr. Eric L. Hirschhorn Under Secretary for Industry and Security US Department of Commerce

Re: Comments Related to Revision of CCL Parts 770 and 774

Dear Mr. Hirschhorn:

Rockwell Collins appreciates the opportunity to provide comments on the proposed Amendment to the Bureau of Industry and Security Regulations: Revision of 15 CFR Parts 770 and 774 (RIN 0694-AG76), published in the Federal Register on February 9, 2016.

Rockwell Collins, Inc. is an industry recognized leader in the design, production and support of communications and aviation electronics for commercial and military customers worldwide. While our products and systems are primarily focused on aviation applications, our Government Systems business also offers products and systems for ground and shipboard applications. The integrated system solutions and products we provide to our served markets are oriented around a set of core competencies: communications, navigation, automated flight control, displays/surveillance, simulation and training, integrated electronics and information management systems. We also provide a wide range of services and support to our customers through a worldwide network of service centers, including equipment repair and overhaul, service parts, field service engineering, training, technical information services and aftermarket used equipment sales. We are headquartered at 400 Collins RD NE, Cedar Rapids, Iowa 52498 and employ approximately 20,000 individuals worldwide.

Regarding the proposed changes to the Bureau of Industry and Security Regulations: Revision of 15 CFR Parts 770 and 774 (RIN 0694-AG76): Clarifications and Revisions to Military Aircraft, Gas Turbine Engines and Related Items License Requirements.

Rockwell Collins submits the following Comments:

### § 770.2 Item interpretations.

(n) Interpretation 14: 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.

### Comments:

As a conforming change, the individual notes would be removed from ECCNs 0A604, 0A614, 3A611, 9A604 and 9A619. It is suggested that although they may be deemed as redundant they are of value during the classification process.

Mr. Eric L. Hirschhorn March 21, 2016

RE: Comments Related to Revision of CCL Parts 770 and 774

Page 2 of 2

9A610 Military aircraft and related commodities, other than those enumerated in 9A991.a

(1) This proposed rule would revise the text of the "Controls" table so that the National Security and Regional Stability reasons for control would not apply to L100 aircraft manufactured prior to 2013 or to specially designed parts and components for L100 aircraft controlled in paragraph .x. This change is to make the reasons for control that apply to pre 2013 L100 aircraft and parts consistent with the reasons for control that applied to them historically under ECCN 9A991.

#### Comments:

These parts should be controlled in 9A991.d. to eliminate confusion when all reasons of control are the same. The proposed change leaves confusion on when 9A610.x part requires NS and RS control.

(2) Paragraph y.10 fluid hoses, straight and unbent lines, fittings, couplings, clamps and brackets. Paragraph .y.15 cockpit or cabin mirrors

#### Comments:

These parts, Identification plates, fluid hoses, straight and unbent lines, fittings, couplings, clamps brackets and cockpit or cabin mirrors do not contain any military functionality or performance and would be released using specially design definition 772(b)(3). Therefore, the parts should be removed from the .y control.

(3) Paragraphs .y.31 and .y.32 identification plates and fluid manifolds, respectively.

#### Comments:

Identification plates do not contain any military functionality or performance and would be released using specially design definition 772(b)(3). Therefore, the parts should be removed from the .y control.

Rockwell Collins is fully committed to supporting the administration's efforts and we greatly appreciate the opportunity to provide comments to the proposed changes.

If you have any questions or would like to discuss the comments provided above, feel free to contact me directly at (319)-295-5396 or via email at Perry.Smith@rockwellcollins.com

Sincerely,

Perry A. Smith

Director, Export and Import Compliance

Office of General Counsel

Rockwell Collins



### **ROLLS-ROYCE NORTH AMERICA**

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Tel: 317-294-3556 CPD: EX16-0159

Regulatory Policy Division
Bureau of Industry and Security
U.S. Department of Commerce
Room 2099B, 14<sup>th</sup> Street and Pennsylvania Ave. NW
Washington DC 20230

24 March 2016

Submittal via email to: publiccommments@bis.doc.gov

**Reference:** RIN: 0694-AG76 [Docket No. BIS-2016-0009]

Request for Comments

Subject: Clarifications and Revisions to Military Aircraft, Gas Turbine Engines and Related Items

License Requirements

Dear Mr. Wolf,

On behalf of Rolls-Royce North America Holdings Inc. (Rolls-Royce), I am pleased to respond to the March 2, 2015 Federal Register Notice requesting comments on the proposed *ECR revisions for Controls on Military Aircraft and Military Gas Turbine Engines on the CCL*. Rolls-Royce commends the Administration's continued efforts on export control reform and agrees with the clarification to the positive list. However, Rolls-Royce believes that many of the additions are repealing the basic concepts of Export Control Reform (ECR). Rolls-Royce offers the following items up for discussion to enhance understanding and functionality of the regulations.

### General

Rolls-Royce would like to take this opportunity to provide feedback on the experience of re-classifying defense articles, software and technical data under the reform. The transition period was very effective and permitted both the process to re-classify items but also to obtain required authorizations to permit export, re-export and retransfer. This was a resource intensive activity to support the reclassification effort as well as reviewing, rewriting and submitting hundreds of authorizations. The proposed language, as a drawback of ECR, would require additional resource and effort to undo the previous work. The reclassification of the defense articles, software and technical data affected under this proposed rule, would benefit from another transition period, which would not only permit US applicants to submit the appropriate ITAR export authorizations but also for foreign companies to request authorizations from the US applicants as well. Further, US officials often note that nothing in the ECR should make it more difficult to export. Many of these proposed changes, and application of previous changes, in fact make exporting more difficult, more confusing and less certain. It might help government and industry if the regulations actually restated what government officials often say: post-ECR regulations should be drafted, interpreted and applied in such a way that they are always less burdensome than their pre-ECR counterparts.

