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To: DDTCResponseTeam@state.gov
Publiccomments@bis.doc.gov

From: Bill Root, waroot23@gmailcom, tel. 301 987 6418

Subject: ITAR Amendments - Category XIX RIN 1400-AC98
EAR Revisions - Gas Turbine Engines RIN 0694-AF41

General Comments:

The following observations apply not only to ITAR Category XIX and related EAR 600 series ECCNs but also to other Categories, including recent proposed rules for Categories VII, VIII, VI, and XX and related EAR 600 series ECCNs.

"Military Use": Commendable progress has been made in substituting technical descriptions for "military use" and other similar words, such as "military applications", "military mission", or for "defense articles." Such expressions are inherently ambiguous, whether or not modified by "specially designed" or other non-technical terms, such as "specifically designed or modified" or "directly related." See below for specific recommendations to complete this process for Category XIX and ECCNs 9x619.

"Specially Designed": The December 2010 and July 2011 proposed definitions of "specially designed" omit designer intent. The original intent of the designer is usually unknown and the designer's intent could change over time. However, designer intent is the usual meaning of "specially designed" and of other similar words, such as "specifically designed", "specially designed or modified", "designed or modified", "designed", "special", "specialized", or "specific." Moreover, no definition of "specially designed" (or of these other words) could cover all their diverse uses throughout the USML and CCL (*e.g.*, to identify the controlled portion of something or the uncontrolled portion of something; to limit controls to a stated end-use or end-user; or to identify which components of an end-item are controlled or which components of a component are controlled). It is, therefore, recommended that "specially designed" (and other similar words) be completely deleted from the USML, the CCL, and corresponding multilateral lists and, where applicable, be replaced with other more precise expressions.

Some USML end-items now proposed to be modified by "specially designed" are already otherwise sufficiently described that simple deletion of "specially designed" would be desirable. This would avoid unintended implications that there were non-specially designed versions which should not be controlled. If such an implication were intended, a few more technical words to exclude what should not be controlled would clarify that intention.

Specific recommendations below to replace "specially designed" with "required" assume that the EAR definition of "required" would be revised to cover commodities as well as technology and software and that the Wassenaar definition would be revised to cover

commodities and software in addition to technology. "Required" is more restrictive than the unique interpretation of "specially designed," which appears in many U.S. and multilateral historical documents and in current missile technology controls. "Required" is a better term to describe the original purpose of "specially designed" components, namely, to avoid defeating the purpose of the embargo.

To control situations in which no components of a munitions production installation would be "required," it is recommended that U.S. controls include the following from Wassenaar Munitions List (WML) 22.b.1, revised to include militarily significant WDUL or MTCR items:

> Technology "required" for the design of, the assembly of components into, and the operation, maintenance and repair of, complete production installations for items specified by the Munitions List or by 9A001, 9A002, 9A011, 9A101, 9A102 (new, see below), 9A111, 9A619, 9B619, or 9D619, even if the components of such production installations are not specified.

Inclusion of trivial items in the list of "specially designed components" of USML end items in ECCN 9A619.y.1-8 indicates an intent that virtually all components of USML end items be controlled. Controlling individual components of little if any military significance would not be necessary to avoid defeating the purpose of the embargo. However, if there were no components "required" for a USML end-item, the purpose of the embargo could be defeated by exporting all the components and assembling them into the end-item. It is, therefore, recommended that only "required" components of USML and militarily significant CCL end-items be controlled individually but that U.S. and Wassenaar controls include technology "required" for the assembly of components into USML and militarily significant CCL end-items even if the components of such end-items are not specified.

"Defense services," as defined in 22 CFR 120.9(a)(1), include assembly of defense articles. If all components of defense article end-items are construed also to be defense articles, this definition of defense services would cover assembly of components into USML end-items. In that case, and assuming applicability of defense service controls to the EAR administration of 600 series components, there would be no need for the above recommended control on technology to assemble uncontrolled components into end-items. However, there would be a major needless cost in terms of controls on countless individual insignificant components.

