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STATUTORY INSTRUMENTS

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**2023 No. 695**

**The Export Control (Amendment) Regulations 2023**

**Amendments to Council Regulation (EC) No 428/2009**

3.—(1) Council Regulation (EC) No 428/2009 of 5 May 2009 setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items (Recast)<sup>(1)</sup> is amended as follows—

(2) In Annex I (List Of Dual-Use Items)—

- (a) in the section headed “General Notes To Annex I”, in Note 4, for “(including hydrates)” substitute “(e.g., hydrates, isotopically-labelled forms or all possible stereoisomers)”;
- (b) in the section headed “Definitions Of Terms Used In This Annex”—
  - (i) in entry ““Intrusion software”” at “b.” for “program” substitute ““program””;
  - (ii) in entry ““Program”” for “(2 6)” substitute “(1 6 7)”;
- (c) in the section headed “Category 1 – Special Materials And Related Equipment”—
  - (i) in the Technical Note in entry 1A004.d., at the beginning, for “*Trace detection*” substitute “*For the purposes of 1A004.d., ‘trace detection’*”;
  - (ii) in the Technical Note in entry 1A006, for “*1A006.b.*” substitute “*1A006.b.,*”;
  - (iii) in the Technical Notes in entry 1A007 in paragraph 2—
    - (aa) for “*1A007.b.*” substitute “*1A007.b.,*”;
    - (bb) for “*vaporization*” substitute “*vaporisation*”;
  - (iv) in the Technical Note in entry 1A008, at the beginning, for “*Shaped charges*” substitute “*For the purposes of 1A008.a., ‘shaped charges’*”;
  - (v) in the Technical Notes in entry 1B001 in paragraph 1—
    - (aa) for “*purpose*” substitute “*purposes*”;
    - (bb) for “*program*” substitute ““*program*””;
  - (vi) in the Technical Note in entry 1C001.a. Note 1.c.1., at the beginning, for “*Absorption test samples for 1C001.a. Note: 1.c.1.*” substitute “*For the purposes of 1C001.a. Note 1.c.1., absorption test*”;
  - (vii) in the Technical Note in entry 1C001.a. Note 1.e, at the beginning, for ““*Open-cell*”” substitute “*For the purposes of 1C001.a. Note 1.e., ‘open-cell’*”;
  - (viii) in the Technical Note in entry 1C001.c., at the beginning, for ““*Bulk*”” substitute “*For the purposes of 1C001.c., ‘bulk’*”;
  - (ix) for the first set of Technical Notes in entry 1C002 substitute—

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*“Technical Note:*

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(1) EUR 2009/428. Annex I was amended by S.I. 2022/410 and S.I. 2023/302. There are other amending instruments but none are relevant.

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*Status:* This is the original version (as it was originally made). This item of legislation is currently only available in its original format.

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*For the purposes of IC002, metal alloys are those containing a higher percentage by weight of the stated metal*

*than of any other element.”;*

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(x) after entry IC002.b., on a new line, insert—

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*“Technical Notes:*

*For the purposes of IC002.b.:*

1. *‘Stress-rupture life’ should be measured in accordance with ASTM standard E-139 or national equivalents.*
2. *‘Low cycle fatigue life’ should be measured in accordance with ASTM Standard E-606 ‘Recommended Practice for Constant-Amplitude Low-Cycle Fatigue Testing’ or national equivalents. Testing should be axial with an average stress ratio equal to 1 and a stress-concentration factor (Kt) equal to 1. The average stress ratio is defined as maximum stress minus minimum stress divided by maximum stress.”;*

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(xi) in the Technical Note in entry IC002.c.1., at the beginning, for “X” substitute “*For the purposes of IC002.c.1., X*”;

(xii) in the Technical Notes at the end of entry IC002, on a new line after the heading, insert—

*“For the purposes of IC002:”*

(xiii) in paragraph 10 of the Technical Notes at the end of entry IC002 for “*Solidify*” substitute “*For the purposes of IC002 Technical Notes, ‘solidify’*”;

(xiv) in the Technical Note in entry IC003.a., at the beginning, for “*Measurement*” substitute “*For the purposes of IC003.a., measurement*”;

(xv) in the Technical Note in entry IC003.c., at the beginning, for “*Nanocrystalline materials in IC003.c.*” substitute “*For the purposes of IC003.c., ‘nanocrystalline materials’*”;

(xvi) in the Technical Note in entry IC005 for “*IC005*” substitute “*IC005*”;

