

(A) Inspect the IP shaft rigid coupling splines as specified in paragraphs (f)(1) or (f)(2) of this AD as applicable and determine the next inspection interval using Figure 10 of RR RB211 Trent 900 Series Propulsion Systems Alert NMSB No. RB.211-72-AG329, Revision 4, dated March 23, 2012; and

(B) Do not install an engine that has an IP shaft with an average spline crest length measured dimension of less than 0.5 mm.

(ii) Before installing an engine in the same position on the airplane it was removed from:

(A) Inspect the IP shaft rigid coupling splines using paragraph (f)(1) or (f)(2) of this AD as applicable and determine the next inspection interval; and

(B) Do not install an engine that has an IP shaft with an average spline crest length measured dimension of less than 0.5 mm.

**(g) Engines That Have Incorporated RR RB211 Trent 900 Series Propulsion Systems SB No. RB.211-72-G585, Original Issue, or Any Revision**

**(1) On-Wing Borescope Inspections**

(i) Initially borescope-inspect the IP shaft rigid coupling splines before accumulating 400 FCSN or 400 cycles since the last inspection per paragraph (g)(2)(i) of this AD. Use paragraph 3.A.(2) of RR RB211 Trent 900 Series Propulsion Systems Alert NMSB No. RB.211-72-AG871, dated March 23, 2012, to do the inspection.

(ii) Repetitively borescope-inspect the IP shaft rigid coupling splines. Use paragraphs 3.A.(2)(e), 3.A.(2)(f), and 3.A.(3) of RR RB211 Trent 900 Series Propulsion Systems Alert NMSB No. RB.211-72-AG871, dated March 23, 2012, to determine the re-inspection interval and to do the inspections.

**(2) In-Shop Inspections**

(i) At every shop visit after the effective date of this AD, where the IP shaft rigid coupling is exposed, visually inspect and MPI the IP shaft rigid coupling splines.

(ii) At every shop visit after the effective date of this AD, where the IP shaft rigid coupling is not exposed, borescope-inspect using paragraphs 3.A.(2)(a) through 3.A.(2)(f) of RR RB211 Trent 900 Series Propulsion Systems Alert NMSB No. RB.211-72-AG871, dated March 23, 2012.

(A) If at the time of initial inspection, the average value of length "B" is equal to, or less than, 6.00 mm, repeat the borescope inspection using paragraph (g)(1) or (g)(2) of this AD within 400 flight cycles.

(B) If at the time of initial inspection the average value of length "B" is greater than 6.00 mm, MPI the IP turbine shaft, and visually inspect and MPI the intermediate turbine shaft and IP rigid coupling.

**(3) After Any Shop Inspection**

After any shop inspection, where the rigid shaft coupling is exposed, perform a borescope inspection per paragraph (g)(1) of this AD within 400 cycles after the in-shop visual inspection and MPI.

**(h) Definition**

For the purpose of this AD, a shop visit is the induction of an engine into the shop for maintenance involving the separation of pairs of major mating engine flanges, except

that the separation of engine flanges solely for the purposes of transportation without subsequent engine maintenance does not constitute an engine shop visit.

**(i) Credit for Previous Actions for Engines That Have Not Incorporated RR RB211 Trent 900 Series Propulsion Systems SB No. RB.211-72-G585**

If you performed inspections and corrective actions that are required by paragraph (f) of this AD using RR RB211 Trent 900 Series Propulsion Systems Alert NMSB No. RB.211-72-AG329, Original Issue, dated November 26, 2009; Revision 1, dated January 13, 2010; Revision 2, dated July 7, 2010; or Revision 3, dated November 25, 2010, before the effective date of this AD, you have met the requirements of paragraph (f) of this AD.

**(j) Alternative Methods of Compliance (AMOCs)**

The Manager, Engine Certification Office, may approve AMOCs for this AD. Use the procedures found in 14 CFR 39.19 to make your request.

**(k) Related Information**

(1) For more information about this AD, contact Alan Strom, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; phone: 781-238-7143; fax: 781-238-7199; email: [alan.strom@faa.gov](mailto:alan.strom@faa.gov).

(2) Refer to European Aviation Safety Agency AD 2012-0057, dated April 3, 2012, and AD 2012-0057 (corrected), dated April 20, 2012, for related information.

(3) RB211-Trent 900 Engine Manual, tasks 72-33-21-200-804 and 72-00-00-200-808, pertain to the visual inspections and MPIs required by this AD.

**(l) Material Incorporated by Reference**

(1) You must use the following service information to do the actions required by this AD, unless the AD specifies otherwise. The Director of the Federal Register approved the incorporation by reference (IBR) under 5 U.S.C. 552(a) and 1 CFR part 51 of the following service information:

(i) Rolls-Royce plc RB211 Trent 900 Series Propulsion Systems Alert Non-Modification Service Bulletin No. RB.211-72-AG329, Revision 4, dated March 23, 2012.

(ii) Rolls-Royce plc RB211 Trent 900 Series Propulsion Systems Alert Non-Modification Service Bulletin No. RB.211-72-AG871, dated March 23, 2012.

