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Subject: Military Electronic Equipment RIN 0694-AF64 and RIN 1400-AD25

The following comments respond to the subject proposed rule 28 RIN 0694-AF64, which appeared in the Federal Register on November 28, 2012. Some of them are also relevant to the proposed revision of USML Category XI RIN 1400-AD, which also appeared in the Federal Register on November 28. They address ambiguities between the CCL and the USML, within the CCL, and within the USML.

My January 3, 2013, comments on the Category XI proposal identified 14 overlaps between proposed Category XI and existing CCL coverage. Four more have since been discovered (XI(a)(10) vs. 2A984, XI(a)(13) vs. 5A001.e, XI(c)(4) vs. 3A001.e.2, and XI(c)(10)(vii) vs. 6A103). The November 28 BIS proposed rule states that one of the reform goals is to ensure that items currently EAR controlled are not unintentionally made ITAR controlled. There is no indication in either of the November 28 rules that any of these 18 overlaps were intentionally proposed to be transferred from EAR to ITAR. Attachment 1 to this letter suggests how to eliminate these 18 overlaps.

Attachment 2 suggests how to eliminate ambiguities in the November 28 CCL rule.

Attachment 3 suggests how to eliminate other CCL ambiguities believed to be relevant.. Many of these arise from statements in the CCL concerning Department of State jurisdiction.

Attachment 1

How to Eliminate 18 Overlaps in Proposed Category XI with Existing CCL Coverage

1. XI(a)(1)(i)(B) Underwater acoustic systems operating frequency less than 20 kHz
   Overlaps 6A001.a.1.b.1 and a.1.b.2
   Delete XI(a)(1)(i)(B). See #16 re XI(c)(11) below.

2. XI(a)(1)(i)(D) Underwater acoustic systems real-time processing
   Overlaps 6A001.a.2.c and a.2.f
   Either delete XI(a)(1)(i)(D) or add to XI(a)(1)(i)(D) technical specifications to describe types of real-time processing other than, or a subset of, a.2.c and a.2.f which would be ITAR-controlled. If the latter:
   add to XI(a)(1)(i)(D) cross references to 6A001.a.2.c and a.2.f; and
   add to 6A001 "not controlled by XI(a)(1)(i)(D)."

3. XI(a)(1)(v) submarine communications
   Overlaps 5A001.b.1 and 8A002.d.1
   Either delete XI(a)(1)(v) or add to XI(a)(1)(v) technical specifications to describe types of submarine communications other than, or a subset of, 5A001.b.1 or 8A002.d.1 which would be ITAR-controlled. If the latter:
   add to XI(a)(1)(v) cross references to 5A001.b and 8A002.d.1; and
   add to 5A001 and 8A002 "not controlled by XI(a)(1)(v)."

4. XI(a)(3)(i) airborne radar that tracks targets
   Overlaps 6A008.g, 6A108.b, and 6A998.a
   Either delete XI(a)(3)(i) or add to XI(a)(3)(i) technical specifications to describe types of airborne radar other than, or a subset of, 6A008.g which would be ITAR-controlled. If the latter:
   add to XI(a)(3)(i) cross references to 6A008.g, 6A108.b, and 6A998.a;
   add to 6A008 and 6A108 "not controlled by XI(a)(3)(i)"; and
   add to 6A998 "not controlled by XI(a)(3)(i), 6A008, or 6A108."

5. XI(a)(3)(ii) Synthetic aperture radar (SAR)
   Overlaps 6A008.d
   Delete XI(a)(3)(ii)

6. XI(a)(3)(iii) Inverse synthetic aperture radar IISAR)
   Overlaps 6A008.d
   Delete XI(a)(3)(iii)

7. XI(a)(3)(xii) Radar incorporating pulsed operation with electronic steering of transmit beam in elevation and azimuth

Overlaps 6A008.e incorporating “electronically steerable phased array antennae” and 6A008.k having “signal processing” subsystems using “pulse compression” and having any of the following: ...
Either delete XI(a)(3)(xii) or add to XI(a)(3)(xii) technical specifications to describe types of pulsed operation with electronic steering other than, or a subset of, 6A008.e or .k which would be ITAR-controlled. If the latter:
add to XI(a)(3)(xii) cross references to 6A008.e and .k; and
add to 6A008 “not controlled by XI(a)(3)(xii).”

8. XI(a)(3)(xvii) ... pulse Doppler processing where any single Doppler filter provides a normalized clutter attenuation of greater than 50 dB.
Overlaps 6A108.a Note .d Radar and laser radar systems designed or modified for use in “missiles” includes Doppler navigation equipment (6A108.a is DOS jurisdiction if for “missiles” or for items on USML per Related Controls (2))
Differs from existing USML XV.e Note 9, which specifies that space qualified laser radar is CCL and not USML unless for military applications.
Revise heading of XV.e Note to read: “The following are included in XV.e if for military use:”
revise XV.e.Note 9 to add “ (also see CCL 6A108.a) ”
add to XI(a)(3)(xvii) cross reference to 6A108.a Note .d
delete 6A108 Related Controls (2) DOS jurisdiction statement
add to 6A108.a “not controlled by XI(a)(3)(xvii) or XV.e Note 9".

9. XI(a)(3)(xxix) Radar and laser radar systems for IV.a.1 (missiles) or VIII.a.5 or a.6 (unarmed or armed UAVs)
Differs from existing USML XV.e Note 9, which specifies that space qualified laser radar is CCL and not USML unless for military applications.
Overlaps 6A008.j ... “laser” radar ... having any of the following: ...
Overlaps 6A108.a radar and laser radar systems designed or modified for use in “missiles”, which are DOS jurisdiction if for “missiles” or for items on USML per Related Controls (2)
Revise heading of XV.e Note to read: “The following are included in XV.e if for military use:”
revise XV.e.Note 9 to add “ (also see CCL 6A008.j and 6A108.a) ”
add to XI(a)(3)(xxix) cross references to 6A008.j and 6A108.a
delete 6A108 Related Controls (2) DOS jurisdiction statement
add to 6A008.j and to 6A108.a “not controlled by XI(a)(3)(xxix) or XV.e Note 9".