(xvii) for the Technical Notes in entry IC008 substitute—

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*“Technical Notes:*

1. *For the purposes of IC008.a.2. thermoplastic materials, IC008.a.4. materials and IC008.f. materials, the ‘glass transition temperature (Tg)’ is determined using the method described in ISO 11357-2 (1999) or national equivalents.*
  2. *For the purposes of IC008.a.2. thermosetting materials and IC008.a.3. materials, the ‘glass transition temperature (Tg)’ is determined using the 3-point bend method described in ASTM D 7028-07 or equivalent national standard. The test is to be performed using a dry test specimen which has attained a minimum of 90 % degree of cure as specified by ASTM E 2160-04 or equivalent national standard, and was cured using the combination of standard- and post-cure processes that yield the highest Tg.”;*
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- (xviii) in the Technical Notes at the beginning of entry 1C010—
  - (aa) in paragraph 1 for “*purpose*” substitute “*purposes*”;
  - (bb) in paragraph 1 for “*10618:2004*” substitute “*10618 (2004)*”;
  - (cc) in paragraph 2, at the beginning, for “*Assessing*” substitute “*For the purposes of assessing*”;
  - (dd) in paragraph 2 for “*1C010*” substitute “*1C010, this*”;
- (xix) in the Technical Note in entry 1C010.d.2., at the beginning, for “*‘Commingled’*” substitute “*For the purposes of 1C010.d.2., ‘commingled’*”;
- (xx) in paragraph 1 of the Technical Notes at the end of entry 1C010 for “*‘Carbon’*” substitute “*For the purposes of 1C010.e. and Note 1, ‘carbon’*”;
- (xxi) for paragraph 2 of the Technical Notes at the end of entry 1C010 substitute—

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“2. *For the purposes of 1C010.e.2. materials, ‘Dynamic Mechanical Analysis glass transition temperature (DMA Tg)’ is determined using the method described in ASTM D 7028-07, or equivalent national standard, on a dry test specimen. In the case of thermoset materials, degree of cure of a dry test specimen shall be a minimum of 90 % as defined by ASTM E 2160-04 or equivalent national standard.*”;

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- (xxii) for the Technical Note in entry 1C011.a. substitute—

*“For the purposes of 1C011.a., the natural content of hafnium in the zirconium (typically 2 % to 7 %) is counted with the zirconium.”;*
- (xxiii) in the Technical Note in entry 1C012, at the beginning, for “*These*” substitute “*For the purposes of 1C012, these*”;
- (xxiv) in entry 1C351.d.13., for “*Cholera toxin*”, substitute “*Not used*”;
- (xxv) after entry 1C351.d.19., insert the following new entries on successive lines—

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- “20. *Brevetoxins;*
  - 21. *Gonyautoxins;*
  - 22. *Nodularins;*
  - 23. *Palytoxin;*”;
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- (xxvi) in entry 1C353.a.1. for “*or genes*” substitute “*, genes, translated product or translated products,*”;
- (xxvii) in entry 1C354.b.2. for “*Xanthomonas axonopodis pv. citri (Xanthomonas campestris pv. citri A) [Xanthomonas campestris pv. citri];*”, substitute “*Xanthomonas citri pv. citri (Xanthomonas axonopodis pv. citri, Xanthomonas campestris pv. citri);*”;
- (xxviii) in entry 1C354.b.4. for “*Clavibacter michiganensis subsp. sepedonicus (Corynebacterium michiganensis subsp. sepedonicum or Corynebacterium sepedonicum);*” substitute “*Clavibacter michiganensis subsp. sepedonicus (Clavibacter sepedonicus, Clavibacter michiganense subsp. sepedonicus, Corynebacterium michiganensis subsp. sepedonicum or Corynebacterium sepedonicum);*”;

- (xxix) in entry 1C354.c.2. for “Cochliobolus miyabeanus (*Helminthosporium oryzae*);”, substitute “*Bipolaris oryzae* (*Cochliobolus miyabeanus*, *Helminthosporium oryzae*);”;
- (xxx) in entry 1C354.c.3. for “*Microcyclus ulei* (syn. *Dothidella ulei*);” substitute “*Pseudocercospora ulei* (*Microcyclus ulei*, *Dothidella ulei*);”;
- (d) in the section headed “Category 2 — Materials Processing”—
- (i) in the Technical Notes in entry 2A001.a., on a new line after the heading, insert—  
“*For the purposes of 2A001.a.:*”
  - (ii) in paragraph 1 of the Technical Notes in entry 2A001.a. for “*Ring -*” substitute “*‘Ring’ is an*”;
  - (iii) in paragraph 2 of the Technical Notes in entry 2A001.a. for “*Rolling element -*” substitute “*‘Rolling element’ is a*”;
  - (iv) in the Technical Notes in entry 2B—
    - (aa) in paragraph 1, at the beginning, for “*Secondary*” substitute “*For the purposes of 2B, secondary*”;
    - (bb) in paragraph 3, at the beginning, for “*Axis*” substitute “*For the purposes of 2B, axis*”;
    - (cc) in paragraph 5, at the beginning, for “*Stated*” substitute “*For the purposes of 2B, ‘stated’*”;
    - (dd) in paragraph 4 for “*2B009*” substitute “*2B009*,”;
    - (ee) in paragraph 5 for “*tests*” substitute “*tests*,”;
    - (ff) in paragraph 7 for “*purpose*” substitute “*purposes*”;
  - (v) in the Technical Note in entry 2B004, at the beginning, for “*The*” substitute “*For the purposes of 2B004, the*”;
  - (vi) in the Technical Note in entry 2B006.a., at the beginning, for “*The*” substitute “*For the purposes of 2B006.a.*,”;
  - (vii) in the Technical Note in entry 2B008.c., at the beginning, for “*A ‘compound’*” substitute “*For the purposes of 2B008.c., a ‘compound’*”;
  - (viii) in the Technical Note in entry 2B009 for “*purpose*” substitute “*purposes*”;
  - (ix) in entry 2B352.d.1.b.1. for “*sterilised*” substitute “*sterilised*”;
  - (x) in entry 2B352.d.1.b.1. for “*disinfected*” substitute “*disinfected*”;
  - (xi) for the Technical Note in entry 2B352.d.1.b. substitute—

