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DEPARTMENT OF COMMERCE

Bureau of Export Administration

15 CFR Parts 734, 740, 742, 752, 771A, 774, 776A and 799A

[Docket No. 960928265-6265-01]

RIN: 0694-AB09

Licensing of commercial communications satellites transferred from the U.S. Munitions List to the Commerce Control List; Expansion of national security and foreign policy controls on commercial communications satellites and hot section technology for the development, production or overhaul of commercial aircraft engines; Clarification of jurisdiction for developmental aircraft designed for civil use.

AGENCY: Bureau of Export Administration, Commerce

ACTION: Interim final rule.

SUMMARY: This interim final rule amends parts 774 and 799A of the Export Administration Regulations (the Commerce Control List) by revising Export Control Classification Numbers (ECCNs) 9A04A and 9A004 to control all commercial communications satellites. This interim final rule also amends the Export Administration Regulations (EAR) by imposing enhanced national security and foreign policy controls on all commercial communications satellites controlled under ECCNs 9A04.a. and 9A004.a. and hot section technology for the development, production or overhaul of commercial aircraft engines controlled under ECCNs 9E03.a.1 through a.12, .f and related controls, and 9E003.a.1 through a.12., .f and related controls, to supplement the national security controls on those items. The provisions of this interim final rule apply for items transferred from the USML to the CCL and to license applications for those items received after the effective date of this rule.

This interim final rule also amends the EAR to exclude commercial communications satellites and hot section technology from the de minimis provisions for items and commingled technology exported from abroad, from the mandatory foreign availability decontrol or export licensing provisions of the EAR, and from Special Comprehensive License eligibility.

Finally, this interim final rule also amends the licensing policy provisions of parts 742 and 776A of the EAR to reflect these new national security and foreign policy controls, providing for case-by-case review of applications for export and reexport to all destinations to determine if the export or reexport is consistent with U.S. national security and foreign policy interests.

Exporters are advised that license applications for commercial communications satellites controlled under ECCN 9A04.a. and 9A004.a., and hot section technology controlled under ECCN 9E03.a.1. through a.12 and .f, and related controls, and 9E003.a.1. through a.12 and .f, and related controls, will be subject to full interagency review in accordance with Executive Order 12981 of December 5, 1995 (60 FR 62981), as amended.

The EAR have been totally amended by an interim rule published on March 25, 1996 (61 FR 12714) that provides for a transition period within which exporters can take advantage of both the old rules and the new rules until November 1, 1996. Therefore, this interim final rule and all other amendments to the EAR during the transition period will amend both the new EAR and the old EAR, which are now designated with the letter "A" following the part number.

DATES: This interim final rule is effective (DATE OF PUBLICATION). Comments must be received (45 days from date of publication).

ADDRESSES: Written comments should be sent to Nancy Crowe, Regulatory Policy Division, Office of Exporter Services, Bureau of Export Administration, Room 2705, 14th Street and Pennsylvania Avenue, N.W., Washington, D.C. 20230.

FOR FURTHER INFORMATION CONTACT: Gene Christiansen, Office of Strategic Trade, Telephone: (202) 482-2984.

SUPPLEMENTARY INFORMATION:

Background

On October 23, 1992, the Bureau of Export Administration added a new ECCN 9A04 to the CCL to control certain commercial communications satellites previously controlled on the USML.

On March 25, 1996, BXA published an interim rule in the Federal Register (61 FR 12714) that completely revised and simplified the EAR, and redesignated the parts of the EAR prior to publication of that rule (15 CFR parts 768 - 799) by including an "A" following the part number (e.g., old part 768 is now part 768A). The March 25 rule was effective April 24, 1996, and all EAR parts designated with "A" are effective until November 1, 1996. This interim final rule therefore amends the relevant parts of the EAR that end in "A" that were in effect prior to April 25, 1996 as well as the provisions of the new EAR. For example, commercial communications satellites are included under ECCN 9A04 in the old regulations (Supplement No. 1 §799A.1 of the EAR), and under ECCN 9A004 in the new regulations (Supplement No. 1 part 774 of the EAR). Hot section technology for commercial aircraft engines is under ECCN 9E03 in the old regulations, and ECCN 9E003 in the new regulations.

This interim final rule amends ECCNs 9A04 and 9A004 on the CCL by removing the nine characteristics that identified commercial communications satellites under the jurisdiction of

the Department of State. Such satellites are therefore now controlled on the CCL. The Department of State is publishing in the Federal Register a separate rule that removes commercial communications satellites from the USML. This interim final rule also amends the EAR by expanding national security controls and imposing foreign policy controls on commercial communications satellites controlled under ECCNs 9A04 and 9A004.

Space launch vehicles and all detailed design, development, production, or manufacturing data for all spacecraft including satellites, regardless of which government agency has jurisdiction over the export of the spacecraft, remains subject to the licensing authority of the Department of State. Commercial communications satellites are subject to Commerce licensing jurisdiction even if they include the individual munitions list systems, components, or parts identified in Category XV(f) of the USML. In all other cases, these systems, components, or parts remain on the USML, except that non-embedded, solid propellant orbit transfer engines (“kick motors”) are subject to Commerce licensing jurisdiction (and not controlled under the USML) when they are to be utilized for a specific commercial communications satellite launch, provided the solid propellant “kick motor” being utilized is not specifically designed or modified for military use or capable of being restarted after achievement of mission orbit (such orbit transfer engines are always controlled under Category IV of the USML). Technical data, as defined in 120.21 of the ITAR, and defense services as defined in 120.8 of the ITAR, related to the systems, components, or parts referred to in Category XV(f) of the USML are always controlled under the USML, even when the satellite itself is licensed by the Department of Commerce.

Technical data provided to the launch provider (form, fit, function, mass, electrical, mechanical, dynamic/environmental, telemetry, safety, facility, launch pad access, and launch parameters) for commercial communications satellites that describe the interfaces for mating of the satellite to the launch vehicle and parameters for launch (e.g. orbit, timing) of the satellite is under Commerce jurisdiction. Other technical data and all defense services and technical assistance for satellites and/or launch vehicles, including compatibility, integration, or processing data are controlled and subject to licensing by the Department of State, in accordance with 22 CFR Part 120 through 130. Approval for such technical assistance will require a Technical Assistance Agreement (TAA) and may require U.S. Government oversight.