10. XI(a)(5)(iv) systems suppressing compromising emanations of information bearing signals
Overlaps 5A002.a.4
Delete XI(a)(5)(iv)

11. XI(a)(10) detection of concealed weapons

Overlaps 2A984, 2D984, 2E984 Concealed object detection equipment with specified frequency and spatial resolution and software and technology therefor (all marked DOS jurisdiction)
If Export Control Reform does not change 2A984 substance and jurisdiction, it should be deleted from the CCL and be added to proposed XI(a)(10

12. XI(a)(13) direction finding equipment for determining bearings to specified electromagnetic sources or terrain characteristics for missiles or armed or unarmed UAVs
Overlaps 5A001.e radio direction finding > 30 MHz, instantaneous bandwidth ≥ 10 MHz, and finding line of bearing to non-cooperative radio transmitter with signal < 1 ms (marked DOS jurisdiction)
Delete 5A001 statement of DOS jurisdiction for 5A001.e;
add to 5A001.e "not controlled by USML XI(a)(13);
add to XI(a)(13) "(also see 5A001.e)".

13. XI(b)(3) systems for measurement and signature intelligence
Overlaps 1A101, 1C101, 1D103, 1E101 Devices for reduced observables such as radar reflectivity, ultraviolet/infrared signatures and acoustic signatures usable in "missiles" and their subsystems and software and technology therefor (1A101, 1C101, and 1D103, but not 1E101, marked DOS jurisdiction for similar items)
In XI(b)(3), add for rockets, missiles, or UAVs with 300 km "range";
In XI(b)(3), add cross reference to 1A101, 1C101, 1D103, 1E101;
1A101 and 1C101, change "missiles" to rockets, missiles, or UAVs with 300 km "range" and specify the subsystems for consistency with MTCR 17.A.1;
Delete DOS jurisdiction statements in 1A101, 1C101, and 1D103,
add to 1A101 and 1C101 "not controlled by USML XI(b)(3)";
` (The result would be DOC jurisdiction for signature systems "for" other purposes which, nevertheless, are "usable in" rockets, missiles, or UAVs with 300 km "range.")

14. XI(c)(4) high energy storage capacitors with technical characteristics
Overlaps 3A001.e.2 high energy storage capacitors with different technical characteristics
Add to 3A001.e.2 "not controlled by USML Category XI(c)(4)"
Add to XI(c)(4) "see also 3A001.e.2"

15 XI(c)(10)(vii) radomes to withstand thermal shock
Overlaps 6A103 radomes to withstand thermal shock with different technical characteristics (marked DOS jurisdiction)
Overlaps 6D003.h.2 software for radomes to protect electronically steerable phased array antenna and resulting in antenna pattern with specified average side lobe level
MTCR 18.A.3 radomes to withstand thermal shock greater than XI(c)(10)(vii) technical parameters usable in protecting rocket systems and UAVs against nuclear effects and usable for "missiles"

Delete 6A103;
Expand XI(c)(10)(vii) to conform with all of MTCR 18.A.3;
add to XI(c)(10)(vii) cross reference 6D003.h.2;
add to 6D003.h.2 cross reference to XI(c)(10)(vii)

16. XI(c)(11)... hydrophones having any of the following:
XI(c)(11)(i, ii, iii, iv, v, vi) are identical to 6A001.a.1.b.1,2,3,4,5,6.
Delete XI(c)(11)
(There is no DOS jurisdiction carve-out from 6A001.)

17. XI(c)(12) Components containing piezoelectric materials for underwater items controlled by (c)(11)
Overlaps 6A001.a.1.c, a.2.a.3.b, and a.2.a.3.c; also overlaps 1A001.b
Delete XI(c)(12) and delete 1A001 Related Controls (1).
(There is no DOS jurisdiction carve-out from 6A001. The statement in 1A001 Related Controls (1) ("Items specially designed or modified for missiles or for items on the U.S. Munitions List are subject to the export licensing authority of the U.S. Department of State") does not assert DOS relevance to 1A001.)

18. XI(c)(14) Electronic assemblies and components for missiles, rockets, or UAVs with a range of at least 300 km operating at temperatures in excess of 125°C
Overlaps 3A001.a.2.a
Delete XI(c)(14); and
revise 3A001 MT applies to include a.2.a if for missiles, rockets, or UAVs with a range of at least 300 km
(Also see Attachments 2 and 3 re 3A001)

Attachment 2

How to Eliminate CCL Military Electronics Ambiguities in November 28 Proposal

3A001 MT applies to 3A001.a.1.a when usable in "missiles", a.2.a if for missiles, rockets, or UAVs with a range of at least 300 km, a.2.c, ~~and to~~ or a.5.a when ~~"designed or modified" for military use, hermetically sealed and rated for operations in the temperature range from below -54°C for above + 125°C~~ also described in 3A101

(Also see item 18 in Attachment 1 and Attachment 3 re 3A001.)

3A101 Electronic equipment, devices and components, ~~other than those~~ not controlled by 3A001.a.1.a, a.2.c, or a.5.a, 4A001.a.1 or a.2.a , or 4A003.e, as follows (see List of Items Controlled)

(There is a big difference between "other than those" and "not" controlled.

The portions of 3A001.a.1.a, 3A001.a.2.c, 3A001.a.5.a, 4A001.a.1 or a.2.a, and 4A003.e also described in 3A101.a would be controlled by 3A001, 4A001, or 4A003, rather than by 3A101.)

Related Controls: ~~See also ECCN 4A003.e for controls on electrical input type analog to digital converter printed circuit boards or modules~~ N/A

(Inclusion of 4A003.e in the heading makes it unnecessary to refer to it in Related Controls. The proposed Related Controls text deviates from the following text of 4A003.e: "Equipment performing analog-to-digital conversions exceeding the limits in 3A001.a.5." Showing revised 3A101 Related Controls as "N/A" would make clear the intent to delete the current statement that 3A101.a is subject to the export licensing authority of the Department of State. The proposed rule implies, but does not unequivocally state, such deletion.)

a.1 ~~"Specially designed" to meet~~ Meeting military specifications for ruggedized equipment.

(MTCR uses the word "Designed," instead of "Specially designed." The MTCR definition of "designed or modified" could be construed as being applicable to "designed." The unique MTCR definition of "specially designed" is narrower than the "may be used for other applications" portion of the MTCR definition of "designed or modified." Deletion of "Designed" is recommended, because of the adequacy of the proposed technical description of MTCR wording in proposed 3A101.a. This would strengthen the control. It would, therefore, not be precluded by legislation now interpreted to prohibit license exception eligibility for MT items.)

a.2 Analog-to-digital converter microcircuits which are ~~radiation hardened~~ "radiation hardened"

(The MTCR definition of "radiation hardened" should be added to the EAR. That definition is identical to 3A001.a.1.a and 4A001.a.2.a. However, MT controls apply to all countries except Canada. They are, therefore, broader than 3A001.a.1.a and 4A001.a.2.a, which otherwise are controlled only to NS2 countries. On the other hand, 3A101 coverage of radiation hardened is narrower than the MTCR definition, because of useable in "missiles" in the heading of

3A101.)

a.3.b Rated for operation in the temperature range from below -54°C to above + 125°C (MTCR text includes "below.")