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*Technical Note:*

*In 2B352.d.1.b. ‘sterilised’ denotes the elimination of all viable microbes from the equipment through the use of either physical (e.g. steam) or chemical agents. ‘Disinfected’ denotes a process to reduce the number of microorganisms but not usually of bacterial spores, through the use of chemical agents, without necessarily killing or removing all organisms.’;*

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- (xii) for Note 2 in entry 2B352.f.2. substitute—

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*“Note 2: 2B352.f.2. includes any isolator meeting all the characteristics specified in 2B352.f.2., regardless of its intended use and its designation, except for medical isolators specially designed for barrier nursing or transportation of infected patients.”;*

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- (xiii) omit Note 3 in entry 2B352.f.2.;
- (xiv) in paragraph 1 of the Technical Notes in entry 2E003.b.1., for “*Direct-acting*” substitute “*For the purposes of 2E003.b.1.c., direct-acting*”;
- (e) in the section headed “Category 3 — Electronics”—
  - (i) in the Technical Note in entry 3A001.a.2., at the beginning, for “*Non-volatile*” substitute “*For the purposes of 3A001.a.2., non-volatile*”;
  - (ii) in the Technical Notes in entry 3A001.a.5.a., on a new line after the heading, insert—  
“*For the purposes of 3A001.a.5.a.:*”;
  - (iii) in the Technical Notes in entry 3A001.a.5.b., on a new line after the heading, insert—  
“*For the purposes of 3A001.a.5.b.:*”;
  - (iv) in the Technical Notes in entry 3A001.a.7., on a new line after the heading, insert—  
“*For the purposes of 3A001.a.7.:*”;
  - (v) for the Technical Note in entry 3A001.a.12. substitute—  
“*For the purposes of 3A001.a.12., when N is equal to 1024 points, the formula gives an execution time of 500 μs.*”;
  - (vi) in the Technical Note in entry 3A001.a.13., at the beginning, for “*The*” substitute “*For the purposes of 3A001.a.13., the*”;
  - (vii) for the heading “*Technical Notes*” in entry 3A001.a.14. substitute “*Technical Notes*”;
  - (viii) in the Technical Notes in entry 3A001.a.14., on a new line after the heading, insert—  
“*For the purposes of 3A001.a.14.:*”;
  - (ix) in the Technical Note in entry 3A001.b.1.d., at the beginning, for “*Dual*” substitute “*For the purposes of 3A001.b.1.d., dual*”;
  - (x) for the Technical Notes in entry 3A001.b.9. substitute—

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*“Technical Notes:*

1. *For the purposes of 3A001.b.9.a., the ‘turn-on time’ refers to the time from fully-off to fully operational, i.e., it includes the warm-up time of the MPM.*
2. *For the purposes of 3A001.b.9.b., the following example is provided to calculate the volume: for a maximum rated power of 20 W, the volume would be: 20 W x 10 cm<sup>3</sup> /W = 200 cm<sup>3</sup>.*

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- (xi) in the Technical Note in entry 3A001.b.10., at the beginning, for “*In*” substitute “*For the purposes of*”;
  - (xii) in the Technical Note in entry 3A001.b.11., at the beginning, for “*A frequency*” substitute “*For the purposes of 3A001.b.11., a frequency*”;
  - (xiii) in the Technical Notes in entry 3A001.b.12.—
    - (aa) on a new line after the heading, insert—