This interim final rule also revises the List of Items Controlled under ECCNs 9E003 and 9E03 by adding a new paragraph .f to control technology not otherwise controlled in 9E003.a.1. through a.12 and 9E03.a.1. through a.12, and currently used in the development, production or overhaul of hot section parts and components of civil derivatives of military engines controlled on the U.S. Munitions List. This interim final rule also imposes enhanced national security and foreign policy controls on hot section technology for the development, production or overhaul of commercial aircraft engines controlled under ECCN 9E03.a.1. through a.12., .f and related controls, and 9E003.a.1. through a.12., .f and related controls. Note that this interim final rule does not change controls on developmental aircraft controlled under ECCNs 9A91 and 9A991. Hot section technology specifically designed, modified, or equipped for military uses or purposes, or developed principally with U.S. Department of

Defense funding, is subject to the jurisdiction of the Department of State. Technology is subject to the EAR when actually applied to a commercial aircraft engine program. Exporters may seek to establish commercial application either on a case-by-case basis through submission of documentation demonstrating application to a commercial program in support of a request for an export license from Commerce in respect to a specific export or, in the case of use for broad categories of aircraft, engines, or components, a commodity jurisdiction determination from State.

A license will be required for all exports and reexports to all destinations, except Canada, of commercial communications satellites controlled under ECCNs 9A04.a. and 9A004.a. and for hot section technology controlled under ECCNs 9E03.a.1. through a.12 and .f. and 9E003.a.1. through a.12 and .f. These items are not eligible for a Special Comprehensive License, and they are not subject to the mandatory foreign availability decontrol or export licensing provisions of the EAR. Exporters are advised that license applications for commercial communications satellites and hot section technology will be subject to full interagency review in accordance with Executive Order 12981 of December 5, 1995 (60 FR 62981). Applications for exports and reexports will be reviewed on a case-by-case basis to determine whether the export or reexport is consistent with U.S. national security and foreign policy interests. Specifically, the following factors are among those that will be considered to determine what action will be taken on license applications:

- 1) The country of destination;

- 2) The ultimate end-users;
- 3) The technology involved;
- 4) The specific nature of the end-use(s); and
- 5) The types of assurance against unauthorized use or diversion that are given in a particular case.

This interim final rule also amends part 734 of the EAR to exclude commercial communications satellites and hot section technology from the de minimis provisions for items and commingled technology exported from abroad, and amends parts 740 and 771A to exclude commercial communications satellites and hot section technology from License Exception GOV and General License GCG. Finally, this interim final rule also amends parts 738 and 742, and §§776A.2 and 776A.19 of the EAR to reflect the new foreign policy controls imposed by this interim final rule.

This interim final rule involves no new curtailment of exports, because the transfer or removal of items from the United States Munitions List to the CCL maintains a continuity of controls. Therefore, the provisions regarding the impact of new controls do not apply and contract sanctity also does not apply to this imposition of controls.

Consistent with the provisions of section 6 of the Export Administration Act, a foreign policy report was submitted to Congress on (DATE OF REPORT), notifying the Congress of the Department's intention to impose controls on commercial communications satellite and hot section technology associated with commercial aircraft engines that will be controlled on the CCL and subject to new control procedures.

Although the Export Administration Act (EAA) expired on August 20, 1994, the President invoked the International Emergency Economic Powers Act and continued in effect, to the extent permitted by law, the provisions of the EAA and the EAR in Executive Order 12924 of August 19, 1994, notice of August 15, 1995 (60 FR 42767), and August 14, 1996 (61 FR 42527).

Rulemaking Requirements

1. This interim final rule has been determined to be significant for purposes of E. O. 12866.
2. Notwithstanding any other provision of the law, no person is required to respond to, nor shall any person be subject to a penalty for failure to comply with a collection of information, subject to the requirements of the Paperwork Reduction Act, unless that collection of information displays a currently valid OMB Control Number. This interim final rule involves collections of information subject to the Paperwork Reduction Act of 1980 (44

U.S.C. 3501 et seq.). These collections have been approved by the Office of Management and Budget under control numbers 0694-0088.

3. This interim final rule does not contain policies with Federalism implications sufficient to warrant preparation of a Federalism assessment under Executive Order 12612.

4. Because a notice of proposed rulemaking and an opportunity for public comment are not required to be given for this interim final rule by under 5 U.S.C. 553 or by any other law, this rule is not subject to the requirements of the Regulatory Flexibility Act (5 U.S.C. 601 et seq.

5. The provisions of the Administrative Procedure Act (5 U.S.C. 553) requiring notice of proposed rulemaking, the opportunity for public participation, and a delay in effective date, are inapplicable because this regulation involves a military and foreign affairs function of the United States (Sec. 5 U.S.C. 553(a)(1)). Further, no other law requires that a notice of proposed rulemaking and an opportunity for public comment be given for this interim final rule.

However, because of the importance of the issues raised by these regulations, this rule is issued in interim final form and comments will be considered in the development of final regulations. Accordingly, the Department encourages interested persons who wish to

comment to do so at the earliest possible time to permit the fullest consideration of their views.

The period for submission of comments will close (INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION). The Department will consider all comments received before the close of the comment period in developing final regulations. Comments received after the end of the comment period will be considered if possible, but their consideration cannot be assured. The Department will not accept public comments accompanied by a request that a part or all of the material be treated confidentially because of its business proprietary nature or for any other reason. The Department will return such comments and materials to the person submitting the comments and will not consider them in the development of final regulations. All public comments on these regulations will be a matter of public record and will be available for public inspection and copying. In the interest of accuracy and completeness, the Department requires comments in written form.

Oral comments must be followed by written memoranda, which will also be a matter of public record and will be available for public review and copying. Communications from agencies of the United States Government or foreign governments will not be made available for public inspection.

The public record concerning these regulations will be maintained in the Bureau of Export Administration Freedom of Information Records Inspection Facility, Room 4525,

Department of Commerce, 14th Street and Pennsylvania Avenue, N.W., Washington, DC 20230. Records in this facility, including written public comments and memoranda summarizing the substance of oral communications, may be inspected and copied in accordance with regulations published in Part 4 of Title 15 of the Code of Federal Regulations. Information about the inspection and copying of records at the facility may be obtained from Margaret Cornejo, Bureau of Export Administration Freedom of Information Officer, at the above address or by calling (202) 482-5653.