3A611 NS applies to entire entry except 3A611.y NS Column 1
RS applies to entire entry except 3A611.y RS Column 1

(This ECCN, and most, perhaps all, of the other 600 series ECCNs, includes both multilateral and unilateral controls. The EAA proscribes NS unilateral controls in the absence of efforts to multilateralize those controls. RS controls are not similarly proscribed. Using RS as a means to evade the NS proscription is questionable. Even if those questions may be satisfactorily answered, applying NS to the unilateral portions of 600 series ECCNs is inconsistent with the EAA.)

3A611 Related Controls: (1) Electronic items that are enumerated in USML Category XI or other USML Categories~~, and technical data (including software) directly related thereto)~~ are subject to the ITAR.

(The EAR should use "technical data" only as it is defined in part 772. The EAR should not use the undefined term "directly related." Some technology now on the USML is not directly related to commodities on the USML, *e.g.*, 7E104 and 9E001 and 9E002 for 9A004. Conversely, MTCR controls no technology or software for USML-controlled 9A103. ITAR does not control software for all USML-controlled commodities, *e.g.*, 9B116 software included in the definition of "production facilities." Most MTCR software items are limited to "use" software. MTCR does not control any software for the numerous USML-controlled materials in MTCR Item 4 (USML Category V). All USML-controlled technology or software is enumerated on the USML. The word "items" includes technology and software as well as commodities. Therefore, the above recommended revision would include all USML-controlled technology and software, as well as commodities, as being subject to the ITAR.)

3A611.a Note: ~~3A611.a~~ 3A611 includes any acoustic, radar, telecommunications, or computer equipment, end items, or systems "specially designed" for military use that are not enumerated in any USML category or controlled by ~~a~~ another ~~"600 series"~~ ECCN.

3A611.c MMIC power amplifiers overlaps 3A001.b.2 MMIC power amplifiers
3A611.d Discrete microwave transistors overlaps 3A001.b.3 Discrete microwave transistors
Recommend deletion of 3A611.c and .d and considering them later as the basis for U.S. proposals in Wassenaar to revise 3.A.1.b.2 and b.3.

(The similarities between 3A611.c , .d and 3A001.b.2, b.3, respectively, coupled with no mention in 3A001 Related Controls of DOS jurisdiction for any parts of 3A001.b.2 or b.3, indicate that 3A611.c and .d were not heretofore considered to have been USML controlled. The usual means to avoid duplicate coverage would be to introduce 3A611.c with "not controlled by 3A001.b.2" and introduce 3A611.d with "not controlled by 3A001.b.3." But 3A611.c and .d explicitly include language from 3A001.b.2 or b.3. The

latter cannot simply be deleted and replaced by 3A611.c and .d, because there are some portions of 3A001.b.2 and b.3 which are not included in 3A611.c and .d and the United States is committed to comply with Wassenaar 3.A.1.b.2 and b.3. A U.S. proposal for multilateral coverage is the EAA pre-requisite for unilateral NS controls.)

3A611.e Radar "tracking" maritime surface targets or low altitude airborne targets overlaps 6A008.l.1 "automatic target tracking" providing predicted target position ... and also overlaps proposed Category XI.a.3, especially a.3.v ocean surface surveillance radar
Recommend either deletion of 3A611.e or addition to 3A611.e of technical specifications to describe types of radar tracking other than, or a subset of, 6A008.l.1, not included in proposed Category XI.a.3. If the latter:
add to 3A611.e "not controlled by 6A008.l.1";
add to 6A008 Related Controls "See also 3A611.e"; and
add to the EAR a definition of "tracking."

3A611.x Note 1: 3A611.x includes parts, components, accessories, and attachments "specially designed" for ~~a~~ an acoustic, radar, telecommunications, or computer end item "specially designed" for military use that are neither enumerated in any USML Category nor controlled in another ~~"600 series"~~ ECCN

(Except for ECCNs xx018, components for existing ECCNs, especially those to comply with Wassenaar or MTCR controls, should remain separate from 600 series.)

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3A611.x Note 2 is inconsistent with Note 1, beecause the piezoelectrics described in Note 2 are enumerated in XI(c)(12). Attachment 1 Item 17 above recommends that XI(c)(12) be deleted in order to remove an overlap with 6A001. If that were done, the reference to XI(c)(12) should be deleted from 3A611.x Note 2. However, the Note might otherwise still serve a purpose. It is believed that magnesium niobate lead titanate is not otherwise mentioned in either the USML or CCL.

3D611 "Software" ~~"specially designed"~~ "required" for military electronics, as follows

3D611 Related Controls: "Software" ~~directly related to~~ "required" for the "use" of articles enumerated in USML Category XI is subject to the control of USML paragraph XI(d).

3D611.a ~~Software~~ "Software" ~~"specially designed"~~ "required" for the "development," "production," ~~operation or maintenance~~ or "use" of ~~commodities~~ items controlled by 3A611 (~~other than~~ except 3A611.y), 3B611, or 3D611 or for the "development" or "production" of USML Categor XI

~~3D611.b. through x. RESERVED~~

3D611.b "Software" not enumerated in the USML or otherwise enumerated in the CCL performing the military functions of equipment enumerated in USML Category XI or 3A611.

3D611.c. through x. RESERVED

3D611.y. Specific "software" ~~"specially designed"~~ "required" for the "development," "production," ~~operation or maintenance~~ or "use" of commodities enumerated in ~~ECCNs~~ ECCN 3A611.y.

(There would be no substantive change by substituting "required" for "specially designed." This is because software is not a component and the non-component portion of the proposed "specially designed" definition is the definition of "required." Such a substitution would also be consistent with the applicability to software of the EAR definition of "required." The EAR should not use the undefined term "directly related.")
(WML21.a controls "software" for the "use" of equipment, materials, or "software" specified by the Munitions List. WML 21.c controls "software" not specified by ML21.a or .b, to perform the military functions of equipment specified by the Munitions List.)
(In the EAR definition of "use," "and" should be changed to "or.")
(3D611 should control "software" for the "development" or "production" of Category XI for consistency with applicability of 3B611.a to test, inspection, and production equipment for Category XI if not enumerated in XI. The only such equipment enumerated in XI is XI(a)(11).)
(3D611.b is to comply with WML 21.c)

3E611 Related Controls: "Technology" ~~directly related to~~ "required" for the "use" of articles enumerated in USML Category XI is subject to the control of USML paragraph XI(d).