Parts: The July 2011 proposed definition of "specially designed" would exclude what ITAR 121.8(d) defines as a "part." It is, therefore, recommended that all mention of parts in Category XIX or ECCNs 9x619 be deleted.

"Accessories and Attachments": The ITAR 121.8(c) definition of these words notes that they are "not necessary" for the operation of an end-item, component, or system. The examples given are separately controlled (riflescopes in I.f and special paints in XIII.g). Therefore, it is recommended that all mention of accessories, attachments, and associated equipment in Category XIX and ECCNs 9x619 be deleted.

Components of components: Controlling components of components is generally questionable.

Materials: Structural materials in XIII.f and ablative materials in IV.f are ambiguously controlled because of their relationship to defense articles with no technical specifications. Existing ECCNs on the CCL control materials with technical detail based on potential military applications. It is, therefore, recommended that materials be controlled on the USML or in 600 series ECCNs only if manufactured to the point of being recognized as USML components (as described in proposed Note 1 to 9A619.x).

Technical data: Proposed Category XIX (and existing and proposed Categories VII, VIII, VI, and XX) ambiguously control technical data directly related to defense articles. Production software and technology should be controlled by the same agency which controls production equipment, *i.e*., Commerce. The definitions of "development" and "production" overlap. "Development" includes all stages prior to serial production; but "production" includes all production stages. Both terms include assembly and testing.

Wassenaar and MTCR: These proposed rules should not become final, or even interim final, until reviewed by related multilateral regimes to which the United States is committed. Historically, the United States has benefitted from considering differing allied technical views. The United States has also been reasonably criticized on those infrequent occasions when it has acted unilaterally in ways which others perceived to be benefitting U.S. exporters. Such might be the case by some substitutions of technical descriptions for specially designed.

Specific Reommendations to Revise Proposed Category XIX and ECCNs 9x619

The Wassenaar Munitions List (WML) does not include the words "gas turbine engines." Wassenaar Dual Use List (WDUL) items 9.A.1 to 9.A.3, 9.A.11, 9.B.1 to 9.B.9, 9.D.1 to 9.D.4, and 9.E.1 to 9.E.3 (and corresponding CCL ECCNs 9A001 to 9A003, 9A011, 9B001 to 9B009. 9D001 to 9D004, and 9E001 to 9E003) control gas turbine engines for military use and related production equipment, software, and technology. These are now all subject to Commerce jurisdiction except the following are are annotated in the CCL as being State jurisdiction: ramjet, scramjet, combined cycle engines 9A011 and related software and technology and 9E003 technology unless actually applied to a commercial aircraft engine program. However, neither the existing nor the proposed USML explicitly specifies such State jurisdiction. It is, therefore, recommended:

- State jurisdiction annotations for these ECCNs be removed
- CCL coverage be continued in these WDUL ECCNs rather than in 600 series ECCNs.

Missile Technology Control Regime (MTCR) 3.A.1 (9A101), 3.A.2 (9A111), 3.A.9 (no ECCN), 3.B.1 (9B116), 3.B.2 (9B115), 3.C.1 (no ECCN), 3.C.2 (no ECCN), 3.D.1 (9D101), 3.D.2 (9D104), and 3.E.1 (9E101) control gas turbine engines for UAVs and rockets (missiles) and related production equipment, materials, software, and technology. The following are annotated

on the CCL as being State jurisdiction: missile and military UAV portions of 9A101 and all of ramjet, scramjet, combined cycle engine 9A111 and related software and technology. Proposed XIX.c covers 3.A.1 and 3.A.9 except for 3.A.9 components but omits the MT technical specifications. Neither the existing nor the proposed USML specifies State jurisdiction for 3.A.2, 3.B.1, 3.B.2, 3.C.1, 3.C.2, or related software or technology. It is, therefore, recommended that

-proposed XIX.c be revised to cover only the missile and armed UAV portions of 3.A.1 and the armed UAV portion of 3.A.9, deleting designed or modified in 3.A.1.b, changing specially designed to "required" as a modifier for turboprop engine systems in 3.A.9, and deferring to 9A619.x to cover 3.A.9 components