### Category 9

- 1. Rolls-Royce agrees and appreciates the clarification of the L-100 aircraft and the 501-D22 engine. This has been an ongoing discussion for many years. The clarification will help to drive consistency.
- 2. Rolls-Royce appreciates the drive for consistent definitions between the EAR and the ITAR. The note regarding unfinished 600 series commodities is consistent with the definition in §120.6 Defense Article. There are two clarifications necessary. The first is if this clause will be utilized for all EAR controlled items. The second is the term "clearly identifiable". This is undefined and is open for interpretation.
- 3. Marine gas turbine engines are still not captured in Category 9. Rolls-Royce proposes the inclusion of marine gas turbine engines in Category 9 under 9A991.c by removing the word "Aero" or creating a new

ECCN in Category 9. The issue regards marine derivatives or aero engines. The ITAR Category XIX now captures all gas turbine engines and Category 9 does not. This would close the gap and continue to build consistency between the ITAR and EAR.

### **Additional Licensing and Regulatory Points for Consideration**

 Rolls-Royce requests BIS consider clarifying or eliminating the requirement to obtain a Letter of Assurance (LoA) per Part 748, Supplement 2, (o)(3)(i). The "upon request" language combined with "if you are unable to obtain this letter of assurance from your consignee, you must state in your license application why the assurances could not be obtained" is creating ambiguity regarding the requirement.

Rolls-Royce believes that the intent of Part 748, Supplement 2, (o)(3)(i) can be accomplished utilizing the banner language on all licenses that requires the ultimate consignees and end-users to be informed of the license scope and conditions. Based on this requirement, Rolls-Royce believes the requirement could be eliminated but the purpose of the LoA is still carried out.

2. Rolls-Royce request BIS consider changes to the banner language issued on all licenses. Rolls-Royce believes the burden of informing should rest with the party who will conduct the re-export or transfer. Rolls-Royce proposes that BIS adopt a similar flow-down approach to informing as has been incorporated into DDTC authorizations. Rolls-Royce suggests the informing portion of the banner language change

From: "The applicant is responsible for informing the other parties identified on the license, such as ultimate consignees and end-users, of the license's scope and of the specific conditions applicable to them."

To: "Prior to export, re-export or transfer, the receiving party must be informed of the scope and other specific conditions applicable to them."

In addition, 750.7(d) would require revision to align with the new banner. It currently states: "It is the licensee's responsibility to communicate in writing the specific license conditions to the parties to whom those conditions apply." And could be revised to: "The person completing the export, reexport, or transfer is responsible for communicating in writing the specific license conditions to the parties to whom those conditions apply."

This change ensures the requirement to inform remains in place, while leaving it to the parties to the license to determine the appropriate way to distribute the information based on the business arrangement. As the applicant, if Rolls-Royce opts to obligate the ultimate consignee(s) to complete informing to certain parties, this requirement would be included in its communication to the ultimate consignee(s).

Rolls-Royce proposes the requirement to inform parties to the authorization can be fulfilled through a written communication that includes the license scope and specific conditions applicable to the party. The communication can be made by electronic transfer (e.g. email, upload to a shared information system) or by hard-copy mail. The applicant, or party completing the informing, should keep a record demonstrating the communication occurred as part of the license file; however, written acknowledgement is not required.

If you require additional information or would like to discuss in greater detail, please contact me at 703.621.2751 or via email at <a href="mailto:Jeff.Merrell@Rolls-Royce.com">Jeff.Merrell@Rolls-Royce.com</a> or Colin Donahue at 317.230.6854 or via e-mail to Colin.P.Donahue@Rolls-Royce.com.

Sincerely,

William J. Merrell, Vice President Strategic Export Control Americas Rolls-Royce North America

William J Mend



Bryce V. Bittner
Director of Global Trade Compliance
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March 25, 2016

Via Email – DDTCPublicComments@state.gov

Mr. C. Edward Peartree
Director, Office of Defense Trade Controls Policy
Directorate of Defense Trade Controls
U.S. Department of State
Washington, D.C. 20522-0112
ATTN: ITAR Amendment – USML Categories VIII and XIX

Subject: Comments on the Proposed Revisions to USML Category VIII

Dear Mr. Peartree,

On February 9, 2016, the Department of State, Directorate of Defense Trade Controls ("DDTC") and the Department of Commerce, Bureau of Industry & Security ("BIS") issued Federal Register notices proposing, respectively, to amend the International Traffic in Arms Regulations ("ITAR") to revise U.S. Munitions List ("USML") Categories VIII and XIX, and to amend the Export Administration Regulations ("EAR") to revise Commerce Control List ("CCL") Category 9. DDTC and BIS set the deadline for comments on the Proposed Rules as March 25, 2016.<sup>1</sup>

In response to the Propose Rules, Textron Inc. ("Textron") respectfully submits the following comments. Thank you for your consideration. We hope that our feedback will help DDTC and BIS continue to improve the U.S. export control system.

## I. DDTC and BIS Should Finalize Many of the Changes in the Proposed Rule

First, Textron agrees with the majority of the changes that DDTC proposes, and we respectfully request that the agency issue a Final Rule to adopt the following changes as proposed:

- The addition to the chapeau of VIII(a) to clarify that the subparagraphs of section (a) apply to "manned, unmanned, remotely piloted, or optionally piloted" aircraft;
- The deletion of VIII(a)(6) in its entirety;
- The deletion of "military" from VIII(a)(7);
- The deletion of VIII(a)(11) in its entirety, along with Notes 1 and 2 to VIII(a)(11);

<sup>&</sup>lt;sup>1</sup> Clarifications and Revisions to Military Aircraft, Gas Turbine Engines and Related Items License Requirements, 81 Fed. Reg. 6791 (BIS); Amendment to the International Traffic in Arms Regulations: U.S. Munitions List Categories VIII and XIX, 81 Fed. Reg. 6797 (DDTC) (Feb. 9, 2016).