*“For the purposes of 3A001.b.12.:”;*

- (bb) in paragraph 1 omit the colon after “*module*”;
- (cc) in paragraph 2 omit the colon after “*module*”;
- (dd) in paragraph 3 omit the colon after “*MMIC*”;
- (ee) in paragraph 3 after “*phase*” insert “*control for transmission and reception of signals.*”;
- (ff) in paragraph 4 omit the colon after “*MMIC*”;
- (xiv) in the Technical Note in entry 3A001.c.1., at the beginning, for “*Frequency*” substitute “*For the purposes of 3A001.c.1., ‘frequency’*”;
- (xv) in the Technical Notes in entry 3A001.e.1. for each occurrence of “*purpose*” substitute “*purposes*”;
- (xvi) in paragraph 1 of the Technical Notes in entry 3A001.e.1. for “*ohms*” substitute “*Ohms*”;
- (xvii) in paragraph 5 of the Technical Notes in entry 3A001.e.1. for “*ampere*” substitute “*amperes*”;
- (xviii) in the Technical Note in entry 3A001.e.4., at the beginning, for “*AM0*” substitute “*For the purposes of 3A001.e.4., ‘AM0’*”;
- (xix) in the Technical Notes in entry 3A002.a.6., on a new line after the heading, insert—  
“*For the purposes of 3A002.a.6.:*”;
- (xx) in the Technical Notes in entry 3A002.c.4.—
  - (aa) in paragraph 1, at the beginning, for “*Real-time bandwidth*” substitute “*For the purposes of 3A002.c.4.a., ‘real-time bandwidth’*”;
  - (bb) in paragraph 2, at the beginning, for “*Probability of discovery in 3A002.c.4.b.1.*” substitute “*For the purposes of 3A002.c.4.b.1., probability of discovery*”;
  - (cc) in paragraph 4, at the beginning, for “*A ‘frequency’*” substitute “*For the purposes of 3A002.c.4.b.2., a ‘frequency’*”;
- (xxi) in the Technical Note in entry 3A002.d.4., at the beginning, for “*In*” substitute “*For the purposes of*”;
- (xxii) in the Technical Note in entry 3A002.d.5., at the beginning, for “*RF*” substitute “*For the purposes of 3A002.d.5., ‘RF’*”;
- (xxiii) in Note 1 in entry 3A002.d.6. for “*purpose*” substitute “*purposes*”;
- (xxiv) in paragraph 1 of the Technical Notes in entry 3A002.d., at the beginning, for “*The*” substitute “*For the purposes of 3A002.d., the*”;
- (xxv) in paragraph 2 of the Technical Notes in entry 3A002.d. for “*3A002.d.1.a*” substitute “*3A002.d.1.a.*”;
- (xxvi) in the Technical Note in entry 3A002.e.3., at the beginning, for “*Nonlinear*” substitute “*For the purposes of 3A002.e.3., ‘nonlinear’*”;
- (xxvii) in the Technical Notes in entry 3A002.h., on a new line after the heading, insert—  
“*For the purposes of 3A002.h.:*”;
- (xxviii) in the Technical Notes in entry 3B001.e. for “*purpose*” substitute “*purposes*” in each place it occurs;
- (xxix) in the Technical Note in entry 3B001.f.1.b., at the beginning, for “*The*” substitute “*For the purposes of 3B001.f.1.b., the*”;

- (xxx) in the Technical Note in entry 3B001.j., at the beginning, for “*Extreme*” substitute “*For the purposes of 3B001.j., ‘extreme’*”;
- (xxxi) in the Technical Note in entry 3D003, at the beginning, for “*Computational*” substitute “*For the purposes of 3D003, ‘computational’*”;
- (xxxii) in the Technical Notes in entry 3D006, on a new line after the heading, insert—  
“*For the purposes of 3D006.:’*”;
- (xxxiii) in the Technical Note to Note 3 in entry 3E001, at the beginning, for “*A ‘Process’*” substitute “*For the purposes of 3E001 Note 3, a ‘Process’*”;
- (xxxiv) in the Technical Note in entry 3E002.a., at the beginning, for “*A ‘vector’*” substitute “*For the purposes of 3E002.a., a ‘vector’*”;
- (xxxv) in the Technical Notes in entry 3E002 for “*purpose*” substitute “*purposes*” in each place it occurs;
- (xxxvi) in entry 3E004 for “3E004” substitute “3E004.”;
- (f) in the section headed “Category 4 — Computers”—
  - (i) in the Technical Note in Note 2, at the beginning, for “*Main*” substitute “*For the purposes of Note 2, ‘main’*”;
  - (ii) in paragraph 1 of the Technical Notes in entry 4A004, at the beginning, for “*Systolic*” substitute “*For the purposes of 4A004.a., ‘systolic’*”;
  - (iii) in paragraph 2 of the Technical Notes in entry 4A004, at the beginning, for “*Neural*” substitute “*For the purposes of 4A004.b., ‘neural’*”;
  - (iv) in paragraph 3 of the Technical Notes in entry 4A004, at the beginning, for “*Optical*” substitute “*For the purposes of 4A004.c., ‘optical’*”;
  - (v) in entry 4D001.b.1. for “15” substitute “24”;
  - (vi) in entry 4E001.b.1. for “15” substitute “24”;
- (g) in the section headed “Category 5 — Telecommunications and Information Security”, in the part headed “Part 1 – Telecommunications”—
  - (i) in the Technical Note in entry 5A001.b.5., at the beginning, for “*Channel*” substitute “*For the purposes of 5A001.b.5.b., ‘channel’*”;
  - (ii) in the Technical Note in entry 5A001.c., at the beginning, for “*Proof Test’:*” substitute “*For the purposes of 5A001.c., ‘proof test’ is the’*”;
  - (iii) in the Technical Note in entry 5A001.d. insert a comma between “5A001.d.” and “*electronically*”;
  - (iv) in the Technical Note in entry 5A001.g., at the beginning, for “*Non-radar*” substitute “*For the purposes of 5A001.g., non-radar’*”;
- (h) in the section headed “Category 5 - Telecommunications and Information Security”, in the part headed “Part 2 – “Information Security””—
  - (i) in the Technical Note in Note 3: Cryptography Note for “*purpose*” substitute “*purposes*”;
  - (ii) in the Technical Note in entry 5A002.a. to Note 2.a.1.b., at the beginning, for “*Personal*” substitute “*For the purposes of 5A002.a. Note 2.a.1.b.1., ‘personal’*”;
  - (iii) in the Technical Note in entry 5A002.a. to Note 2.a.2., at the beginning, for “*Readers/writers*” substitute “*For the purposes of 5A002.a. Note 2.a.2. ‘Readers/writers’*”;