List of Subjects

15 CFR part 734

Administrative practice and procedure, Exports, Foreign trade.

15 CFR parts 742 and 774

Exports, Foreign trade.

15 CFR parts 740 and 752

Administrative practice and procedure, Exports, Foreign trade, Reporting and recordkeeping requirements.

15 CFR parts 771A, 776A and 799A

Exports, Reporting and recordkeeping requirements

Accordingly, parts 734, 742, 752, 771A, 774, 776A and 799A of the Export Administration Regulations (15 CFR Parts 730-799) are amended as follows:

1. The authority citation for 15 CFR part 734 continues to read as follows:

Authority: 50 U.S.C. app. 2401 et seq.; 50 U.S.C. 1701 et seq.; E.O. 12924, 59 FR 43437, 3 CFR, 1994 Comp., p. 917; E.O. 12938, 59 FR 59099, 3 CFR, 1994 Comp., p. 950; Notice of August 15, 1995 (60 FR 42767, August 17, 1995); Notice of August 14, 1996 (61 FR 42527).

2. The authority citation for 15 CFR part 740 continues to read as follows:

Authority: 50 U.S.C. app. 2401 et seq.; 50 U.S.C. 1701 et seq.; E.O. 12924, 59 FR 43437, 3 CFR, 1994 Comp., p. 917; Notice of August 15, 1995 (60 FR 42767, August 17, 1995); Notice of August 14, 1996 (61 FR 42527).

3. The authority citation for 15 CFR part 742 continues to read as follows:

Authority: 50 U.S.C. app. 2401 et seq.; 50 U.S.C. 1701 et seq.; 18 U.S.C. 2510 et seq.; 22 U.S.C. 3201 et seq.; 42 U.S.C. 2139a; E.O. 12058, 43 FR 20947, 3 CFR, 1978 Comp., p. 179; E.O. 12851, 58 FR 33181, 3 CFR, 1993 Comp., p. 608; E.O. 12924, 59 FR 43437, 3 CFR, 1994 Comp., p. 917; E.O. 12938, 59 FR 59099, 3 CFR, 1994 Comp., p. 950; Notice of August 15, 1995 (60 FR 42767, August 17, 1995); Notice of August 14, 1996 (61 FR 42527).

4. The authority citation for 15 CFR part 752 continues to read as follows:

Authority: 50 U.S.C. app. 2401 et seq.; 50 U.S.C. 1701 et seq.; E.O. 12924, 59 FR 43437, 3 CFR, 1994 Comp., p. 917; Notice of August 15, 1995 (60 FR 42767, August 17, 1995); Notice of August 14, 1996 (61 FR 42527).

5. The authority citation for 15 CFR part 774 continues to read as follows:

Authority: 50 U.S.C. app. 2401 et seq.; 50 U.S.C. 1701 et seq.; 10 U.S.C. 7420; 10 U.S.C. 7430(e); 18 U.S.C. 2510 et seq.; 22 U.S.C. 287c; 22 U.S.C. 3201 et seq.; 22 U.S.C. 6004; Sec. 201, Pub. L. 104-58, 109 Stat. 557 (30 U.S.C. 185(s)); 30 U.S.C. 185(u); 42 U.S.C. 2139a; 42 U.S.C. 6212; 43 U.S.C. 1354; 46 U.S.C. app. 466c; 50 U.S.C. app. 5; E.O. 12924, 59 FR 43437, 3 CFR, 1994 Comp., p. 917; Notice of August 15, 1995 (60 FR 42767, August 17, 1995); Notice of August 14, 1996 (61 FR 42527).

6. The authority citation for 15 CFR part 776A continues to read as follows:

Authority: 50 U.S.C. App. 5, as amended; Pub. L. 264, 59 Stat. 619 (22 U.S.C. 287c), as amended; Pub. L. 90-351, 82 Stat. 197 (18 U.S.C. 2510 et seq.), as amended; Pub. L. 95-223, 91 Stat. 1626 (50 U.S.C. 1701 et seq.); Pub. L. 95-242, 92 Stat. 120 (22 U.S.C. 3201 et seq. and 42 U.S.C. 2139a); Pub. L. 96-72, 93 Stat. 503 (50 U.S.C. App. 2401 et seq.), as amended; Pub. L. 102-484, 106 Stat. 2575 (22 U.S.C. 6004); E.O. 12002 of July 7, 1977 (42 FR 35623, July 7, 1977), as amended; E.O. 12058 of May 11, 1978 (43 FR 20947, May 16, 1978); E.O. 12214 of May 2, 1980 (45 FR 29783, May 6, 1980); E.O. 12730 of September 30, 1990 (55 FR 40373, October 2, 1990), as continued by Notice of September 25, 1992 (57 FR 44649, September 28, 1992); E.O. 12924 of August 19, 1994 (59 FR 43437, August 23, 1994); E.O. 12938 of November 14, 1994 (59 FR 59099 of November 16, 1994).

7. The authority citation for 15 CFR parts 771A and 799A continues to read as follows:

Authority: 50 U.S.C. App. 5, as amended; Pub. L. 264, 59 Stat. 619 (22 U.S.C. 287c), as amended; Pub. L. 90-351, 82 Stat. 197 (18 U.S.C. 2510 et seq.), as amended; sec. 101, Pub. L. 93-153, 87 Stat. 576 (30 U.S.C. 185), as amended; sec. 103, Pub. L. 94-163, 89 Stat. 877 (42 U.S.C. 6212), as amended; secs. 201 and 201(11)(e), Pub. L. 94-258, 90 Stat. 309 (10 U.S.C. 7420 and 7430(e)), as amended; Pub. L. 95-223, 91 Stat. 1626 (50 U.S.C.

1701 et seq.); Pub. L. 95-242, 92 Stat. 120 (22 U.S.C. 3201 et seq. and 42 U.S.C. 2139a); sec. 208, Pub. L. 95-372, 92 Stat. 668 (43 U.S.C. 1354); Pub. L. 96-72, 93 Stat. 503 (50 U.S.C. App. 2401 et seq.), as amended; Pub. L. 102-484, 106 Stat. 2575 (22 U.S.C. 6004); E.O. 12002 of July 7, 1977 (42 FR 35623, July 7, 1977), as amended; E.O. 12058 of May 11, 1978 (43 FR 20947, May 16, 1978); E.O. 12214 of May 2, 1980 (45 FR 29783, May 6, 1980); E.O. 12730 of September 30, 1990 (55 FR 40373, October 2, 1990), as continued by Notice of September 25, 1992 (57 FR 44649, September 28, 1992); E.O. 12924 of August 19, 1994 (59 FR 43437, August 23, 1994); E.O. 12938 of November 14, 1994 (59 FR 59099 of November 16, 1994).