3E611.a "Technology" ~~(other than that described in~~ not controlled by 3E611.b, 3E611.c, or 3E611.y~~) not otherwise enumerated in this ECCN~~ "required" for the "development," "production," ~~operation, installation, maintenance, repair, or overhaul~~ or "use" of commodities or "software" controlled by ECCNs 3A611, 3B611, or 3D611 or "technology" "required" for the "development" or "production" of USML Category XI.

3E611.b "Technology" required for the "development," "production," ~~operation, installation, maintenance, repair, or overhaul~~ or "use" of: ...

~~3E611.c through x. RESERVED~~

3E611.c '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 U.S. Munitions List or "600 series" ECCNs, even if the components of such production installations are not specified.

(To comply with WML 22.b.1)

3E611.d through x. RESERVED

3E611.y Specific "technology" "required" for the "development," "production," ~~installation,~~

~~maintenance, repair or overhaul~~ or "use" of commodities or "software" enumerated in ECCNs 3A611.y or 3D611.y

4A001 MT applies to ~~items in 4A001.a when the parameters in 4A101 are met or exceeded~~ 4A001.a.1 or a.2.a when also described in 4A101.;

4A003 MT applies to 4A003.e when ~~the parameters in 3A101.a.4 are met or exceeded~~ also described in 3A001.a.1.a, 3A101, 4A001.a.2.a, or 4A101

4A101 ... computers ... ~~other than those~~ not controlled by 4A001.a.1 or a.2.a ...

4A611 Computers ... for military use that are not enumerated in any USML Category or other ECCN are controlled by ECCN 3A611

(For consistency with 6A611.)

5A611 Telecommunications and Information Security Equipment ... for military use that are not enumerated in any USML Category or other ECCN are controlled by ECCN 3A611

6A611 Acoustic Systems and Equipment, Radar, and ...

The following recommended revisions to CCL Category 7 Navigation and Avionics are limited to those directly relevant to 7A006 and 7A106, concerning which the November 28 rule proposes changes. Recommended revisions to other related portions of CCL Category 7 ECCNs are in Attachment 3. Most of the Attachment 3 recommendations are electronic; but some may not be.

7A006
MT applies to ~~commodities in this entry that meet or exceed the parameters of 7A106~~ 7A006 when also described in 7A106.

7A106 Altimeters, ~~other than those~~ not controlled by 7A006, of radar or laser radar type ~~designed or modified~~ for ~~use in~~ "missiles". ~~(These items are subject to the export licensing authority of the U.S. Department of State, Directorate of Defensee Trade Controls. See 22 CFR part 121.)~~

(Altimeters are not included in the November 28 proposed Category XI. Also see items 4 through 9 in Attachment 1 re 6A008 and 6A108)

7A611 Navigation and avionics parts, components, accessories, and attachments "specially designed" therefor, "specially designed" for military use that are not enumerated in any USML Category or other ECCN are controlled by ECCN 3A611

7B001 Test, calibration or alignment equipment ~~specially designed~~ for equipment controlled by ~~7A (except 7A994)~~ 7A001 to 7A006, 7A008, 7A116, or 7A117, including items, or portions thereof, subject to the export licensing authority of the U.S. Department of State, Directorate of

Defense Trade Controls

(7A101 to 7A104 are omitted, because MTCR 9.B.1 controls test equipment used "with," not "for," equipment specified in 9.A and this equipment is covered by 7B101. 7A105, 7A106, and 7A115 are omitted, because MTCR 11 does not control any test equipment. 7A116 and 7A117 are included to conform with MTCR 2.B.1, 2.B.2, and 10.B.1)

NS applies to ~~entire entry~~ equipment for 7A001 to 7A006 or 7A008

MT applies to ~~entire entry~~ equipment for 7A116 or 7A117 or with 7A004 or the MT portions of 7A001, 7A002, or 7A003.

(7A005 and 7A006 are omitted from "MT applies" because MTCR 11 does not control any test equipment.)

7D001 "Software" ~~specially designed or modified~~ according to the General Software Note for the "development" or "production" of equipment controlled by ~~7A (except 7A994) or 7B (except 7B994)~~ 7A001 to 7A004, 7A006, 7A008, or 7B001 to 7B003

~~MT applies ...~~

(MTCR does not control development or production software for CCL Category 7 items.)

TSR: ~~N/A~~ Yes

Related Controls: ... ~~(2) The "software" related to 7A003.b, 7A005, 7A103.b, 7A105, 7A106, 7A115, 7A116, 7A117, or 7B103 are subject to the export licensing authority of the U.S. Department of State, Directorate of Defense Trade Controls. (See 22 CFR part 121,) (3) "Software" for inertial navigation systems and inertial equipment, and specially designed components therefor, not for use on civil aircraft are subject to the export licensing authority of the U.S. Department of State, Directorate of Defense Trade Contrrols. (See 22 CFR part 121.)~~

(For consistency with Commerce jurisdiction for production of USML items.)

7D101 "Software" ~~specially designed or modified~~ according to the General Software Note , not controlled by 7D002 or 7D003. for the "use" of equipment controlled for MT reasons by ...

Related Controls: (1) ~~The~~ "software" ~~related to~~ for the "use" of the portions of the following ECCNs which are subject to the export licensing of the U.S. Department of State: 7A003.b, 7A005, 7A103.b, 7A105, 7A106, 7A115, 7A116, 7A117, or 7B103 are subject to the export licensing authority of the U.S. Department of State, Directorate of Defense Trade Controls. (See 22 CFR part 121,) ~~(2) "Software" for inertial navigation systems and inertial equipment, and specially designed components therefor, not for use on civil aircraft are subject to the export licensing authority of the U.S. Department of State, Directorate of Defense Trade Contrrols. (See 22 CFR part 121.)~~

7E001

MT applies to ~~technology for equipment controlled for MT reasons. MT does not apply to "technology" for equipment controlled by 7A008. MT does apply to~~ "technology" for equipment ~~specified in~~ controlled for MT reasons by ~~7A001, 7A002, or 7A003.d that meets or exceeds parameters of 7A101, 7A102, or 7A103~~ 7A001 to 7A006, 7A101 to 7A107, 7A115 to 7A117, 7B001 to 7B003, 7B101 to 7B103, 7D002, 7D003, 7D101 to 7D103

TSR: ~~N/A~~ Yes except MT

Related Controls: ... (2) The "technology" ~~related to~~ for the "use" of the portions of the following

ECCNs which are subject to the export licensing authority of the U.S. Department of State 7A003.b, 7A005, 7A103.b, 7A105, 7A106, 7A115. 7A116. 7A117, ~~or~~ 7B103 ~~software in 7D101 specified in the Related Controls paragraph of ECCN~~ 7D101, 7D102.a, or 7D103 are subject to the export licensing authority of the U.S. Department of State, Directorate of Defense Trade Control (see 22 CFR part 121).