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- The deletion of VIII(a)(13) in its entirety;
- The deletion of "Face gear gearboxes, split-torque gearboxes, variable speed gearboxes, synchronization shafts, interconnecting drive shafts, or" from VIII(h)(2) and the addition of "without an emergency or auxiliary lubrication system" to VIII(h)(2); and
- The deletion of "or controlled in ECCN 9A610" from VIII(h)(17).

Textron believes that these revisions significantly clarify the USML and remove controls that either no longer reflect the current state of industry or are adequately and more efficiently covered by other sections of the USML.

# II. The USML Would Benefit from Additional Revisions to Category VIII

Textron respectfully submits that in addition to the changes in the Proposed Rule, DDTC could take further steps towards achieving the goals of Export Control Reform and implement a more positive export control list by adopting the recommendations in the following sections.

A. <u>To Avoid Reintroducing the Burden on Industry that DDTC Sought to Remove by</u> Eliminating VIII(a)(11), DDTC Should Clarify the Scope of VIII(a)(7) and VIII(a)(8)

First, Textron commends DDTC for removing USML Category VIII(a)(11). In the Proposed Rule, DDTC responded to comments received on May 1, 2015 regarding VIII(a)(11), as follows:

"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 on 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 to merit ITAR control, the Department accepted these recommendations and deleted the paragraph and the notes to the paragraph."

Textron agrees with the stated rationale for deleting USML Category VIII(a)(11), and we participated extensively in the comments submitted by the Aerospace Industries Association ("AIA") to DDTC on this issue on May 1, 2015; however, Textron would argue that the proposed revisions to USML Categories VIII(a)(7) and VIII(a)(8), without further refinement, significantly detract from the clarity and efficiencies gained by the removal of VIII(a)(11).

As stated above, Textron agrees with the removal of "military" from the beginning of USML Category VIII(a)(7), but the fact that this subparagraph does not define what aircraft are considered to be "Intelligence, surveillance, and reconnaissance" ("ISR") aircraft reintroduces the burden on industry that DDTC sought to remove. A similar issue is caused by the fact that neither "Electronic warfare"

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<sup>&</sup>lt;sup>2</sup> 81 Fed. Reg 6797, 6798.

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nor "command, control, and communication" aircraft are defined in USML Category VIII(a)(8). Unless DDTC clarifies these issues, many of the aircraft formerly classified under VIII(a)(11) will simply move to VIII(a)(7) or VIII(a)(8) thereby negating the benefits that DDTC stated that it wished to achieve.

As DDTC is aware, like others in industry, Textron's businesses manufacture many aircraft and helicopters that fall under ECCN 9A991 of the CCL – such as the Beechcraft King Air, Cessna Grand Caravan and Citation, and Bell 412 and 429 – and our customers often request the installation of defense articles that provide search and rescue, police surveillance, and other audio/visual capabilities, such as EO/IR cameras or military radios, or they install these items after purchase without our knowledge or involvement. At present, Textron generally classifies these aircraft under USML Category VIII(a)(11) since the "mission systems" are the only features that cause the aircraft to be controlled; but if the Proposed Rule is finalized as currently written, one could argue that these aircraft will simply move to USML Category VIII(a)(7) as "ISR" aircraft or USML Category VIII(a)(8) as "command, control, and communications" ("CCC") aircraft. This seems to be an unintended consequence and contrary to DDTC's intent.

General Aviation aircraft are not inherently designed to satisfy ISR or CCC mission requirements; for instance, there is a stark difference between the capabilities of aircraft categorized as ISR in the U.S. Air Force inventory – such as the U-2, RC-135, E-8, and U-28 aircraft – and a Cessna Grand Caravan or Beechcraft King Air with a USML-controlled EO/IR camera. Accordingly, we recommend that DDTC clarify the technical parameters or capabilities that merit ITAR control as ISR or CCC aircraft. Since the defense articles in question are already subject to ITAR control and there is no other feature that causes the aircraft at issue to merit ITAR control, one way to accomplish this goal would be to add the following note to USML Category VIII(a):

"Aircraft issued a standard category airworthiness certificate and not bearing an original U.S. military designation of A, B, E, F, K, M, P, R, S, or U, or a foreign country equivalent thereof, are not controlled under Category VIII(a)(7) or VIII(a)(8). Any defense articles installed on such aircraft remain subject to the controls of the ITAR in the USML Category(ies) into which the defense articles fall."

Alternatively, if DDTC elects to finalize the revisions to VIII(a)(7) and VIII(a)(8) as currently written, Textron respectfully requests DDTC to explain how registrants should address the fact that USML Category VIII(a)(11) is not controlled as Significant Military Equipment ("SME"), whereby USML Categories VIII(a)(7) and VIII(a)(8) are SME. For example, would industry need to obtain DSP-83 Non-Transfer and Use Certificates retroactively? What would happen if industry had relied on a license exemption permitted for non-SME defense articles but not for SME defense articles, such as 22 C.F.R. § 123.16(b)(5)? These issues cause significant confusion for industry.

Textron believes that DDTC can give meaning to its proposed revisions to USML Category VIII(a)(11) by clarifying that items previously controlled under VIII(a)(11) will not simply move to USML Categories VIII(a)(7) or VIII(a)(8).