PART 734 - [AMENDED]

8. Section 734.4 is amended by:

- a. Redesignating paragraphs (b) through (f) as (c) through (g) respectively; and
- b. adding new paragraphs (b) and (h) to read as follows:

§734.4 De minimis U.S. content.

* * * * *

(b) There is no de minimis level for the reexport of foreign-origin items that incorporate items controlled by ECCN 9A004.a.

* * * * *

(g) Notwithstanding the provisions of paragraphs (c) and (d) of this section, U.S.-origin technology controlled under ECCNs 9E003.a.1. through a.12, and .f, and related controls does not lose its U.S.-origin when it is redrawn, used, consulted, or otherwise commingled abroad in any respect with other technology of any other origin. Therefore, any subsequent or similar technology prepared or engineered abroad for the design, construction, operation, or maintenance of any plant or equipment, or part thereof, which is based on or uses any U.S.-origin technology controlled under ECCNs 9E003.a.1. through a.12, and .f, and related controls is subject to the EAR.

PART 740 - [AMENDED]

9. Section 740.6 is amended by:

a. Redesignating paragraphs (b)(2)(iii)(A) through (C) as (b)(2)(iii)(B) through (D);

b. Redesignating paragraphs (b)(2)(iv)(A) through (C) as (b)(2)(iv)(B) through (D); and

c. Adding new paragraphs (b)(2)(iii)(A) and (b)(2)(iv)(A) to read as follows:

§ 740.6 Governments and international organizations (GOV).

* * * * *

(b) * * *

(2) * * *

(iii) * * *

(A) Commercial communications satellites controlled under ECCN 9A004 and hot section technology for the development, production or overhaul of commercial aircraft engines controlled under ECCN 9E003.a.1 through a.12, and .f, and related controls;

* * * * *

(iv) * * *

(A) Commercial communications satellites controlled under ECCN 9A004 and hot section technology for the development, production or overhaul of commercial aircraft engines controlled under ECCN 9E003.a.1 through a.12, and .f, and related controls;

* * * * *

PART 742 - [AMENDED]

10. Part 742 is amended by adding new §742.14 to read as follows:

§742.14 Significant Items: commercial communications satellites; hot section technology for the development, production or overhaul of commercial aircraft engines, components, and systems.

(a) License requirements. Licenses are required for all destinations, except Canada, for ECCNs having an "SI" under the "Reason for Control" paragraph. These items include commercial communications satellites controlled by ECCN 9A004.a., and hot section technology for the development, production or overhaul of commercial aircraft engines controlled under ECCN 9E003.a.1. through a.12., .f, and related controls.

(b) Licensing policy. Pursuant to section 6 of the Export Administration Act of 1979, as amended, (EAA), foreign policy controls apply to commercial communications satellites controlled under 9A004.a. and technology required for the development, production or overhaul of commercial aircraft engines controlled by ECCN 9E003.a.1. through a.12, .f, and related controls. These controls supplement the national security controls that apply to those items. Applications for export and reexport to all destinations will be reviewed on a case-by-case basis to determine whether the export or reexport is consistent with U.S. national security and foreign policy interests. The following factors are among those that will be considered to determine what action will be taken on license applications:

- (1) The country of destination;
- (2) The ultimate end-user(s);
- (3) The technology involved;
- (4) The specific nature of the end-use(s); and
- (5) The types of assurance against unauthorized use or diversion that are given in a particular case.

(c) Contract sanctity. Contract sanctity provisions are not available for license applications reviewed under this §742.14.

(d) [Reserved]

PART 752 - [AMENDED]

11. Section 752.3 is amended by redesignating paragraphs (a)(7) and (a)(8) as (a)(9) and (a)(10) respectively, and by adding new paragraphs (a)(7) and (a)(8) to read as follows:

§752.3 Eligible items.

(a) * * *

(7) Commercial communications satellites controlled under ECCN 9A004.a on the CCL;

(8) Hot section technology for the development, production or overhaul of commercial aircraft engines controlled under ECCN 9E003.a.1. through a.12. .f , and related controls;

* * * * *

PART 771A - [AMENDED]

12. Section 771A.14 is amended by adding a new paragraph (d)(4) to read as follows:

§771A.14 General License GCG; Shipments to agencies of cooperating government.

* * * * *

(d) * * *

(4) No commercial communications satellites controlled under ECCN 9A04.a. or hot section technology for the development, production or overhaul of commercial aircraft engines controlled under ECCN 9E03.a.1 through a.12, and .f, and related controls may be exported under this general license.

PART 774 - [AMENDED]

13. In Supplement No. 1 to part 774 (the Commerce Control List), Category 9 (Propulsion Systems, Space Vehicles, and Related Equipment), ECCNs 9A004 and 9E003 are revised to read as follows:

9A004 "Spacecraft", (not including their payloads) and specially designed components therefor that are not subject to the authority of the Department of State . (See notes.)

LICENSE REQUIREMENTS:

Reason for Control: NS, AT, SI

Control(s)

Country Chart

NS applies to entire entry

NS Column 1

AT applies to entire entry

AT Column 1

SI applies to commercial communications satellites controlled by 9A004.a.

See §742.14 of the EAR for additional information.

LICENSE EXCEPTIONS:

LVS: N/A

GBS: N/A

CIV: N/A

LIST OF ITEMS CONTROLLED:

Unit: Equipment in number; systems, components, parts and accessories in \$ value

Related Controls: 1.) The corresponding EU list number controls space launch vehicles (not including their payloads) and other "spacecraft" (not identified in this CCL entry). These items are subject to the export licensing authority of the U.S. Department of State, Office of Defense Trade Controls (See 22 CFR part 121 Category XV). For the control status of products contained in "spacecraft" payloads, see the appropriate categories of the USML. 2.) For the control status of items contained in "spacecraft" payloads subject to the EAR, see the appropriate entries on the CCL.