7E002
MT applies to ~~technology for equipment controlled for MT reasons. MT does not apply to "technology" for equipment controlled by 7A008. MT does apply to~~ "technology" for equipment ~~specified in~~ controlled for MT reasons by ~~7A001, 7A002, or 7A003.d that meets or exceeds parameters of 7A101, 7A102, or 7A103~~ 7A001 to 7A006, 7A101 to 7A107, 7A115 to 7A117, 7B001 to 7B003, 7B101 to 7B103
TSR: ~~N/A~~ Yes except MT
Related Controls: ... (2) The "technology" ~~related to~~ for the "use" of the portions of the following ECCNs which are subject to the export licensing authority of the U.S. Department of State 7A003.b, 7A005, 7A103.b, 7A105, 7A106, 7A115. 7A116. 7A117, or 7B103 are subject to the export licensing authority of the U.S. Department of State, Directorate of Defense Trade Control (see 22 CFR part 121).

7E101 "Technology" according to the General Technology Note not controlled by 7E001 to 7E004 for the "use" of equipment controlled by ... ~~7B001,~~ ...
Related Controls: The "technology" ~~related to~~ for the "use" of the portions of the following ECCNs which are subject to the export licensing authority of the U.S. Department of State 7A003.b, 7A005, 7A103.b, 7A105, 7A106, 7A115. 7A116. 7A117, 7B103, ~~software specified in the Related Controls paragraph of ECCN~~ 7D101, 7D102.a, or 7D103 are subject to the export licensing authority of the U.S. Department of State, Directorate of Defense Trade Control (see 22 CFR part 121).

7E102 "Technology" according to the General Technology Note not controlled by 7E001 to 7E004 for protection of avionics ...

9A620 Cryogenic and "superconductive" equipment not controlled by 1C005, 3A001.d, 3A001.e.3, 3A201.b, 6A002.d.1, 6A006.a.1, or 8A002.o.2.c, as follows ...
Unit: ... ~~parts,~~ components~~,~~ and accessories ~~and attachments~~ in $ value
Related Controls: (1) Electronic items that are enumerated in USML Category XI or other USML categories~~, and technical data directly related thereto,~~ are subject to the ITAR. (2) See also 6A996.b.

("Items" includes technology and software. Technology includes technical data.)

a. Equipment ~~"specially designed" to be installed~~ in a vehicle for military ground, marine, airborne, or space applications, ~~and capable of~~ operating while in motion and ~~of~~ producing or maintiaining temperatures below 103 K (- 170°C)

b "Superconductive" electrical equipment (rotating machinery and transformers) ~~"specially designed" to be installed~~ in a vehilce for military ground, marine, airborne, or space applications, ~~and capable of~~ operating while in motion.

x ~~"Parts,"~~ "components," and "accessories" ~~and "attachments" that are "specially designed"~~ for a commodity controlled by ECCN ~~9A620~~ 9A620.a or 9A620.b having any of the characteristics described in the texts of those sub-items.

Add to Related Controls in 1C005, 3A001.d, 3A001.e.3, 3A201.b, 6A002.d.1, 6A006.a.1, or 8A002.o.2.c "See also 9A620."

9B620 Test, inspection, and production commodities for cryogenic and "superconductive" equipment, as follows (see List of Items Controlled):
Items: Test, inspection, ~~and~~ or production end-items ~~and~~ or equipment ~~"specially designed" for items controlled in ECCN 9A620~~ having any of the characteristics described in 9A620.a or 9A620.b

9D620 "Software" ~~"specially designed"~~ according to the General Software Note for cryogenic and "superconductive" equipment, as follows (see List of Items Controlled)
Related Controls: "Software" ~~directly related to articles~~ enumerated on USML are subject to the control of that USML

(Software for development or production of USML commodities is subject to the EAR.)
Items: "Software" ~~"specially designed"~~ for the "development," "production," ~~operation or maintenance~~ or "use" of commodities or "software" controlled by ECCNs 9A620, ~~or~~ 9B620, or 9D620

9E620 "Technology" ~~"required"~~ according to the General Technology Note not controlled by 3E003.c for cryogenic and "superconductive equipment, as follows (see List of Items Controlled)
Related Controls: ~~Technical data directly related to articles~~ "Technology" enumerated on USML ~~are subject to the control of that USML~~ is subject to USML control.
Items: "Technology" ~~"required"~~ for the "development," "production," ~~operation or maintenance~~ or "use" of commodities or "software" controlled by ECCNs 9A620, ~~or~~ 9B620, or 9D620

Attachment 3

How to Eliminate Other CCL Military Electronic Ambiguities

0A002, 0D001, 0E001 Power generating equipment for use with space, marine, or mobile nuclear reactors and software and technology therefor (all marked DOS jurisdiction; no reference found in current USML or in proposed Category XI)
Overlap 2A290, 2D290, 2E290 Generators and other equipment for nuclear plants and software and technology therefor (none marked DOS jurisdiction)
Delete DOS jurisdiction statements in 0A002, 0D001, and 0E001;
Cross reference 2A290 in 0A002, 2D290 in 0D001, and 2E290 in 0E001;
Cross reference 0A002 in 2A290, 0D001 in 2D290, and 0E001 in 2E290