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## B. DDTC Should Remove USML Category VIII(a)(5) in Its Entirety

In the Proposed Rule, DDTC deleted USML Categories VIII(a)(6) and VIII(a)(13) and added language to the chapeau of VIII(a) to clarify that aircraft are controlled "whether manned, unmanned, remotely piloted, or optionally piloted." Textron believes that these proposed changes will streamline and clarify the USML. Nevertheless, for similar reasons stated above with respect to VIII(a)(7), VIII(a)(8), and VIII(a)(11), Textron recommends that DDTC also remove subparagraph VIII(a)(5).

Unmanned Aerial Vehicles (UAVs) that do not contain defense articles are already adequately controlled under the CCL, such as by ECCN 9A012. If a party were to give a UAV capabilities described in any other subparagraph of USML Categories VIII(a), it would fall under that subparagraph by operation of the chapeau to VIII(a). If the UAV did not have such capabilities, but otherwise contained defense articles, Textron respectfully submits that the UAV airframe should fall on the CCL and the defense articles should be controlled by the USML Categories into which the defense articles fall, *e.g.*, USML Categories XI or XII.

It is not clear what DDTC gains by retaining VIII(a)(5) while deleting VIII(a)(6) and VIII(a)(13). Any provisioning or other items incorporated into the UAV to "specially design" it for a defense article should be controlled because they relate to the defense article, not to the otherwise CCL-controlled UAV.

# C. The U.S. Government Should Revisit the MTCR Definition of "Range" at the Next Possible Opportunity

Note 2 to Paragraph (a) states, in part, that "Range" should be "determined independently of any external factors such as operational restrictions, limitations imposed by telemetry, data links, or other external constraints." Textron understand that this requirement stems from the Missile Technology Control Regime ("MTCR"), and DDTC is unable to modify this language unilaterally, but we would recommend that the U.S. government seek to revisit this definition at the next possible opportunity.

Textron understands the intent behind the definition, and we share the U.S. government's desire to prevent UAVs and other aircraft from being repurposed and used for nefarious ends. However, our potential customers have expressed the desire to purchase UAVs that are capable of remaining on station for extended periods of time, which requires a certain amount of fuel. As DDTC is aware, an aircraft that can fly in circles for hours over an oil pipeline or fishing territory could easily trip the MTCR range thresholds if not for operational restrictions and limitations imposed by telemetry and data links.

Textron respectfully requests that the U.S. government take this into consideration and work with industry to develop appropriate technological safeguards that would allow industry to sell products that meet our customers' requirements for endurance and time on station while preventing the aircraft from being turned into a missile or weapon of mass destruction. For example, such safeguards could take

Mr. C. Edward Peartree Office of Defense Trade Controls Policy March 25, 2016

the form of an automatic return to base/automatic land feature if the UAV exceeded a defined operational area or lost its connection to the ground control station.

D. <u>DDTC and BIS Should Clarify What Specific Factors Make Certain UAV Launching, Recover, and Landing Systems ITAR-Controlled, and When such Systems Fall under the CCL</u>

Although certain UAVs take off and land like manned aircraft, other variants use launching, recovery, and landing systems, especially in environments where a traditional runway is not an option.<sup>3</sup> However, these systems are used for aircraft that have valid dual-use applications, and they are not uniquely military.

The USML and CCL currently contain multiple overlapping entries into which the same UAV launching, recover, and landing system could fall, and it is not clear why some are ITAR-controlled and others are EAR-controlled. Specifically, proposed USML Category VIII((h)(5) would control "On-aircraft arresting gear (e.g., tail hooks and drag chutes) and specially designed parts and components therefor," but proposed ECCN 9A610.e would control "Mobile aircraft arresting and engagement systems for aircraft controlled by either USML Category VIII(a) or ECCN 9A610.a." Textron does not believe that such systems for small aircraft like UAVs warrant control, and we suggest that DDTC impose an aircraft weight limit to clarify this issue.

Similarly, ECCNs 9A610.u and 9A115 overlap significantly with respect to launching UAVs, and ECCN 9A115 simply refers industry back to the USML. If BIS adopted its Proposed Rule, the two ECCNs would read, in pertinent part, as follows:

- **Proposed ECCN 9A610.u** "Apparatus and devices 'specially designed' for the . . . non-ship-based launching of UAVs or drones controlled by either USML paragraph VIII(a) or ECCN 9A610.a, and capable of a range equal to or greater than 300 km. (Such apparatus and devices for aircraft capable of a range less than 300km are controlled in 9A610.x).
- ECCN 9A115 "Apparatus, devices and vehicles, designed or modified for the transport, handling, control, activation and launching of . . . unmanned aerial vehicles capable of achieving a "range" equal to or greater than 300 km. (These items are 'subject to the ITAR.' See 22 CFR parts 120 through 130.)."

In other words, a launching apparatus or device for a UAV controlled by VIII(a) or ECCN 9A610.a that is capable of a range equal to or greater than 300 km could never fall under ECCN 9A610.u, although this entry clearly covers such items, because ECCN 9A115 would send the apparatus/device back to the ITAR, although it does not specify where on the USML the items would fall.

Textron respectfully requests that DDTC and BIS clarify that all non-ship based UAV launching, recovery, and landing systems fall under ECCN 9A610.u (or another CCL category) or clarify when to use ECCN 9A610.u and when to use the various USML Categories identified above.

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<sup>&</sup>lt;sup>3</sup> <u>See</u>, <u>e.g.</u>, Aerosonde Mark 4.7 - <u>http://www.aerosonde.com/pdfs/aerosonde-mark-47.pdf</u>.