-9A101 Commerce jurisdiction be limited to the unarmed UAV portion of 3.A.1

-a new 9A102 be added for Commerce jurisdiction for the unarmed portion of 3.A.9, changing specially designed to "required" as a modifier for turboprop engine systems and also as a modifier for components

-new 9C101 and 9C102 be added for Commerce jurisdiction for 3.C.1 and 3.C.2, deleting specially designed in 3.C.1

-adding 9A102 to 9D104

-adding 9A102, 9C101, and 9C102 to 9B115, 9B116, and 9E101.

In XIX.a and b headings add "not controlled by USML Category VI.e or ECCNs 9A001, 9A002, 9A011, 9A101, 9A102 (new, see above), or 9A111"

In XIX.e delete FADEC (because FADEC already covered by incorporation of 9E003.h into 9A001.a and 9A003)

In XIX.f heading add "not controlled by 9A003"

Revise XIX.f.2 to remove portions already covereed by 9A003 related to 9E003.a

Delete "specially designed" in

XIX.e, XIX.f.1 Note
740 Supp. 4.a.6 (twice), a.7,14, 15, b.2.vi,vii
9A619.a Note, 9A619.b

Change "specially designed" to "required" in

XIX.f.1,2,3
9A619.d,x
9B619 heading, 9B619.a (twice), 9B619.b
9D619 heading, 9D619.a

Delete parts in

XIX.f heading, XIX.f.1
740 Supp. 4 introductory paragraph, 740 Supp. 4 a intro (twice), a.7,8,9,10, b.1 (twice), 740 Supp. 4.b.1.ii, iii, iv,v,vi,vii, viii, b.2 intro (twice), b.2.i,ii,iii,iv,v
9A018, 9D018, 9E018

9A619 Unit, 9A619.x, 9A619.x Note 2 first sentence, 9B619.a

Delete accessories, attachments, or associated equipment in
XIX.f heading, XIX.f.1
9A619 Unit, 9A619.x, 9A619.x Note 2 first sentence, 9B619.a
9E018

Revise XIX.g to read:
Software "required" for installation, operation, maintenance, repair, overhaul, or refurbishing of XIX.a,b,c,d,e,f and software portion of .g; and
Technology "required" for installation, operation, maintenance, repair, overhaul, or refurbishing of XIX.a,b,c,d,e,f, and software portion of .g.

Delete and components "specially designed" therefor in
740 Supp.4 a.7,8,10

In 9A619 heading delete Military and add excluding those certified for civil use

In 9A619 Related Controls delete "Military" and change "technical data (including software) directly related thereto" to "software and technology "required" for installation, operation, maintenance, repair, overhaul, or refurbishing of such aircraft and related articles or for such software"

Revise 9A619.a to read:
'Gas turbine engines' excluding those certified for civil use not controlled byUSML Category XIX.a,b,c,d or VI.e or by ECCNs 9A001, 9A002, 9A011, 9A101, 9A102 (new, see above), or 9A111

In 9A619.a Note delete military

In 9A619.b delete FADEC

Delete 9A619.c (already covered by 9A003)

In 9A619.x change "not specified elsewhere in the CCL or on the USML" to "not controlled by USML XIX.f or ECCNs 9A002, 9A003, or 9A102 (new, see above)"

Delete 9A619,y, 9B619.y, 9C619, 9D619.y, 9E619.y and references elsewhere to these ECCNs

Revise ECCN 9A991 heading to read:
"Aircraft," gas turbine engines, and components, as follows (see List of Items controlled)
Revise 9A991.c to read:
Aero gas turbine engines not controlled by USML Category XIX.a,b,c,d or ECCNs 9A001, 9A002, 9A011, 9A101, 9A102 (new, see above), or 9A619.a and components

"required" therefor not controlled by USML Category XIX.e,f or ECCNs 9A002, 9A003, 9A102, 9A619.b,d,x