1A001.b. See Item 17 in Attachment 1

1A004.a, b detection and 1A004.c,d protection equipment and components not for military use
1D003 software to perform 1A004.c,d functions
1E001 technology development or production of 1A004
1E002.g technology to perform 1A004.c,d functions
(1A004, but not 1D003, 1E001 for 1A004, or 1E002.g, marked DOS jurisdiction if XIV.f and if for military applications, or if commercial equipment includes XIV.f components unless components integral to commercial device, inseparable from device, and incapable of replacement; USML XIV.f .2 covers detection and XIV.f.4,5 cover individual or collective protection for military operations and compatibility with military equipment; not in proposed Category XI)
Delete 1A004 DOS jurisdiction statement;
add to 1A004 “not controlled by USML IV.f”;
add to IV.f the conditions under which it applies from existing 1A004 DOS jurisdiction statement
add to IV.f “(also see 1A004)”
(See also 2A291 in Attachment 3 below)

1A006 Equipment for disposal of improvised explosive devices as follows (remotely operated vehicles and disruptors)
1E001 technology for development or production of 1A006.b disruptors
(1A006, but not 1E001 for 1A006.b, marked DOS jurisdiction if for military use; no reference found in current USML or in proposed Category XI)
Delete 1A006 DOS jurisdiction statement

1A007 Equipment to initiate charges
1E001 technology for development or production of 1A007
3A229 firing sets for 3A232 detonators
3A232 detonators and multipoint initiation systems to nearly simultaneously initiate an explosive surface over a specified area from a single firing signal with a specified initiation timing spread

USML II.c devices for delivering ordinance,
USML IV.c devices for detonation of missiles
(Related Controls in1A007, 3A229, and 3A232, but not 1E001 for 1A007, marked DOS jurisdiction for high explosives and related equipment but do not assert DOS jurisdiction for any portions of these ECCNs; no reference in proposed Category XI)
Delete DOS jurisdiction statements in 1A007, 3A229, and 3A232
Add to 1A007, 3A229, and 3A232 "not controlled by USML II.c or IV.c
Add to II.c and IV.c cross references to 1A007, 3A229 and 3A232
1A101, 1C101, 1D103, 1E101 - see item 13 in Attachment 1

1A102, 1C102, 1D002, 1E001 for 1A102, 1E101 for 1A102, 1E104 Resaturated pyrolized carbon-carbon missile or UAV components and software and technology therefor
(all marked DOS jurisdiction except 1E104)
IV.f covers carbon/carbon ablative materials
MTCR 6.A.2 and 6.C.2 control carbon carbon components for rockets usable in missiles
Delete DOS jurisdiction statements in 1A102, 1C102, 1D002, 1E001 for 1A102, 1E101 for 1A102,
Revise IV.f to carbon/carbon fabricated or semi-fabricated for components of "missiles" or "missile subsystems" or UAVs with 300 km "range" (also see 1A102 and 1C102)
Revise 1A102 and 1C102 to use MTCR 6.A.2 and 6.C.2 wording
Add to 1A102 and 1C102 "not controlled by USML IV.f"
Add to 1A102 and 1C102 MT applies to entire entry MT Column 1
Add to 1A102 and 1C102 AT applies to entire entry AT Column 1

2A001, 2A991, 2D001, 2E001, 2E002 Anti-friction bearings and software and technology therefor (2A001 and 2A991, but not 2D001, 2E001, or 2E002, marked DOS jurisdiction for quiet-running bearings; no coverage found in current USML or proposed Category XI)
Delete DOS jurisdiction statements in 2A001 and 2A991.

2A291.e, 2D290, 2E290 Nuclear radiation detection and measuring (2A291, but not 2D290 or 2E290, marked DOS jurisdiction if for military purposes; no coverage found in current USML or proposed Category XI)
Delete DOS jurisdiction statement in 2A291
(See also 1A004 in Attachment 3 above)

2A984, 2D984, 2E984 - see Item 11 in Attachment 1

3A001.a.1 radiation hardened integrated circuits (marked DOS jurisdiction per existing XV.d; not included in proposed Category XI)
Delete 3A001.a.1 DOS jurisdiction;
If XV.d retained in future proposed Category XV:
add to 3A001.a.1 "not controlled by USML Category XV.d";
add to XV.d cross reference to 3A001.a.1
(Also see Attachment 2 re MT applies to 3A001.a.1 ...)

3A001.a.2.a - see item 18 in Attachment 1

3A001.b.1.a.4.c helix traveling wave tube
3A001.b.4.b microwave solid state amplifier
3A001.b.8 traveling wave tube amplifiers
3D001 development or production software for 3A001.b
3D002 use software for 3A001.b
3E001 development or production technology for 3A001.b
3E003.g technology for development or production of electronic vacuum tubes operating at frequencies of 31.8 GHz or higher
(all three 3A001.b and 3D001,3E001, and 3E003.g DOS if space qualified and >31.8 GHz; all three 3A001.b listed in USML XV.e. Note 1 as on the CCL and not included in USML unless for military application; not in proposed Category XI)
Delete three DOS jurisdiction statements re 3A001.b, 3D001, 3E001, 3E003.g;
revise heading of XV.e Note to read: "The following are included in XV.e if for military use:"
revise XV.e.Note 1 to add "operating at frequencies higher than 31.8 GHz (also see CCL 3A001.b.1.a.4.c, b.4.b, and b.8; 3D001, 3D002, 3E001 therefor; and 3E003.g) "
add to 3A001.b.1.a.4.c, b.4.b, and b.8 "not controlled by USML Category XV.e Note 1"
add to 3D002 "not controlled by XV.e Note 1 if for 3A001.b.1.a.4.c, b.4.b, or b.8"

3A001.d devices containing "superconductive" materials - see 9A620 in Attachment 2

3A001.e.2 capacitors- see item 14 in Attachment 1

3A001.e.3 "Superconductive"electromagnets and solenoids - see 9A620 in Attachment 2.