Mr. C. Edward Peartree Office of Defense Trade Controls Policy March 25, 2016

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We appreciate DDTC's and BIS's consideration of these issues, and we look forward to discussing these topics with you further.

Thank you

United Technologies Corporation 1101 Pennsylvania Avenue, N.W. 10<sup>th</sup> Floor Washington, D.C. 20004-2545



#### **Submitted Via Email**

March 25, 2016

Hillary Hess Director, Regulatory Policy Division Bureau of Industry and Security U.S. Department of Commerce

Attn: RIN 0694-AG76

Re: Proposed Rule: Clarifications and Revisions to Military Aircraft, Gas Turbine

Engines and Related Items License Requirements (81 Fed. Reg. 6791, Feb. 9, 2016)

Dear Ms. Hess:

United Technologies Corporation ("UTC") appreciates the opportunity to submit these comments with respect to the Bureau of Industry and Security ("BIS") proposed revisions of Commodity Control List ("CCL") controls on military aircraft, gas turbine engines and related items. UTC supports the process of regular review and revision of CCL and USML categories to clarify control language, address advances in technology, and ensure alignment with the national security and foreign policy objectives of Export Control Reform ("ECR"). As described in more detail below and in separate comments to the Directorate of Defense Trade Controls ("DDTC") in response to proposed revisions to U.S. Munitions List ("USML") Categories VIII and XIX, UTC believes the proposed changes to CCL and USML controls on military aircraft and gas turbine engines, in part, run counter to the objectives and intent of ECR and that such changes would have a significant impact on industry. UTC recommends reconsideration and/or clarification of a number of proposed revisions to CCL and USML controls.

#### I. General EAR Comments

#### A. EAR Part 772

In the corresponding proposed rule published by DDTC, the definition of "range" in Note 2 of USML Category VIII(a) was revised to include "but with no fuel reserve." UTC recommends that this text be added to Technical Note (d) pertaining to the definition of range in Part 772 of the Export Administration Regulations ("EAR"). If accepted, Technical Note (d) would read:

"For UAV 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 ICAO standard atmosphere with zero wind, with no fuel reserve."

#### B. EAR Parts 770 and 772

The proposed rule replaces individual "600-series" Export Control Classification Number ("ECCN") notes regarding castings, forgings and other unfinished products, with Item Interpretation No. 14 in EAR §770.2(n). UTC supports this change as it centralizes the definition.

UTC has found the four specific criteria (mechanical properties, material composition, geometry or function) used in the "clearly identifiable" standard of the current notes and proposed Interpretation No. 14 to be very useful in determining where in the production process an item transitions from a material to a part or component. UTC notes that non-"600-series" ECCNs currently use the definition of "material" found in Part 772 of the EAR, which although uses the term "(not) clearly identifiable," does not identify any "clearly identifiable" criteria.

UTC believes that the application of the four criteria throughout the EAR would be beneficial to industry; therefore, UTC recommends the following:

- Revise Interpretation 14 to cover all unfinished commodities by removing the "600-series" limiter.
- Revise the definition of "material" to incorporate the four criteria and to add a reference to Interpretation No. 14.

# II. Comments Common to the 9x610 and 9x619 ECCNs

#### A. Modification of Related Controls Paragraphs Consistent with USML Revisions

UTC notes that there is a lack in continuity and alignment between the text of the proposed changes to the CCL and that of the USML, thus complicating the Order of Review analysis. In particular, the Related Controls paragraph in ECCNs 9B610 and 9B619 have not been updated to include the new controls under USML subparagraphs VIII(h)(27) – (30) and XIX (f)(8) to (16). UTC also notes that the Related Controls paragraph in ECCNs 9B610 and 9B619 have not been revised to remove the term "equipment" in relation to USML subparagraphs VIII(h)(1) and XIX(f)(1).

To account for the proposed changes to USML subparagraph VIII(h)(1), UTC recommends that the Related Controls paragraph for ECCN 9B610 be revised to read:

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 XIX(h)(2)-(30)

controls other engine "parts," "components," "accessories," "attachments," and "systems."

To account for the proposed changes to USML subparagraph XIX(f)(1), UTC recommends that the Related Controls paragraph for ECCN 9B619 be revised to read:

Related Controls: USML Category XIX(f)(1) controls "parts," "components," "accessories," and "attachments" "specially designed" for the engines described in Category XIX(f)(1), but does not control the commodities enumerated or otherwise described in ECCN 9B619. USML Category XIX(f)(2)-(16) controls other engine "parts," "components," "accessories," "attachments," and "systems."

#### B. Clarification of Controls in the 9A610.y and 9A619.y ECCNs

UTC strongly supports the addition of the "600-series" ".y" paragraph for items of lesser significance. To better align the aircraft and engine ".y" subparagraphs, UTC recommends the following revisions to existing and proposed language.

#### i. <u>9A610.y.10</u>

**Proposed Rule Wording**: Fluid hoses, straight and unbent lines, fittings, couplings, clamps and brackets.

**Recommended Wording**: Fluid lines, tubes, and hoses, and fittings, couplings and mounting brackets thereof.

Rationale: As currently written, ECCN 9A610.y.10 could be interpreted to include any coupling (e.g., driveshaft coupling) or any bracket that is enumerated in the ".y" paragraph. The proposed revision would clarify that hoses and lines are for fluid and that any couplings, fitting or brackets are specific to those lines or hoses. The current ".y" entries for engine and aircraft lines are inconsistent. Parts common to the airframe and engine should be treated at the same level of control. See the rationale for ECCN 9A610.y.3.