- (iv) in the Technical Note in entry 5A002.a. to Note 2.b., at the beginning, for “*Money transactions*” in 5A002.a. Note 2.b.” substitute “*For the purposes of 5A002.a. Note 2.b., ‘money transactions’*”;
- (v) in paragraph 1 of the Technical Notes in entry 5A002.a. to Note 2.j., at the beginning, for “*Connected*” substitute “*For the purposes of 5A002.a. Note 2.j., ‘connected’*”;
- (vi) in paragraph 2 of the Technical Notes in entry 5A002.a. Note 2.j., at the beginning, for “*Non-arbitrary*” substitute “*For the purposes of 5A002.a. Note 2.j.1.a.1., ‘non-arbitrary’*”;
- (vii) in the Technical Note in entry 5A002.b., at the beginning, for “*A ‘cryptographic’*” substitute “*For the purposes of 5A002.b., a ‘cryptographic’*”;
- (viii) in the Technical Note in entry 5A002.c., at the beginning, for “*Quantum*” substitute “*For the purposes of 5A002.c., ‘quantum’*”;
- (ix) in the Technical Note in entry 5A004.a., at the beginning, for “*‘Cryptanalytic’*” substitute “*For the purposes of 5A004.a., ‘cryptanalytic’*”;
- (x) for the Technical Note in entry 5A004.b. substitute—
  - “*For the purposes of 5A004.b.1., ‘extract raw data’ from a computing or communications device means to retrieve binary data from a storage medium, e.g., RAM, flash or hard disk, of the device without interpretation by the device’s operating system or filesystem.*”;
- (i) in the section headed “Category 6 - Sensors and Lasers”—
  - (i) in paragraph 1 of the Technical Notes in entry 6A001.a.1.a.1., at the beginning, for “*Sounding*” substitute “*For the purposes of 6A001.a.1.a.1.c., ‘sounding’*”;
  - (ii) in paragraph 2 of the Technical Notes in entry 6A001.a.1.a.1., at the beginning, for “*Enhancement*” substitute “*For the purposes of 6A001.a.1.a.1.d., ‘enhancement’*”;
  - (iii) in the Technical Note in entry 6A001.a.1.a.2.—
    - (aa) at the beginning, for “*The*” substitute “*For the purposes of 6A001.a.1.a.2., the*”;
    - (bb) omit “*of the equipment specified in 6A001.a.1.a.2*”;
  - (iv) in the Technical Note in entry 6A001.a.1.a.2.a.2., at the beginning, for “*Sounding*” substitute “*For the purposes of 6A001.a.1.a.2.a.2., ‘sounding’*”;
  - (v) in the Technical Notes in entry 6A001.a.1.a.3., on a new line after the heading, insert—
    - “*For the purposes of 6A001.a.1.a.3.:*”;
  - (vi) in the Technical Note in entry 6A001.a.1.c.1., at the beginning, for “*The ‘free-field Source Level (SLRMS)’*” substitute “*For the purposes of 6A001.a.1.c.1., the ‘free-field Source Level (SLRMS)’*”;
  - (vii) in the Technical Notes immediately below entry 6A001.a.2.a., on a new line after the heading, insert—
    - “*For the purposes of 6A001.a.2.a.:*”;
  - (viii) in the Technical Notes in entry 6A001.a.2.a. immediately below entry 6A001.a.2.a.6.—
    - (aa) in paragraph 1, at the beginning, for “*Piezoelectric*” substitute “*For the purposes of 6A001.a.2.a.3.b., ‘piezoelectric’*”;
    - (bb) in paragraph 2, at the beginning, for “*Flexible*” substitute “*For the purposes of 6A001.a.2.a.3.c., ‘flexible’*”;



- (cc) in paragraph 3, at the beginning, for “*Hydrophone*” substitute “*For the purposes of 6A001.a.2.a., ‘hydrophone’*”;
- (ix) in the Technical Note in entry 6A001.a.2.b., at the beginning, for “*Hydrophone*” substitute “*For the purposes of 6A001.a.2.b., hydrophone*”;
- (x) in the Technical Note in entry 6A001.a.2.b.2., at the beginning, for “*‘Able to be modified’ in 6A001.a.2.b.1. and 2.*” substitute “*For the purposes of 6A001.a.2.b., ‘able to be modified’ in 6A001.a.2.b.*”;
- (xi) in the Technical Notes in entry 6A001.a.2.g.—
  - (aa) in paragraph 1, at the beginning, for “*Accelerometer-based*” substitute “*For the purposes of 6A001.a.2.g., accelerometer-based*”;
  - (bb) in paragraph 2, at the beginning, for “*‘Acceleration’*” substitute “*For the purposes of 6A001.a.2.g.2., ‘acceleration’*”;
- (xii) in the Technical Note in entry 6A002.a.2., at the beginning, for “*‘Charge’*” substitute “*For the purposes of 6A002.a.2., ‘charge’*”;
- (xiii) in the Technical Note at the beginning of entry 6A002.a.3. for “*‘Linear’*” substitute “*For the purposes of 6A002.a.3., linear*”;
- (xiv) in the Technical Note in entry 6A002.a.3. after Note 2.c.2., at the beginning, for “*A response*” substitute “*For the purposes of 6A002.a.3. Note 2.c.2.a., a response*”;
- (xv) in the Technical Note in entry 6A002.c., at the beginning, for “*‘Direct’*” substitute “*For the purposes of 6A002.c., ‘direct’*”;
- (xvi) in the Technical Note in entry 6A002.f., at the beginning, for “*A ‘Read-Out’*” substitute “*For the purposes of 6A002.f., a ‘Read-out’*”;
- (xvii) in the Technical Note for entry 6A002.f., for “*(‘FPA’)*” substitute “*(“FPA”)*”;
- (xviii) in the Technical Notes in entry 6A003.b.1.—
  - (aa) in paragraph 1 for “*purpose*” substitute “*purposes*”;
  - (bb) in paragraph 1 for “*this entry*” substitute “*6A003.b.1.*”;
  - (cc) in paragraph 2 for “*purpose*” substitute “*purposes*”;
  - (dd) in paragraph 2 for “*this entry*” substitute “*6A003.b.1.b.3.*”;
- (xix) in the Technical Notes in entry 6A003.b.4. after Note 3.—
  - (aa) in paragraph 1, at the beginning, insert “*For the purposes of 6A003.b.4. Note 3.b.1.*”;
  - (bb) in paragraph 1 after “*horizontal detector elements*” insert a full stop;
  - (cc) in paragraph 2, at the beginning, for “*‘Direct’*” substitute “*For the purposes of 6A003.b.4. Note 3.b.3., ‘direct’*”;
- (xx) in the Technical Note for entry 6A004.a., for “*purpose*” substitute “*purposes*”;
- (xxi) in the Technical Note for entry 6A004.a.1., on a new line after the heading, insert—