3A001.e.4 Solar cells space qualified minimum average efficiency exceeding 20%
3D001 development or production software for 3A001.e.4
3D002 use software for 3A001.e.4
3E001 devlopment or production technology for 3A001.b
USML XV.e. Note 2 lists space qualified photovoltaic arrays having silicon cells or having single, dual, triple junction solar cells that have gallium arsenide as one of the junctions as on the CCL and not included in USML unless for military application
(DOS jurisdiction minimum average efficiency 31% or greater and associated specified equipment, per Related Controls in 3A001.e.4, 3D001, and 3E001, but not 3D002; no reference in proposed Category XI)
Delete 3A001.e.4, 3D001, and 3E001 DOS jurisdiction statements;
revise heading of XV.e Note to read: "The following are included in XV.e if for military use:"
revise XV.e.Note 2 to resolve differences between that Note and the 3A001.e.4 DOS jurisdiction statement;
add to XV.e Note 2 "(also see CCL 3A001.e.4) "
add to 3A001.e.4 "not controlled by USML Category XV.e Note 2"

3A002.a Recording equipment, as follows
3D001 development or production software for 3A002.a
3D002 use software for 3A002.a
3E001 devlopment or production technology for 3A002.a
USML XV.e Notes 3 and 5 list space qualified tape recorders and space qualified data recorders as on the CCL and not included in USML unless for military application
(no DOS jurisdiction statement re 3A001.a or 3D001, 3D002, 3E001 therefor; not in proposed Category XI;)
Revise heading of XV.e Note to read: "The following are included in XV.e if for military use:"
add technical specifications to XV.e Notes 3 and 5
add to XV.e Notes 3 and 5 "(also see CCL 3A002.a) "
add to 3A002.a "not controlled by USML Category XV.e Notes 3 or 5"

3A002.g.1 space qualified atomic frequency standards
3D001 development or production software for 3A002.g.1
3D002 use software for 3A002.g.1
3E001 devlopment or production technology for 3A002.g.1
USML XV.e Note 4 lists atomic frequency standards which are not space qualified as on the CCL and not included in USML unless for military application
(DOS jurisdiction statements in 3A002.g.1, 3D001, and 3E001, but not in 3D002; not in proposed Category XI)
Delete XV.e Note 4
add separate XV.e Note "XV.e includes space qualified atomic frequency standards whether or not for military use (also see 3A002.g.1)";
delete DOS jurisdiction statements re 3A002.g.1 and 3D001 and 3E001 therefor;
add to 3A002.g.1 "not controlled by USML XV.e Note x)"

3A101.a analog-to-digital converters usable in "missiles' for ruggedized equipment and
3A101.b accelerators delivering specified electromagnetic radiation usable for "missiles" or subsystems of "missiles"
3D101 for use of 3A101.b
(DOS jurisdiction statement in existing 3A101 Related Controls but not in November 28 proposed revision of 3A101 Related Controls; not found in existing USML; not in proposed USML Category XI)
Delete DOS jurisdiction statement in existing 3A101 Related Controls.
(Also see Attachment 2 re 3A101.a)

3A229 and 3A232 - see 1A007 in Attachment 3, above

4A001 Computers radiation hardened (DOS jurisdiction transient ionizing radiation; not found in current USML or in proposed Category XI)
Delete DOS jurisdiction statement in 4A001.
(Also see Attachment 2 re 4A001, 4A003 and 4A101 and Attachment 3 re 5A001.a.2.)

4A102, 7D103, 9D103 Hybrid computers for simulation of "missiles" and software therefor
(DOS jurisdiction; not found in existing USML or in proposed Category XI)
Delete DOS jurisdiction statements in 4A102, 7D103, 9D103;
conform texts of 4A102, 7D103, 9D103 with MTCR 16.A.1 and 16.D.1

5A001 Telecommunications
5A001.a.1 withstand transitory electronic or electromagnetic pulse effects
5A001.a.2 withstand gamma, neutron or ion radiation
5A001.a.3 outside temperature range from 218 K to 397 K
(5A001.a.1, a.2, a.3 DOS jurisdiction for use on board satellite; not found in existing USML or in proposed Category XI.)
Delete DOS jurisdiction
If DOS jurisdiction is mandated by legislation for use on satellites:
add to XI.a texts of 5A001.a.1 to a.3 "on board satellites (also see 5A001.a)";
add to 5A001.a.1, a.2, a.3 "not controlled by XI.a"

(See Item 12 in Attachment 1 re 5A001.e and see 4A001 in Attachment 3, above)

(Also see item 3 in Attachment 1 re 5A001.b.1)

5E001.b.1 technology for development or production of telecommunications equipment to be used on board satellites
5E001.b.2 technology for development or use of laser communication techniques automatically acquiring and tracking signals
5E001.b.4 technology for development of spread spectrum, including frequency hopping
5E001.c technology for development or production of equipment having any of numerous technical characteristics
(DOS jurisdiction for use on board satellites; USML XV.e Note 6 lists space qualified telecommunications equipment not designed for satellite use and Note 7 lists technology for development or production of telecommunications equipment for non-satellite use as on the CCL and not included in USML unless for military application; not in proposed USML Category XI)
Delete XV.e Notes 6 and 7
add separate XV.e Note "XV.e includes telecommunications equipment for use on board satellites (also see 5E001.b.1, b.2, b.4, and .c)";
delete DOS jurisdiction statement from 5E001 Related Controls;
add to 5E001.b.1 "(subject to Department of State jurisdiction, see USML XV.e Note x)"
add to 5E001.b.2, b.4, and .c "not controlled by USML XV.e Note x)"

6A001 - see items 1, 2, 16, and 17 in Attachment 1

6A002.a.1 space qualified solid state detectors as follows
6A002.a.2 image intensifier tubes as follows
6A002.a.3 non-space qualified focal plane arrays as follows
6A002.b.2.b.1 space qualified imaging sensors
6A002.d.1 space qualified cryocoolers

6D002 software for use of 6A002.b
6E001 technology for development of 6A002
6E002 technology for the production of 6A002
(DOS jurisdiction for 6A002.a.1, b.2.b.1, and d.1 and, if for military use and not part of civil equipment, for 6A002.a.2 and a.3; DOS jurisdiction for 6D002 for 6A002.b.2.b.1 unless CJ fo DOC; DOS for 6E001 or 6E002 for 6A002.a.1, b.2.b.1, or d.1 unless CJ for DOC; existing USML XII.c infrared focal plane arrays, image intensification tubes, and other night sighting devices for military use even if exported for commercial systems - second and third generation tubes and arrays DOC; USML XV.e Note 8 lists focal plane arrays having more than 2048 elements per array and having a peak response between 300 nm and 900 nm wave length as on the CCL and not included in USML unless for military application; not in proposed USML Category XI)
Delete DOS jurisdiction statements re 6A002.a.1, a.2, a.3, b.2.b.1, d.1, 6D002. 6E001, 6E002; delete XV.e Note 8 and, if significant, include relevant specifications in XII.c;
add to 6A002.a.1, a.2, a.3, and b.2.b.1 “not controlled by USML XII.c;
add to XII.c “(see also 6A002.a.1, a.2, a.3, b.2.b.1)";
(See also 9A620 in Attachment 2.)