#### ii. 9A610.y.33

**Current Wording**: None

Recommended Wording: Clamps for hoses, lines, tubes, and wires

Rationale: It is assumed that due to the placement of clamps in the proposed 9A610.y.10 was to limit the clamps to those for fluid lines, not clamps in general. A specific entry for clamps will align it with the recommended 9A619.y.5 changes below. As clamps for wires (e.g., harness clamps) serve the same purpose as for tubes and hoses, it is suggested that the entry be expanded to include wires.

iii. 9A619.y.2

**Wording**: Oil lines and hoses.

**Recommended Wording**: [RESERVED]

**Rationale**: The items captured in ECCN 9A619.y.2. will be captured in the suggested 9A619.y.3; therefore, ECCN 9A619.y.2. is unnecessary.

iv. 9A619.y.3

**Proposed Rule Wording**: Fluid hoses, straight and unbent lines, fittings, couplings, clamps and brackets.

**Recommended Wording**: Fluid lines, tubes, and hoses, and fittings, couplings, and mounting brackets thereof.

Rationale: As currently written, ECCN 9A619.y.3 could be interpreted to include any coupling (e.g., driveshaft coupling) or any bracket that is enumerated in the ".y" paragraph. The proposed revision would clarify that hoses and lines are for fluid and that any couplings, fitting or brackets are specific to those lines or hoses. The current ECCN simply states "lines"; the addition of "straight and unbent" would move bent lines to 9A610.x. It is not clear why bent lines necessitate a re-classification and licensing activity for items that will have been AT-only for approximately three years. It should be noted that in the present regulations, ECCN 9A619.y.2 controls tubes and lines for oil with no "straight and unbent" restriction. Hoses and lines, regardless of being flexible, rigid, straight, or bent should be treated the same, as should parts common to the airframe and engine.

v. <u>9A619.y.5</u>

**Proposed Rule Wording**: Check valves for hydraulic and pneumatic systems.

**Recommended Wording**: Clamps for hoses, lines, tubes, and wires.

**Rationale**: Moving "clamps" from the present ECCN 9A619.y.5 to 9A619.y.3 will require re-classification of a large number of clamps for no technical advantage. As "check valves" are new to ECCN 9A619.y, it is better to move them to a new entry (ECCN 9A619.y.9). This would align aircraft clamps in ECCN 9A610.y.33 with engine clamps in ECCN 9A619.y.5.

vi. 9A619.y.6

**Current Wording**: Shims

**Recommended Wording**: [RESERVED]

Rationale: UTC recommends that BIS remove the control on "shims" in ECCN 9A619.y.6. Instead, UTC recommends that the term "shim" be added to added to subparagraph (b)(2) of "specially designed." Shims are washers or thin strips of material used to align parts, make them fit, or reduce wear. This is the same function as washers, spacers, and bushings, which are already identified in subparagraph (b)(2) of "specially designed" (see EAR, Part 772). Given the equivalency, controlling "shims" in ECCN 9A619.y.6 creates confusion.

vii. <u>9A619.y.9</u>

Current Wording: None

**Recommended Wording**: Check valves for hydraulic and pneumatic systems.

Rationale: See 9A619.y.5.

#### C. USML Reference in 9C610 and 9C619 ECCNs

The proposed rule adds a reference to USML Categories VIII and XIX in ECCNs 9C610 and 9C619, respectively. If adopted, ECCN 9C610 would capture all materials "specially designed" for commodities controlled by USML Category VIII or ECCN 9A610 and not elsewhere specified in the CCL or the USML. Similarly, if adopted, ECCN 9C619 would capture all materials "specially designed" for commodities controlled by USML Category XIX or ECCN 9A619 and not elsewhere specified in the CCL or the USML.

Although UTC agrees with the need to control materials, UTC notes that the capture of materials in ECCNs 9C610 and 9C619, which are catchall classifications, presents significant challenges for industry due to the limited release available to materials in the present definition of "specially designed." Specifically, the only opportunity for release of materials through application of the "specially designed" definition is subparagraph (a)(1). In applying subparagraph (a)(1) conservatively, the burden is on industry to prove that a material was <u>not</u> developed to have properties peculiarly responsible for achieving or exceeding the performance levels, characteristics, or functions in the relevant ECCN or USML paragraph, before determining that a material was not "specially designed" (i.e., industry would need to prove that a material was not "caught").

Under the proposed rule, UTC believes that materials developed several decades earlier and clearly in commercial use, such as Alloy 454, DS 1000 and Yttrium oxide stabilized Zirconium oxide, may now be subject to control in ECCNs 9C610 and 9C619 because UTC cannot easily confirm that they are not "caught" by subparagraph (a)(1) of the "specially designed" definition. In other words, UTC may not be able to definitively prove that these materials were not developed to have properties peculiarly responsible for achieving or exceeding the performance levels, characteristics, or functions in the relevant ECCN or USML paragraph.

<sup>&</sup>lt;sup>1</sup> The subparagraph (a)(2) catch and paragraph (b) release provisions are not applicable as materials are not parts, components, accessories, attachments or software.

UTC does not believe it is the intention of the BIS and the DDTC to control materials commonly found in commercial use; therefore, UTC recommends that BIS and DDTC work with industry to clarify the catch and release of materials under the "specially designed" definition.

As of October 15, 2013, non-structural materials (e.g., coating powders), and as of January 6, 2014 structural materials (e.g., metal alloys for struts, blades, or cases), "specially designed" for a USML aircraft or engine, have not been controlled on the USML, ECCNs 9C610 or 9C619. As of October 15, 2013 and January 6, 2014, these materials, assuming they were not classified elsewhere on the CCL (e.g., ECCN 1C008), were classified as EAR99. If adopted, the proposed rule will have the effect of re-controlling these materials in an ECCN with stricter controls (i.e., National Security and Regional Stability controls).