*“For the purposes of 6A004.a.1.:”*
- (xxii) in the Technical Notes in entry 6A004.e.—
  - (aa) in paragraph 1, at the beginning, for “*An*” substitute “*For the purposes of 6A004.e., an*”;
  - (bb) in paragraph 2, at the beginning, for “*Manufacturers*” substitute “*For the purposes of 6A004.e.2., manufacturers*”;
  - (cc) in paragraph 2, for “*control*” substitute “*specified*”;

- (xxiii) in the Technical Note in entry 6A005 following Note 2, at the beginning, for “*Non-repetitive*” substitute “*For the purposes of 6A005 Note 2, ‘non-repetitive’*”;
- (xxiv) in the Technical Note in entry 6A005 following Note 6, at the beginning, for “*In 6A005 ‘Wall-plug’*” substitute “*For the purposes of 6A005., ‘wall-plug’*”;
- (xxv) in entry 6A005.b.3.a.2., for “50” substitute “80”;
- (xxvi) in entry 6A005.d.1.a.1., for “1 510 nm” substitute “1 570 nm”;
- (xxvii) in entry 6A005.d.1.a.1., for “1,5 W” substitute “2,0 W”;
- (xxviii) in entry 6A005.d.1.a.2., for “1 510 nm” substitute “1 570 nm”;
- (xxix) in the Technical Notes for entry 6A005.d.1.e., on a new line after the heading, insert—
  - “*For the purposes of 6A005.d.1.e.:’*”;
- (xxx) in the Technical Note in entry 6A005.d.5.c., at the beginning, for “*Transfer*” substitute “*For the purposes of 6A005.d.5.c., ‘transfer’*”;
- (xxxi) in the Technical Note in entry 6A005.d.5.c., for “*non-lasing*” substitute “*non-lasing*”;
- (xxxii) in the Technical Note in entry 6A005.e.1., at the beginning for “*‘Active’*” substitute “*For the purposes of 6A005.e.1., ‘active’*”;
- (xxxiii) in the Technical Note in entry 6A005.g., at the beginning, for “*‘Laser’*” substitute “*For the purposes of 6A005.g., ‘laser’*”;
- (xxxiv) in the Technical Note in entry 6A008.b., at the beginning, for “*The*” substitute “*For the purposes of 6A008.b., the*”;
- (xxxv) in the Technical Note in entry 6A008.e., at the beginning, for “*Electronically*” substitute “*For the purposes of 6A008.e., electronically*”;
- (xxxvi) in the Technical Note in entry 6A008.l.1., at the beginning, for “*‘Automatic’*” substitute “*For the purposes of 6A008.l.1., ‘automatic’*”;
- (xxxvii) in the Technical Note in entry 6A008.l.4., at the beginning, for “*Sensors*” substitute “*For the purposes of 6A008.l.4., sensors*”;
- (xxxviii) at the end of the Technical Note in entry 6A008.l.4. and after the words “*Military Goods Controls*”, on a new line insert the following—

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*“Note: 6A008.l. does not control systems, equipment and assemblies designed for ‘vessel traffic services’”;*

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- (xxxix) in entry 6A008.l.4. omit the following which occurs at the end of the entry: “*Note: 6A008.l. does not control systems, equipment and assemblies designed for ‘vessel traffic services’*”;
- (xl) in entry 6B007 for “better” substitute “less (better)”;
- (xli) in the Technical Note in entry 6C002.b.—
  - (aa) at the beginning, for “*‘Mole’*” substitute “*For the purposes of 6C002.b.1. ‘mole’*”;
  - (bb) for “*the sum of moles*” substitute “*the sum of the moles*”;
- (xlii) in paragraph 1 of the Technical Notes in entry 6C005.b. for “*6C005.b.*” substitute “*6C005.b.1.b.*”;