In 9B619 heading add not controlled by 9B001 through 9B009, 9B115, or 9B116

Revise 9B991 heading to read:
Equipment, tooling, or fixtures "required" for manufacturing or measuring gas turbine blades, vanes, or tip shroud castings, not controlled by 9B001 through 9B009, 9B115, 9B116, or 9B619, as follows (see List of Items controlled)

In 9D619 heading:
add not controlled by USML XIX.g or ECCNs 9D001 through 9D004, 9D101, or 9D104
add installation, repair, overhaul, refurbishing

In 9D619 Related Controls (1) change "directly related to" to "required" for installation, operation, maintenance, repair, overhaul, or refurbishing of

Revise 9D619.a to read:
Software "required" for development or production of XIX.a,b,c,d,e,f, and software portion of .g; and software "required" for development, production, installation, operation, maintenance, repair, overhaul, or refurbishing of 9A619, 9B619, or 9D619.

Revise 9D991 to read:
Software "required" for the "development" or "production" of 9A991 or 9B991 not controlled by USML Category XIX.g or ECCNs 9D001 through 9D004, 9D101, 9D104, or 9D619

Revise 9E619 heading to read:
"Technology" for 'gas turbine engines' and related commodities and software, not controlled by USML Category XIX.g or ECCNs 9E001, 9E002, 9E003, 9E101, or 9E104, as follows (see List of Items controlled):

Revise 9E619.a,b,c,d to read::

a. Technology "required" for development or production of XIX.a,b,c,d,e,f, and software portion of .g;

b Technology "required" for development, production, installation, operation, maintenance, repair, overhaul, or refurbishing of 9A619, 9B619, or 9D619;

c Technology "required" for the design of, the assembly of components into, and the operation, maintenance and repair of, complete production installations for XIX.a,b,c,d,e,f and software portion of .g, 9A001, 9A002, 9A011, 9A101, 9A102 (new, see above), 9A111, 9A619, 9B619, or 9D619, even if the components of such production installations are not specified; and

d Technology "required" for the assembly of components into XIX.a,b,c,d,e,f and software portion of .g, 9A001, 9A002, 9A011, 9A101, 9A102 (new, see below), 9A111, 9A619,

9B619, or 9D619 end-items, even if the components of such end-items are not specified.

Revise 9E991 to read:

Technololgy "required" for the "development," "production," or "use" of 9A991 or 9B991, not controlled by USML Category XIX.g or ECCNs 9E001, 9E002, 9E003, 9E101, 9E104, or 9E619

Recommended Category XIX portion of Wassenaar Proposal

Revise WML 10.d to conform with proposed Category XIX plus 9A619.x revised as recommended above (this assumes the improbability of multilateral agreement on 9A619.a,b,d, given that no examples of aero or marine gas turbine engines not otherwise covered and no examples of any gas turbine engines for ground vehicles have been identified)

Revise WML 16 to conform with Note 1 to 9A619.x
In WML 18.a change "specially designed or modified" to "required" and change "specially designed" to "required"
In WML 18.b change "specially designed" to "required" (twice)
In WML 21.a change "specially designed or modified" to "required"
Revise WML 22.b.1 to add "or by 9.A.1, 9.A.2, or 9.A.11"
Add to WML 22.b:

6. Technology "required" for the assembly of components into WML end-items or 9.A.1, 9.A.2, or 9.A.11, even if the components of such end-items are not specified.

Revise Wassenaar definition of "required" to include commodities and software as well as technology

Recommended Category XIX portion of MTCR proposal

In 3.A.1.b change designed or modified to "required"
In 3.A.9 delete specially designed modifying 'Turboprop engine systems' and change specially designed components to components "required"
In 3.B.1 and 3.B.2 change specially designed to "required"
In the definition of "Production facilities" change specially designed to "required"
In 3.C.1 delete specially designed
In 3.D.1 and 3.D.2 change specially designed or modified to "required"
Add to MTCR definitions the recommended revised Wassenaar definition of "required"
Add MTCR technology controls comparable to recommended WML 22.b.1 and b.6.