While the number of materials likely to be recaptured will be small in number, industry will still be required to complete a lengthy reclassification process and obtain necessary licenses. In the short-term, the re-control of materials could have short-term negative consequences, such as a temporary blackout period in which industry will be unable to export, re-export and/or retransfer, for a period of time, while reclassification is completed and licenses are obtained. To avoid the negative consequences associated with re-controlling materials, UTC recommends that BIS develop a transition plan to provide industry with a framework in which to manage the transition of items from the USML to the CCL.

# III. Comments Related to ECCN 9x610 Only

#### A. ECCN 9A610.f – Technical Note

The proposed rule updates ECCN 9A610.f by incorporating the current technical note into the body of the ECCN. With the revision, the word "includes" has been removed. The proposal effectively narrows the control from <u>all</u> ground equipment to <u>only</u> ground equipment for pressure refueling or to facilitate operation in confined areas.

This narrowing of control is appreciated; however, UTC believes an additional revision is necessary. Specifically, UTC believes that the word "other" should be removed from ECCN 9A610.f. The inclusion of the word "other" could imply that only pressure refueling equipment designed to facilitate operations in a confined area is controlled in ECCN 9A610.f. UTC believes that it is BIS's intent to control ground equipment designed to facilitate operations in a confined area, and pressure refueling equipment, regardless of whether it is designed to operate in a confined area. Removing the word "other" will make that intent clear.

If BIS agrees with UTC's understanding, UTC recommends that ECCN 9A619.f be revised to read:

"Pressure refueling equipment, and ground equipment designed to facilitate operations in confined areas, where such equipment is "specially designed" for aircraft controlled by either USML paragraph VIII(a) or ECCN 9A610.a."

# IV. Comments Related to ECCN 9x619 Only

# A. ECCN 9E619 – Related Controls Paragraph - Note 2

The proposed rule removes Note 2 from the Related Controls paragraph of ECCN 9E619. UTC appreciates this change and believes that is will simplify the Order of Review analysis. Further, UTC believes that the change will have no significant impact on licensing requirements, as the technologies of concern in ECCN 9E003 are mirrored in ECCN 9E619.c, which has similar licensing requirements.

# V. Transition Plan

As addressed above, this proposed rule will likely re-control items (e.g., material and parts and components) currently classified as EAR99 under ECCNs 9x610 and 9x619. At a minimum, this will require a reclassification effort and potentially could require BIS license authority. As a result, industry is likely to experience a blackout period in which no recontrolled items can be exported, re-exported and/or retransferred. To avoid a potential blackout period, UTC recommends that BIS consider and develop a transition plan. For reference, UTC has attached the transition plan proposed to DDTC in response to the companion rule issued by the DDTC with regards to revisions to controls on aircraft, gas turbine engines, and related items (Attachment A). While the transition plan proposed to the DDTC is related to the re-control of items on the USML that had previously been controlled on the CCL or as EAR99, UTC believes the general principles addressed in the transition plan are relevant in the context of a re-control entirely within the CCL.

UTC does not believe that a transition period will negatively harm U.S. national security as these re-controlled items will have been exported, re-exported and/or retransferred for roughly three years before the Proposed Rule becomes effective.

If you have any questions regarding UTC's comments, please contact the undersigned at 202-336-7467 or peter.jordan@utc.com, or Ari Novis at 860-557-2353 or ari.novis@pw.utc.com.

Sincerely,

Peter S. Jordan

Executive Director & Associate General Counsel, International Trade Compliance United Technologies Corporation

# Attachment A DDTC Transition Plan

With the first set of ECR final rules issued on April 16, 2013 ("Final Rules"), a large number of aircraft, gas turbine engines, and related items transitioned from USML Category VIII to the newly created "600-series" Export Control Classification Numbers ("ECCNs") of 9x610, 9x619 and 3x611, or to legacy ECCNs (e.g., ECCN 9A991 and EAR99). To effectively manage the transition of items from the USML to the CCL, the DDTC published a transition plan on April 16, 2013 ("2013 Transition Plan") (see 78 Fed. Reg. 22740). The transition plan addressed: (i) the timeline for implementing changes; (ii) temporary licensing procedures; and (iii) permanent licensing procedures.

With this Proposed Rule, some items that were initially transitioned from the USML to the 9x610, 9x619, 3x611 and legacy ECCNs will be re-controlled in USML Categories VIII or XIX ("Re-controlled Items"). Also, as mentioned in the preamble, some items will now be subject to first-time control in USML Categories VIII or XIX. For purposes of UTC's comment regarding the need for a well-crafted transition plan, items subject to first-time control will be treated as Re-controlled Items. As was the case when items were initially transitioned from the USML to the CCL, the transition of Re-controlled Items from the CCL to the USML will require a transition plan that addresses the following: (i) the timeline for implementing changes; (ii) temporary licensing procedures; and (ii) permanent licensing procedures. UTC provides the following transition plan recommendations and justifications.

# i. Timeline for Implementing Changes

UTC recommends that DDTC adopt a one-year transition period to implement Proposed Rule classification changes. In the 2013 Transition Plan, DDTC established a 180-day transition period, which was intended to provide industry with enough time to reclassify all items affected by the Final Rules. For UTC, the process for reclassifying all items in accordance with the Final Rules took significantly longer than the 180-day transition period. Although the actual reclassification effort extended well past the 180-day transition period, the practical consequences were minimal as items that were not yet reclassified could, so long as they were properly licensed in according with the 2013 Transition Plan, be exported under the legacy USML classification(s).