- (xliii) in the Technical Note in entry 6D003.h.2.b., at the beginning, for “*Average side lobe level*’ in 6D003.h.2.b.” substitute “*For the purposes of 6D003.h.2.b., ‘average side lobe level’*”;
- (xliv) in the Technical Notes in entry 6E003.a.1., at the beginning, for “*Optical*” substitute “*For the purposes of 6E003.a.1., ‘optical’*”;
- (j) in the section headed “Category 7 - Navigation and Avionics”—
  - (i) in entry 7A003 omit the entirety of Note 1;
  - (ii) in entry 7A003, for “*Note 2.*” substitute “*Note.*”;
  - (iii) for the first Technical Note for entry 7A003 substitute—

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*“Technical Notes*

1. *For the purposes of 7A003., ‘Inertial measurement equipment or systems’ incorporate accelerometers or gyroscopes to measure changes in velocity and orientation in order to determine or maintain heading or position without requiring an external reference once aligned. ‘Inertial measurement equipment or systems’ include:*
  - Attitude and Heading Reference Systems (AHRs);*
  - Gyrocompasses;*
  - Inertial Measurement Units (IMUs);*
  - Inertial Navigation Systems (INs);*
  - Inertial Reference Systems (IRs);*
  - Inertial Reference Units (IRUs).*
2. *For the purposes of 7A003, ‘positional aiding references’ independently provide position, and include:*
  - a. *“Satellite navigation system”;*
  - b. *“Data-Based Referenced Navigation” (“DBRN”).*
  - c. *Designed for “aircraft”, land vehicles or vessels, providing position without the use of ‘positional aiding references’, and having any of the following “accuracies” subsequent to normal alignment:*
    1. *0,8 nautical miles per hour (nm/hr) “Circular Error Probable” (“CEP”) rate or less (better);*
    2. *0,5 % distanced travelled “CEP” or less (better); or*
    3. *Total drift of 1 nautical mile “CEP” or less (better) in a 24 hr period;”;*

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(iv) in the Technical Note in entry 7A003.a.—

- (aa) at the beginning, for “*The performance parameters in 7A003.a.1., 7A003.a.2. and 7A003.a.3.*” substitute “*For the purposes of 7A003.a.1., 7A003.a.2. and 7A003.a.3., the performance parameters*”;

- (bb) for “*non-positional aiding references*” substitute “*non-‘positional aiding references’*”;
- (v) in the Technical Note in entry 7A003.b., at the beginning, for “7A003.b.” substitute “*For the purposes of 7A003.b., this entry*”;
- (vi) in the Technical Note in entry 7A004., at the beginning, for “*Star*” substitute “*For the purposes of 7A004.a., ‘star’*”;
- (vii) in the Technical Note in entry 7A005.b.—
  - (aa) for “7A005.b.” substitute “7A005.b.”;
  - (bb) for “*signal processing*” substitute ““*signal processing*””;
- (viii) in the Technical Note in entry 7A006, at the beginning, for “*Power*” substitute “*For the purposes of 7A006.a., ‘power’*”;
- (ix) in the Technical Notes in entry 7B001, on a new line after the heading, insert—
 

*“For the purposes of 7B001:”*
- (x) in the Technical Note in entry 7D002, at the beginning, insert “*For the purposes of 7D002,*”;
- (xi) in the Note for entry 7D004, for “*program*” substitute ““*program*””;
- (xii) in the Technical Note in entry 7E004.a.5., at the beginning, for “*Primary*” substitute “*For the purposes of 7E004.a.5., ‘primary’*”;
- (xiii) in the Technical Note in entry 7E004.a.6., at the beginning, for “*A flight*” substitute “*For the purposes of 7E004.a.6., a ‘flight’*”;
- (xiv) in the Technical Note in entry 7E004.b.7.a., at the beginning, for “*Inner-loop*” substitute “*For the purposes of 7E004.b.7.a., ‘inner-loop’*”;
- (xv) in the Technical Note in entry 7E004.b.7.b.2., at the beginning, for “*Abnormal*” substitute “*For the purposes of 7E004.b.7.b.2., ‘abnormal’*”;
- (xvi) in the Note in entry 7E004.b., at the end of 7E004.b., for “*program*” substitute ““*program*””;
- (xvii) in the Technical Note in entry 7E004.c.3., at the beginning, for “*Variable*” substitute “*For the purposes of 7E004.c.3., ‘variable’*”;
- (k) in the section headed “Category 8 – Marine”—
  - (i) in entry 8A001.c.1.c. for “*Optical data*” substitute “*Wireless optical data*”;
  - (ii) in the Technical Note in entry 8A002.a.4.—
    - (aa) at the beginning, for “*The objective of 8A002.a.4.*” substitute “*For the purposes of 8A002.a.4., this entry*”;
    - (bb) for “*in 8C001*” substitute “*by 8C001*”;
    - (cc) for “*the final*” substitute “*its final*”;
  - (iii) in the Technical Note in entry 8A002.i.2., at the beginning, for “*Only*” substitute “*For the purposes of 8A002.i.2., only*”;
  - (iv) in entry 8A002.o.2.b. for “*engines*” substitute “*motors*”;
  - (v) in entry 8A002.o.2.c. for “*engines or permanent magnet electric propulsion engines,*” substitute “*motors*”;
  - (vi) in the Technical Note in entry 8A002.o.3.b., at the beginning, for “*Active*” substitute “*For the purposes of 8A002.o.3.b., ‘active’*”;

- (vii) in entry 8A002.o., on a new line after the end of entry 8A002.o.3. and immediately before entry 8A002.p., insert—

“4. Permanent magnet electric propulsion motors specially designed for submersible vehicles, having a power output exceeding 0.1 MW.