Related Definition: Transferring registration or operational control to any foreign person of any commercial communications satellite controlled by this entry must be authorized on a license issued by the Bureau of Export Administration. This requirement applies whether the commercial communications satellite is physically located in the United States or abroad.

List of Items Controlled:

- a. Commercial communication satellites;

Technical Note: Commercial communications satellites are subject to Commerce licensing jurisdiction even if they include the individual munitions list systems, components,

or parts identified in Category XV(f) of the USML. In all other cases, these systems, components, or parts remain on the USML, except that non-embedded, solid propellant orbit transfer engines (“kick motors”) are subject to Commerce licensing jurisdiction (and not controlled under the USML) when they are to be utilized for the specific commercial communications satellite launch, provided the solid propellant “kick motor” being utilized is not specifically designed or modified for military use or capable of being restarted after achievement of mission orbit (such orbit transfer engines are always controlled under Category IV of the USML). Technical data (as defined in 120.21 of the ITAR) and defense services (as defined in 120.8 of the ITAR) related to the systems, components, or parts referred to in Category XV(f) of the USML are always controlled under the USML, even when the satellite itself is licensed by the Department of Commerce.

NOTE: Military communications satellites or multi-mission satellites, including commercial communications satellites having additional non-communication mission(s) or payload(s) are under the jurisdiction of the Department of State.

b. [Reserved]

c. Other "spacecraft" not subject to the export licensing authority of the U.S. Department of State, Office of Defense Trade Controls under 22 CFR part 121, Category XV.

NOTES: 1. ECCN 9A004.c includes the international space station being developed, launched and operated under the supervision of the U.S. National Aeronautics and Space Administration. Exporters requesting a license from the Department of Commerce for spacecraft other than the international space station or a commercial communications satellite specified in 9A004 must provide a statement from the Department of State, Office of Defense Trade Controls, verifying that the item intended for export is under the licensing jurisdiction of the Department of Commerce.

2. All other spacecraft, including all other satellites not controlled under 9A004 and components, parts, accessories, attachments, associated equipment, and ground support equipment therefor are subject to the export licensing authority of the Department of State.

3. Items on Category XV(f) of the USML that are included in a commercial communications satellite to be exported under a Commerce license must be specifically listed on the Commerce license application. Such items when not included in a specific commercial communications satellite are under the jurisdiction of the Department of State.

4. Technical data provided to the launch provider (form, fit, function, mass, electrical, mechanical, dynamic/environmental, telemetry, safety, facility, launch pad access, and launch parameters) for commercial communications satellites that describe the interfaces for mating of the satellite to the launch vehicle and parameters for launch (e.g. orbit, timing) of the satellite, are under Commerce jurisdiction. Other technical data and all defense services and

technical assistance for satellite and/or launch vehicles, including compatibility, integration, or processing data are controlled and subject to licensing by the Department of State, in accordance with 22 CFR Part 120 through 130. Approval for such technical assistance will require a Technical Assistance Agreement (TAA) and may require U.S. Government oversight.

5. Once a satellite is launched, items remaining unlaunched are required to be returned immediately to the United States. If the satellite launch is canceled or unduly delayed, the satellite and all support equipment must be returned immediately to the United States.

6. Detailed design, development, production, or manufacturing data for all spacecraft, including satellites, regardless of which agency has jurisdiction over the export, and all systems components, parts, accessories, attachments, and associated equipment (including ground support equipment) specifically designed or modified for articles under Category XV on the United States Munitions List (including software source code and operating algorithms) are subject to licensing by the Department of State. This does not include that level of technical data (including marketing data) necessary and reasonable for a purchaser to have assurance that a U.S.-built item intended to operate in space has been designed, manufactured and tested in conformance with specified contract requirements (e.g., operational performance, reliability, lifetime, product quality, or delivery expectations) as well as data necessary for normal in-orbit satellite operations, to evaluate in-orbit anomalies,

and to operate and maintain associated ground station equipment (except encryption hardware).

* * * * *

9E003 Other "technology".

LICENSE REQUIREMENTS:

Reason for Control: NS, AT, SI

Control(s)

Country Chart

NS applies to entire entry

NS Column 1

AT applies to entire entry

AT Column 1

SI applies to 9E003.a.1. through a.12 and .f. See §742.14 of the EAR for additional information.

LICENSE EXCEPTIONS:

CIV: N/A

TSR: N/A

LIST OF ITEMS CONTROLLED

Unit: N/A

Related Controls: 1.) The corresponding EU List number does not control technology controlled under 9E003.f. 2.) Hot section technology specifically designed, modified, or equipped for military uses or purposes, or developed principally with U.S.

Department of Defense funding, is subject to the jurisdiction of the Department of State. 3.) Technology is subject to the EAR when actually applied to a commercial aircraft engine program. Exporters may seek to establish commercial application either on a case-by-case basis through submission of documentation demonstrating application to a commercial program in requesting an export license from Commerce in respect to a specific export or, in the case of use for broad categories of aircraft, engines, or components, a commodity jurisdiction determination from State.

Items:

- a. "Technology" "required" for the "development", "production" or overhaul of the following commercial aircraft engines, components or systems:

a.1. Gas turbine blades, vanes or tip shrouds made from directionally solidified (DS) or single crystal (CS) alloys having (in the 001 Miller Index Direction) a stress-rupture life exceeding 400 hours at 1,273 K (1,000° C) at a stress of 200 MPa, based on the average property values;

a.2. Multiple domed combustors operating at average burner outlet temperatures exceeding 1,643 K (1370° C), or combustors incorporating thermally decoupled combustion liners, non-metallic liners or non-metallic shells;

a.3. Components manufactured from organic "composite" materials designed to operate above 588 K (315° C), or from metal "matrix" "composite", ceramic "matrix", intermetallic or intermetallic reinforced materials controlled by 1A002 or 1C007;

a.4. Uncooled turbine blades, vanes, tip-shrouds or other components designed to operate at gas path temperatures of 1,323 K (1,050° C) or more;

a.5. Cooled turbine blades, vanes or tip-shrouds, other than those described in 9E003.a.1, exposed to gas path temperatures of 1,643 K (1,370° C) or more;

a.6. Airfoil-to-disk blade combinations using solid state joining;

a.7. Gas turbine engine components using "diffusion bonding" "technology" controlled by 2E003.b;

a.8. Damage tolerant gas turbine engine rotating components using powder metallurgy materials controlled by 1C002.b;

a.9. Full authority digital electronic engine controls (FADEC) for gas turbine and combined cycle engines and their related diagnostic components, sensors and specially designed components;

a.10. Adjustable flow path geometry and associated control systems for:

a.10.a. Gas generator turbines;

a.10.b. Fan or power turbines;

a.10.c. Propelling nozzles;

NOTE 1: Adjustable flow path geometry and associated control systems do not include inlet guide vanes, variable pitch fans, variable stators or bleed valves for compressors.