With the Proposed Rule, UTC expects that many items currently classified under 9x610, 9x619, 3x611 or legacy ECCNs as a result of the 2013 Final Rules will require a reclassification analysis. Unlike the transition from the USML to the CCL, UTC could experience practical consequences if the reclassification of items cannot be completed before the transition period

<sup>&</sup>lt;sup>2</sup> Although USML Category XI is not part of the proposed rule, some of the Re-controlled Items are electronic in nature, and some parts and components may be classified in ECCN 3A611. As an example, printed circuit boards for Re-controlled Items would be re-controlled in USML subparagraph XI(c)(2).

<sup>&</sup>lt;sup>3</sup> The original reclassification process took longer than the 180-day transition period because of the volume and complexity of the changes required in business processes and IT systems to implement new classifications. For a large corporation with hundreds of thousands of parts and millions of pieces of associated technical data, the reclassification process required writing procedures, preparing training materials, and training personnel on the changes. Further, considerable time was required to ensure that IT systems were modified to handle new USML and CCL paragraphs and subparagraphs.

expires. At UTC, we estimate that roughly 275,000 items will be subject to a reclassification analysis to determine if they are re-controlled on the USML. In addition to the roughly 275,000 items that will be subject to reclassification analysis, UTC will need to assist suppliers that have designed items, such as equipment and tooling, for the production of UTC-designed items. For example, a supplier manufacturing items classified in VIII(h)(1) could have developed tooling that will, as a result of the Proposed Rule, need to be reclassified.

UTC does not believe that a one-year transition period will negatively impact U.S. national security or foreign policy interests as these Re-controlled Items will have been exported, re-exported and/or retransferred for roughly three years before the Proposed Rule becomes effective.

## ii. <u>Temporary Licensing Procedure</u>

Since October 2013, UTC has obtained hundreds of Bureau of Industry and Security ("BIS") licenses authorizing the export, re-export and/or retransfer of Re-controlled Items and has employed a number of available EAR license exceptions (e.g., STA). In some instances, UTC has been authorized to export under the authority of No License Required ("NLR") (i.e., exports of "600-series" items to Canada, exports of items controlled in the .y paragraph of Yx600 ECCNs, and exports of items otherwise controlled solely for anti-terrorism ("AT") reasons). In many cases, the BIS licenses are still active (i.e., they have not expired or been exhausted) and the use of EAR license exceptions and NLR remain available. Requiring industry to immediately cease using active BIS licenses, EAR license exceptions and the NLR authorization would create a temporary blackout period in which no exports, re-exports and/or retransfers can occur. Any blackout period will negatively impact industry and customers.

UTC recommends that DDTC adopt a three-year transition period in which industry can continue to export, re-export and/or retransfer Re-controlled Items against active BIS licenses obtained prior to the effective date of the Proposed Rule, under existing EAR license exceptions, or as NLR, as appropriate. UTC believes a three-year transition period is appropriate for the following reasons:

- The three-year transition period is consistent with the 2013 Transition Plan, as amended by DDTC in a web notice published on October 9, 2015.
- A three-year transition period is necessary given the significant time required to obtain DDTC agreements, which for complex cases and/or cases requiring Congressional review can require more than one year to be completed.
- All "600-series" items licensed for export, re-export and/or retransfer by BIS have been subject to review by the DDTC and DOD. Because the items have already been licensed for export, re-export and/or retransfer, there is no obvious benefit in requiring industry to immediately obtain a new export, re-export and/or retransfer licenses, and it would place a significant strain on limited industry and government resources.

- The only license exceptions available for the re-export and retransfer of 9x610, 9x619 and 3x611 are BAG, GOV, LVS, RPL, TMP, TSU, and STA. In effect, the continued export, re-export and/or retransfer of Re-controlled Items will be largely limited to certain government end-users, end-users already in possession of the item(s), and strategic allies.
- All items controlled for AT-only purposes, such as those controlled under the .y paragraph of 600-series ECCNs, were originally determined to be of such low sensitivity that minimal controls were required.

#### iii. Permanent License Procedure

UTC recommends that the USG allows Re-controlled Items previously exported, re-exported and/or retransferred pursuant to a BIS license, license exception or NLR, to remain controlled in the 9x610, 9x619, 3x611 and legacy ECCNs for purposes of re-export and/or retransfer pursuant to BIS authorization. Since October 2013, it is likely that tens of thousands of Re-controlled Items have been exported, re-exported and/or retransferred. Requiring foreign end-users to now treat those items as ITAR-controlled is not practical for the following reasons:

- To ensure that as of the effective date of the Proposed Rule all Re-controlled Items are identified and all end-users in possession of Re-controlled Items are advised, the following actions must occur. First, the design authority responsible for completing a reclassification analysis would need to complete the analysis. Second, once the reclassification analysis is completed, the design authority would need to identify and advise all customers who had purchased the item of any reclassification. Third, if the initial customer has resold or retransferred the Re-controlled Item, the initial customer will then need to identify and advise all subsequent customers of the reclassification. The ability for industry to effectively ensure that all actions occur will be nearly impossible.
- The Re-controlled Items will have been exported, re-exported and/or retransferred in accordance with EAR requirements for more than three years when the Proposed Rule become effective. Subjecting the items now to the more restrictive controls would have little benefit to national security.
- The only license exceptions available for the re-export and retransfer of 9x610, 9x619 and 3x611 are BAG, GOV, LVS, RPL, TMP, TSU, and STA. In effect, the continued re-export and/or retransfer of Re-controlled Items will be largely limited to certain government end-users, end-users already in possession of the item(s), and strategic allies.

Alternatively, UTC recommends that DDTC create ITAR license exceptions that mirror the current BIS license exceptions. Use of the ITAR license exceptions could be restricted exclusively to the re-export and/or retransfer of Re-controlled Items.