6A004.c Specified space-qualified components for optical systems
6A004.d.1 Equipment to maintain surface figure or orientation of 6A004.c.1 or c.3 components
6C004 specified optical materials
6D001 software for development or production of 6A004
6E001 technology for development of 6A004
6E002 technology for production of 6A004
6E003.d.1 optical surface coating and treatment technology to achieve thickness uniformity and low loss (absorption and scatter)
(DOS jurisdiction for 6A004.c and d.1 and 6D001, 6E001, and 6E002 therefor, but not 6C004 or 6E003.d.1; not found in existing USML; not in proposed Category XI)
Delete DOS jurisdiction statements for 6A004.c and d.1 and 6D001, 6E001, 6E002 therefor

6A005 Lasers (DOS jurisdiction for military applications; existing USML XII.b and XV.e Note 9 lasers for military applications; proposed Category XI.a.3.xxix laser radar for missiles and UAVs)
In 6A005, delete DOS jurisdiction for military applications;
add to 6A005 “not controlled by USML XI.a.3.xxix or XII.b;
add technical specifications to XII.b to reduce inherent ambiguity of “military applications”
add to XI.a.3.xxix, XII.b, and XV.e Note “See also 6A005"
(See item 9 in Attachment 1 for more re 6A108 and XV.e Note 9)

6A005.f.3 optical equipment and components for phased-array Super High Power (SHPL) for coherent beam combination to a specified accuracy (DOS jurisdiction for shared aperture elements in SHPL applications per 6A005 Related Controls and 6A005.f N.B.)
Delete DOS jurisdiction in both 6A005 Related Controls and 6A005.f N.B.;
Include “shared aperture elements in SHPL applications (see also 6A005.f.3)” in XII.b additional

technical specifications
add to 6A005.f.3 “not controlled by USML XII.b”

6A103 - see item 15 in Attachment 1

6A108.a - see items 8 and 9 in Attachment 1

6D001 - see 6A004.c and d.1 in Attachment 3

6D002 - see 6A002.b.2.b.1 in Attachment 3

6D003.h.2 - see item 15 in Attachment 1

6D103 software that processes post-flight data for “missiles”
Add “or other rockets or unmanned aerial vehicles having a “range” equal to or better than 300 km” to conform with MTCR 12.D.2
In the absence of a Related Controls section, it is uncertain whether DOS jurisdiction is intended. If not, a cross reference to USML IV.i should be added to 6D103 and a cross reference to 6D103 should be added to USML IV.

6E001 and 6E002 - see 6A002 and 6A004 in Attachment 3

7A005 Global Navigation Satellite Systems ...
These items, when also described in USML Category XV(c), are subject to the export licensing authority of the U.S. Department of State, Directorate of Defense Trade Controls
NS applies to entire entry NS Column 1
MT applies to 7A005 when also described in7A105 MT Column 1
AT applies to entire entry AT Column 1

(If XV when revised does not include coverage overlapping 7A005, then the DoS carve-out from 7A005 should be completely eliminated.)

7A105 Receiving equipment, not controlled by 7A005, for Global Navigation Satellite Systems ... (These items, when also described in USML Category XV(c), are subject to the export licensing authority of the U.S. Department of State, Directorate of Defense Trade Controls)
MT applies to entire entry MT Column 1
AT applies to entire entry AT Column 1

(If XV when revised does not include coverage overlapping 7A105, then the DoS carve-out from 7A105 should be completely eliminated.)

7B103 ~~Specially designed~~ “production facilities” and “production equipment” not controlled by 7B002 or 7B003 for equipment controlled by 7A117 ~~(These items are subject to the export licensing authority of the U.S. Department of State, Directorate of Defense Trade Controls. See 22 CFRpart 121.)~~
MT applies to entire entry MT Column 1

AT applies to entire entry AT Column 1

(To conform with MTCR 2.B.1 and 2.B.2. Retransfer to BIS is for consistency with 9B116 and 9B115)

7D002 "Source code" according to the General Software Note for the "use" of any inertial navigation equipment ...
MT applies to ~~entire entry~~ 7D002 when also described in 7D101.
TSR: ~~N/A~~ Yes except MT

7D003 Other "software" according to the General Software Note as follows ...
MT applies to ~~"software" controlled by MT reasons. MT does not apply to "software" for equipment controlled by 7A008~~ 7D003 when also described in 7D101 or 7D102
TSR: ~~N/A~~ Yes except MT

7D102 Integration "software", not controlled by 7D003, according to the General Software Note as follows ...
Related Controls: The "software" ~~related to~~ for the "use" of ~~7A003.b or~~ 7A103.b ~~are~~ is subject to the export licensing authority of the U.S. Department of State

(7D102 does not control software related to 7A003.b.)

7D103 "Software", not controlled by 7D002 or 7D003, ~~specially designed~~ according to the General Software Note for modelling or simulation ... (This entry, when also described in USML Category IV or XV, is subject to the export licensing authority of the U.S. Department of State...)
MT applies to entire entry MT Column 1
AT applies to entire entry AT Column 1

(If IV or XV when revised do not include this 7D103 text from MTCR 16.D.1, then the DoS carve-out from 7A105 should be completely eliminated.)

7E003
MT applies to ~~entire entry~~ "technology" for equipment controlled by 7A001 to 7A004 for MT reasons
TSR: ~~N/A~~ Yes except MT

7E004 Other "technology" according to the General Technology Note as follows ...
MT applies to ~~entire entry except 7E994.a.7~~ 7E004.b.5 when also described in 7E104 or 7E105
TSR: ~~N/A~~ Yes except MT

7E104 Design "technology" according to the General Technology Note not controlled by 7E004.b.5 for the integration of flight control ... for "missiles" ... (This entry, when also described in USML Category IV or VIII or XV, is subject to the export licensing authority of the U.S.Department of State ...)
MT applies to entire entry MT Column 1
AT applies to entire entry AT Column 1

(If IV or VIII or XV when revised do not include this 7E104 text, from MTCR 10.E.2, then the DoS carve-out from 7E104 should be completely eliminated.)

7E105 Design "technology" according to the General Technology Note, not controlled by 7E004.b.5 or by USML Categories IV, VIII, or XV, for integration of air vehicle fuselage, propulsion system and lifting control surfaces for "missile" aerodynamic performance throughout the flight regine.

MT applies to entire entry	MT Column 1
AT applies to entire entry	AT Column 1

(If IV, VIII, or XV when revised do not include this 7E105 text, from MTCR 10.E.1, then there should be no DOS carve-out from 7E105.)