NOTE 2: 9E003.a.10 does not control "development" or "production" "technology" for adjustable flow path geometry for reverse thrust.

a.11. Rotor blade tip clearance control systems employing active compensating casing "technology" limited to a design and development data base;

a.12. Gas bearings for gas turbine engine rotor assemblies;

a.13. Wide chord hollow fan blades without part-span support;

NOTE: Also see 9E003.f.

b. "Technology" "required" for the "development" or "production" of:

b.1. Wind tunnel aero-models equipped with non-intrusive sensors capable of transmitting data from the sensors to the data acquisition system;

b.2. "Composite" propeller blades or propfans capable of absorbing more than 2,000 kW at flight speeds exceeding Mach 0.55;

c. "Technology" "required" for the "development" or "production" of gas turbine engine components using "laser", water jet or ECM/EDM hole drilling processes to produce holes with:

c.1.a. Depths more than four times their diameter;

c.1.b. Diameters less than 0.76 mm; and

c.1.c. Incidence angles equal to or less than 25° ; or

c.2.a. Depths more than five times their diameter;

c.2.b. Diameters less than 0.4 mm; and

c.2.c. Incidence angles of more than 25° ;

TECHNICAL NOTE: For the purposes of 9E003.c, incidence angle is measured from a plane tangential to the airfoil surface at the point where the hole axis enters the airfoil surface.

d. "Technology" "required" for the "development" or "production" of helicopter power transfer systems or tilt rotor or tilt wing "aircraft" power transfer systems:

d.1. Capable of loss-of-lubrication operation for 30 minutes or more; or

d.2. Having an input power-to-weight ratio equal to or more than 8.87 kW/kg.

e.1 "Technology" for the "development" or "production" of reciprocating diesel engine ground vehicle propulsion systems having all of the following:

e.1.a. A box volume of 1.2 m³ or less;

e.1.b. An overall power output of more than 750 kW based on 80/1269/EEC, ISO 2534 or national equivalents; and

e.1.c. A power density of more than 700 kW/m³ of box volume;

TECHNICAL NOTE: Box volume: the product of three perpendicular dimensions measured in the following way:

Length: The length of the crankshaft from front flange to flywheel face;

Width: The widest of the following:

a. The outside dimension from valve cover to valve cover;

- b. The dimensions of the outside edges of the cylinder heads; or
- c. The diameter of the flywheel housing;

Height: The largest of the following:

- a. The dimension of the crankshaft center-line to the top plane of the valve cover (or cylinder head) plus twice the stroke; or
- b. The diameter of the flywheel housing.

e.2. "Technology" "required" for the "production" of specially designed components, as follows, for "high output diesel engines":

e.2.a. "Technology" "required" for the "production" of engine systems having all of the following components employing ceramics materials controlled by 1C007:

e.2.a.1. Cylinder liners;

e.2.a.2. Pistons;

e.2.a.3. Cylinder heads; and

e.2.a.4. One or more other components (including exhaust ports, turbocharger, valve guides, valve assemblies or insulated fuel injectors);

e.2.b. "Technology" "required" for the "production" of turbocharger systems, with single-stage compressors having all of the following:

e.2.b.1. Operating at pressure ratios of 4:1 or higher;

e.2.b.2. A mass flow in the range from 30 to 130 kg per minute; and

e.2.b.3. Variable flow area capability within the compressor or turbine sections;

e.2.c. "Technology" "required" for the "production" of fuel injection systems with a specially designed multifuel (e.g., diesel or jet fuel) capability covering a viscosity range from diesel fuel (2.5 cSt at 310.8 K (37.8° C)) down to gasoline fuel (0.5 cSt at 310.8 K (37.8° C)), having both of the following:

e.2.c.1. Injection amount in excess of 230 mm³ per injection per cylinder;

e.2.c.2. Specially designed electronic control features for switching governor characteristics automatically depending on fuel property to provide the same torque characteristics by using the appropriate sensors;

e.3. "Technology" "required" for the "development" or "production" of "high output diesel engines" for solid, gas phase or liquid film (or combinations thereof) cylinder wall lubrication, permitting operation to temperatures exceeding 723 K (450° C), measured on the cylinder wall at the top limit of travel of the top ring of the piston.

f. Technology not otherwise controlled in 9E003.a.1. through a.12 and currently used in the "development", "production" or overhaul of hot section parts and components of civil derivatives of military engines controlled on the U.S. Munitions List.

PART 776A - [AMENDED]

14. Sections 776A.2 and 776A.19 are amended to read as follows:

§776A.2 Commercial communications satellites.

Pursuant to section 6 of the Export Administration Act of 1979, as amended, (EAA), foreign policy controls apply to commercial communications satellites controlled under 9A04.a.

These controls supplement the national security controls that apply to those items.

(a) License requirements. Individual validated licenses are required for all exports and reexports of commercial communications satellites controlled by ECCN 9A04A.a. to all destinations, except Canada.

(b) License review policy. Applications for export and reexport will be reviewed on a case-by-case basis to determine whether the export or reexport is consistent with U.S. national security and foreign policy interests. The following factors are among those that will be considered to determine what action will be taken on individual license applications:

(1) The country of destination;

(2) The ultimate end-users;

(3) The technology involved;

(4) The specific nature of the end-use(s); and

(5) The types of assurance against unauthorized use or diversion that are given in a particular case.

* * * * *

§776A.19 Hot section technology for the development, production or overhaul of commercial aircraft engines, components or systems.

Pursuant to section 6 of the Export Administration Act of 1979, as amended, (EAA), an individual validated export license is required for hot section technology related to the development, production or overhaul of commercial aircraft engines, components or systems. These controls supplement the national security controls that apply to those items.

(a) License requirements. Individual validated licenses are required for all exports and reexports of hot section technology for the development, production or overhaul of civil gas turbine engines controlled by ECCN 9E03A.a.1 through a.12, .f, and related controls to all destinations, except Canada.