*Note: 8A002.o.4. includes rim-driven propulsion systems.”;*

- (viii) in the Technical Note in entry 8C001, at the beginning, for “*Syntactic*” substitute “*For the purposes of 8C001, ‘syntactic’*”;
- (ix) in the Technical Note in entry 8E002.c.4., at the beginning, for “*A ‘small’*” substitute “*For the purposes of 8E002.c.4., a ‘small’*”;
- (l) in the section headed “Category 9 – Aerospace and Propulsion”—
  - (i) in entry 9A001.a., at the end, omit “or”;
  - (ii) in Note 1 of entry 9A001.a. for “*9A001.a.*” substitute “*9A001*”;
  - (iii) in Note 2 of entry 9A001.a. for “*9A001.a.*” substitute “*9A001*”;
  - (iv) for entry 9A001.b. substitute “b. Not used.”;
  - (v) in entry 9A003 for “9E003.i., for” substitute “9E003.i. or 9E003.k., for”;
  - (vi) in the Technical Note in entry 9A007.e., at the beginning, for “*Strong*” substitute “*For the purposes of 9A007.e., a ‘strong’*”;
  - (vii) in the Technical Note in entry 9A008.b., at the beginning, for “*Structural*” substitute “*For the purposes of 9A008.b., ‘structural’*”;
  - (viii) in the Technical Note in entry 9B005.a., at the beginning, for “*Test*” substitute “*For the purposes of the Note in 9B005.a., ‘test’*”;
  - (ix) in the Technical Notes in entry 9E003.a.2.—
    - (aa) in paragraph 1, at the beginning, for “*Thermally*” substitute “*For the purposes of 9E003.a.2.a., ‘thermally’*”;
    - (bb) in paragraph 2, at the beginning, for “*Combustor*” substitute “*For the purposes of 9E003.a.2.d. ‘combustor’*”;
    - (cc) in paragraph 3, at the beginning, for “*In*” substitute “*For the purposes of 9E003.a.2.e., in*”;
  - (x) in the Technical Note in entry 9E003.a.3.c., at the beginning, for “*A ‘splitter’*” substitute “*For the purposes of 9E003.a.3.c., a ‘splitter’*”;
  - (xi) in the Technical Note in entry 9E003.a.5., at the beginning, for “*Gas*” substitute “*For the purposes of 9E003.a.5., ‘gas’*”;
  - (xii) in the Technical Note in entry 9E003.a.8., at the beginning, for “*Damage*” substitute “*For the purposes of 9E003.a.8., ‘damage’*”;
  - (xiii) in entry 9E003.c. after “*holes*” omit the comma;
  - (xiv) in paragraph 4 of the Technical Notes in entry 9E003.c., at the beginning, for “*Methods*” substitute “*For the purposes of 9E003.c., methods*”;
  - (xv) in the Technical Note in entry 9E003.e., at the beginning, for “*Box volume’ in 9E003.e.*” substitute “*For the purposes of 9E003.e., ‘box volume’*”;
  - (xvi) in the Technical Note in entry 9E003.g., at the beginning, for “*High*” substitute “*For the purposes of 9E003.g., ‘high’*”;
  - (xvii) in entry 9E003, on a new line after entry 9E003.j., insert—

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**Status:** This is the original version (as it was originally made). This item of legislation is currently only available in its original format.

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- “k. “Technology”, not specified in 9E003.a., 9E003.h., or 9E003.i., “required” for the “development” of any of the following components or systems, specially designed for aero gas turbine engines to enable “aircraft” to cruise at Mach 1 or greater for more than 30 minutes:
1. Propulsion inlet systems;
  2. Propulsion exhaust systems;
  3. ‘Reheat systems’;
  4. ‘Active thermal management systems’ to condition fluids used to lubricate or cool ‘engine rotor supports’;
  5. Oil-free ‘engine rotor supports’; or
  6. Systems to remove heat from ‘compression system’ core gas path flow.

*Technical Notes:*

*For the purposes of 9E003.k.:*

1. *Propulsion inlet systems include core flow pre-coolers.*
2. *‘Reheat systems’ provide additional thrust by combusting fuel in exhaust and/or bypass flow downstream of the last turbomachinery stage. ‘Reheat systems’ are also referred to as afterburners.*
3. *‘Active thermal management systems’ employ methods other than passive oil-to-air cooling or oil-to-fuel cooling, such as vapour cycle systems.*
4. *‘Compression system’ is any stage or combination of stages between the engine inlet face and the combustor that increases gas path pressure through mechanical work.*
5. *An ‘engine rotor support’ is the bearing supporting the main engine shaft that drives the compression system or turbine rotors.*

*N.B. 1. See 9E003.h. for engine control technology.*

*N.B. 2. See 9E003.i. for adjustable flow path systems technology.”*

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