(b) License review policy. Applications for export and reexports will be reviewed on a case-by-case basis to determine whether the export or reexport is consistent with U.S. national security and foreign policy interests. The following factors are among those that will be considered to determine what action will be taken on individual license applications:

(1) The country of destination;

(2) The ultimate end-users;

(3) The technology involved;

(4) The specific nature of the end-use(s); and

(5) The types of assurance against unauthorized use or diversion that are given in a particular case.

* * * * *

PART 799A - [AMENDED]

15. In Supplement No. 1 to §799A.1 (the Commerce Control List), Category 9 (Propulsion Systems and Transportation Equipment), ECCNs 9A04A and 9E03A are revised to read as follows:

9A04A "Spacecraft" (not including their payloads), and specially designed components therefor that are not subject to the authority of the Department of State. (See notes.)

Note: Space launch vehicles (not including their payloads) and other "spacecraft" (not identified in this CCL entry) are subject to the export licensing authority of the U.S. Department of State, Office of Defense Trade Controls (See 22 CFR part 121 Category XV). For the control status of products contained in "spacecraft" payloads, see the appropriate

categories of the USML. For the control status of items contained in "spacecraft" payloads subject to the EAR, see the appropriate entries on the CCL.

Requirements

Validated License Required: QSTVWYZ

Unit: Equipment in number; parts and accessories in \$ value

Reason for Control: NS, FP (see Note)

GLV: \$0

GCT: No

GFW: No

Note: FP controls apply to items controlled in 9A04.a (see §776.2 of this subchapter).

List of Items Controlled

- a. Commercial communications satellites;

Technical Note: Commercial communications satellites are subject to Commerce licensing jurisdiction even if they include the individual munitions list systems, components, or parts identified in Category XV(f) of the USML. In all other cases, these systems, components, or parts remain on the USML, except that non-embedded, solid propellant orbit transfer engines (“kick motors”) are subject to Commerce licensing jurisdiction (and not controlled under the USML) when they are to be utilized for the specific commercial communications satellite launch, provided the solid propellant “kick motor” being utilized is not specifically designed or modified for military use or capable of being restarted after achievement of mission orbit (such orbit transfer engines are always controlled under Category IV of the USML). Technical data (as defined in 120.21 of the ITAR) and defense services (as defined in 120.8 of the ITAR) related to the systems, components, or parts referred to in Category XV(f) of the USML are always controlled under the USML, even when the satellite itself is licensed by the Department of Commerce.

NOTE: Military communications satellites or multi-mission satellites, including commercial communications satellites having additional non-communication mission(s) or payload(s) are under the jurisdiction of the Department of State.

b. [Reserved]

c. Other "spacecraft" not controlled under Category XV of the USML.

Note: 9A04.c. includes the international space station being developed, launched and operated under the supervision of the U.S. National Aeronautics and Space Administration. Exporters requesting a validated license from the Department of Commerce for spacecraft other than the international space station or a commercial communication satellite specified in 9A04, must provide a statement from the Department of State, Office of Defense Trade Controls, verifying that the item intended for export is under the licensing jurisdiction of the Department of Commerce.

Notes: 1. Transferring registration or operations control to any foreign person of any commercial communications satellite controlled by this entry must be authorized on a license issued by the Bureau of Export Administration. This requirement applies whether the commercial communications satellite is physically located in the United States or abroad.

2. All other spacecraft, including all other satellites not controlled under 9A04, and components, parts, accessories, attachments, associated equipment, and ground support equipment therefor are subject to the export licensing authority of the Department of State.

3. Items on Category XV(f) of the USML that are included in a commercial communications satellite to be exported under a Commerce license must be specifically listed on the Commerce license application. Such items when not included in a specific commercial communications satellite are under the jurisdiction of the Department of State.

4. Technical data provided to the launch provider (form, fit, function, mass, electrical, mechanical, dynamic/environmental, telemetry, safety, facility, launch pad access, and launch parameters) for commercial communications satellites that describe the interfaces for mating of the satellite to the launch vehicle and parameters for launch (e.g. orbit, timing) of the satellite, are under Commerce jurisdiction. Other technical data and all defense services and technical assistance for satellite and/or launch vehicles, including compatibility, integration, or processing data are controlled and subject to licensing by the Department of State, in accordance with 22 CFR Part 120 through 130. Approval for such technical assistance will require a Technical Assistance Agreement (TAA) and may require U.S. Government oversight.

5. Once a satellite is launched, items remaining unlaunched are required to be returned immediately to the United States. If the satellite launch is canceled or unduly delayed, the satellite and all support equipment must be returned immediately to the United States.

6. Detailed design, development, production, or manufacturing data for all spacecraft, including satellites, regardless of which agency has jurisdiction over the export, and all systems components, parts, accessories, attachments, and associated equipment (including ground support equipment) specifically designed or modified for articles under Category XV on the United States Munitions List (including software source code and operating algorithms) are subject to licensing by the Department of State. This does not include that

level of technical data (including marketing data) necessary and reasonable for a purchaser to have assurance that a U.S.-built item intended to operate in space has been designed, manufactured and tested in conformance with specified contract requirements (e.g., operational performance, reliability, lifetime, product quality, or delivery expectations) as well as data necessary for normal in-orbit satellite operations, to evaluate in-orbit anomalies, and to operate and maintain associated ground station equipment (except encryption hardware).

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9E03A Other technology, as follows:

Requirements:

Validated License Required: QSTVWYZ

Reason for Control: NS, FP (see Note)

GTDR: No

GTDU: No

GFW: No

Note: FP controls apply to technology controlled in 9E03.a.1 through a.12, and .f, and related controls (see §776.19 of this subchapter).

Related controls: 1.) Hot section technology specifically designed, modified, or equipped for military uses or purposes, or developed principally with U.S. Department of Defense funding, is subject to the jurisdiction of the Department of State. 2.) Technology is subject to the EAR when actually applied to a commercial aircraft engine program. Exporters may seek to establish commercial application either on a case-by-case basis through submission of documentation demonstrating application to a commercial program in requesting an export license from Commerce in respect to a specific export or, in the case of use for broad categories of aircraft, engines, or components, a commodity jurisdiction determination from State.

List of Items Controlled

a. "Technology" "required" for the "development" "production" or overhaul of the following commercial aircraft engine components or systems:

a.1. Gas turbine blades, vanes or tip shrouds made from directionally solidified (DS) or single crystal (CS) alloys having (in the 001 Miller Index Direction) a stress-rupture life

exceeding 400 hours at 1,273 K (1,000° C) at a stress of 200 MPa, based on the average property values;

a.2. Multiple domed combustors operating at average burner outlet temperatures exceeding 1,643 K (1370° C), or combustors incorporating thermally decoupled combustion liners, non-metallic liners or non-metallic shells;

a.3. Components manufactured from organic "composite" materials designed to operate above 588 K (315° C), or from metal "matrix" "composite", ceramic "matrix", intermetallic or intermetallic reinforced materials controlled by 1A02 or 1C07;

a.4. Uncooled turbine blades, vanes, tip-shrouds or other components designed to operate at gas path temperatures of 1,323 K (1,050° C) or more;

a.5. Cooled turbine blades, vanes or tip-shrouds, other than those described in 9E03.a.1, exposed to gas path temperatures of 1,643 K (1,370° C) or more;

a.6. Airfoil-to-disk blade combinations using solid state joining;

a.7. Gas turbine engine components using "diffusion bonding" "technology" controlled by 2E03.b;

a.8. Damage tolerant gas turbine engine rotating components using powder metallurgy materials controlled by 1C02.b;

a.9. Full authority digital electronic engine controls (FADEC) for gas turbine and combined cycle engines and their related diagnostic components, sensors and specially designed components;

a.10. Adjustable flow path geometry and associated control systems for:

a.10.a. Gas generator turbines;

a.10.b. Fan or power turbines;

a.10.c. Propelling nozzles;

NOTE 1: Adjustable flow path geometry and associated control systems do not include inlet guide vanes, variable pitch fans, variable stators or bleed valves for compressors.

NOTE 2: 9E03.a.10 does not control "development" or "production" "technology" for adjustable flow path geometry for reverse thrust.

a.11. Rotor blade tip clearance control systems employing active compensating casing "technology" limited to a design and development data base;

a.12. Gas bearings for gas turbine engine rotor assemblies;

a.13. Wide chord hollow fan blades without part-span support;

NOTE: Also see 9E03.f.

b. "Technology" "required" for the "development" or "production" of:

b.1. Wind tunnel aero-models equipped with non-intrusive sensors capable of transmitting data from the sensors to the data acquisition system;

b.2. "Composite" propeller blades or propfans capable of absorbing more than 2,000 kW at flight speeds exceeding Mach 0.55;

c. "Technology" "required" for the "development" or "production" of gas turbine engine components using "laser", water jet or ECM/EDM hole drilling processes to produce holes with:

c.1.a. Depths more than four times their diameter;

c.1.b. Diameters less than 0.76 mm; and

c.1.c. Incidence angles equal to or less than 25°; or

c.2.a. Depths more than five times their diameter;

c.2.b. Diameters less than 0.4 mm; and

c.2.c. Incidence angles of more than 25°;

TECHNICAL NOTE: For the purposes of 9E03.c, incidence angle is measured from a plane tangential to the airfoil surface at the point where the hole axis enters the airfoil surface.

d. "Technology" "required" for the "development" or "production" of helicopter power transfer systems or tilt rotor or tilt wing "aircraft" power transfer systems:

d.1. Capable of loss-of-lubrication operation for 30 minutes or more; or

d.2. Having an input power-to-weight ratio equal to or more than 8.87 kW/kg.

e.1 "Technology" for the "development" or "production" of reciprocating diesel engine ground vehicle propulsion systems having all of the following:

e.1.a. A box volume of 1.2 m³ or less;

e.1.b. An overall power output of more than 750 kW based on 80/1269/EEC, ISO 2534 or national equivalents; and

e.1.c. A power density of more than 700 kW/m³ of box volume;

TECHNICAL NOTE: Box volume: the product of three perpendicular dimensions measured in the following way:

Length: The length of the crankshaft from front flange to flywheel face;

Width: The widest of the following:

- a. The outside dimension from valve cover to valve cover;
- b. The dimensions of the outside edges of the cylinder heads; or
- c. The diameter of the flywheel housing;

Height: The largest of the following:

- a. The dimension of the crankshaft center-line to the top plane of the valve cover (or cylinder head) plus twice the stroke; or

b. The diameter of the flywheel housing.

e.2. "Technology" "required" for the "production" of specially designed components, as follows, for "high output diesel engines":

e.2.a. "Technology" "required" for the "production" of engine systems having all of the following components employing ceramics materials controlled by 1C07:

e.2.a.1. Cylinder liners;

e.2.a.2. Pistons;

e.2.a.3. Cylinder heads; and

e.2.a.4. One or more other components (including exhaust ports, turbocharger, valve guides, valve assemblies or insulated fuel injectors);

e.2.b. "Technology" "required" for the "production" of turbocharger systems, with single-stage compressors having all of the following:

e.2.b.1. Operating at pressure ratios of 4:1 or higher;

e.2.b.2. A mass flow in the range from 30 to 130 kg per minute; and

e.2.b.3. Variable flow area capability within the compressor or turbine sections;

e.2.c. "Technology" "required" for the "production" of fuel injection systems with a specially designed multifuel (e.g., diesel or jet fuel) capability covering a viscosity range from diesel fuel (2.5 cSt at 310.8 K (37.8° C)) down to gasoline fuel (0.5 cSt at 310.8 K (37.8° C)), having both of the following:

e.2.c.1. Injection amount in excess of 230 mm³ per injection per cylinder;

e.2.c.2. Specially designed electronic control features for switching governor characteristics automatically depending on fuel property to provide the same torque characteristics by using the appropriate sensors;

e.3. "Technology" "required" for the "development" or "production" of "high output diesel engines" for solid, gas phase or liquid film (or combinations thereof) cylinder wall lubrication, permitting operation to temperatures exceeding 723 K (450° C), measured on the cylinder wall at the top limit of travel of the top ring of the piston.

f. Technology not otherwise controlled in 9E03.a.1. through a.12 and currently used in the “development”, “production” or overhaul of hot section parts and components of civil derivatives of military engines controlled on the U.S. Munitions List.

* * * * *

Dated:

Sue E. Eckert

Assistant Secretary for

Export Administration