(2) For service information identified in this AD, contact Rolls-Royce plc, Corporate Communications, P.O. Box 31, Derby, England, DE248BJ, phone: 011-44-1332-242424; fax: 011-44-1332-245418, or email: [http://www.rolls-royce.com/contact/civil\\_team.jsp](http://www.rolls-royce.com/contact/civil_team.jsp).

(3) You may review copies at the FAA, New England Region, 12 New England Executive Park, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125.

(4) You may also review copies of the service information that is incorporated by reference at the National Archives and Records Administration (NARA). For

information on the availability of this material at NARA, call (202) 741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Burlington, Massachusetts, on June 5, 2012.

**Peter A. White,**

*Manager, Engine & Propeller Directorate, Aircraft Certification Service.*

[FR Doc. 2012-15985 Filed 6-29-12; 8:45 am]

**BILLING CODE 4910-13-P**

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

[Docket No. FAA-2012-0441; Directorate Identifier 2012-CE-011-AD; Amendment 39-17106; AD 2012-13-04]

**RIN 2120-AA64**

**Airworthiness Directives; Empresa Brasileira de Aeronáutica S.A. (EMBRAER) Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), Department of Transportation (DOT).

**ACTION:** Final rule.

**SUMMARY:** We are adopting a new airworthiness directive (AD) for certain Empresa Brasileira de Aeronáutica S.A. (EMBRAER) Model EMB-505 airplanes. This AD results from mandatory continuing airworthiness information (MCAI) issued by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as an inadequate amount of drain holes in the primary control surfaces (rudder, elevator, and aileron) and their tab surfaces, which may allow water to accumulate in the control surfaces. This condition could cause unbalanced flight control surfaces and reduced flutter margins, which could result in loss of control of the airplane. We are issuing this AD to require actions to address the unsafe condition on these products.

**DATES:** This AD is effective August 6, 2012.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in the AD as of August 6, 2012.

**ADDRESSES:** You may examine the AD docket on the Internet at <http://www.regulations.gov> or in person at Document Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

For service information identified in this AD, contact Empresa Brasileira de Aeronautica S.A. (EMBRAER), Phenom Maintenance Support, Av. Brigadeiro Faria Lima, 2170, São José dos Campos—SP, CEP: 12227-901—PO Box 36/2, BRASIL; fax ++55 12 3927-2619; email

[phenom.reliability@embraer.com.br](mailto:phenom.reliability@embraer.com.br); Internet: <http://www.embraer.com>. You may review copies of the referenced service information at the FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148.

**FOR FURTHER INFORMATION CONTACT:** Jim Rutherford, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4165; fax: (816) 329-4090; email: [jim.rutherford@faa.gov](mailto:jim.rutherford@faa.gov).

#### SUPPLEMENTARY INFORMATION:

#### Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to include an AD that would apply to the specified products. That NPRM was published in the **Federal Register** on April 24, 2012 (77 FR 24425). That NPRM proposed to correct an unsafe condition for the specified products. The MCAI states:

It has been found that certain regions of the rudder, elevator, ailerons, and their tabs surfaces does not present adequate drainage capacity to avoid water accumulation inside of these control surfaces. Internal water accumulation may lead to flight control surfaces unbalancing possibly reducing the flutter margins, which could result in loss of airplane control.

The MCAI requires visually inspecting the control surfaces (rudder, elevator, and aileron) and their tab surfaces for the existence of required drain holes and modifying the control surfaces by drilling drain holes. You may obtain further information by examining the MCAI in the AD docket.

#### Comments

We gave the public the opportunity to participate in developing this AD. We received no comments on the NPRM (77 FR 24425, April 24, 2012) or on the determination of the cost to the public.

#### Conclusion

We reviewed the relevant data and determined that air safety and the public interest require adopting the AD as proposed except for minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM (77 FR 24425, April 24, 2012) for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM (77 FR 24425, April 24, 2012).

#### Costs of Compliance

We estimate that this AD will affect 38 products of U.S. registry.

We also estimate that it will take from .5 work-hour to 2 work-hours per product for 10 of the affected airplanes to comply with the basic inspection requirements of this AD. The average labor rate is \$85 per work-hour.

Based on these figures, we estimate the cost of the inspection on U.S. operators to be from \$425 to \$1,700, or \$42.50 to \$170 per product.

In addition, we estimate that any necessary follow-on actions will take from 2 work-hours to 38 work-hours and require parts costing \$50, for a cost from \$220 to \$3,280 per product. We have no way of determining the number of products that may need these actions.

We also estimate that it will take from 19 work-hours to 27 work-hours per product for 36 of the affected airplanes to comply with basic modification requirements of this AD. The average labor rate is \$85 per work-hour. Required parts will cost about \$100 per product.

Based on these figures, we estimate the cost of the modification on U.S. operators to be from \$61,740, to \$86,220, or \$1,715 to \$2,395 per product.

According to the manufacturer, some of the costs of this AD may be covered under warranty, thereby reducing the cost impact on affected individuals. We do not control warranty coverage for affected individuals. As a result, we have included all costs in our cost estimate.

#### Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for

safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

#### Regulatory Findings

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this AD:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

#### Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains the NPRM, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (telephone (800) 647-5527) is in the **ADDRESSES** section. Comments will be available in the AD docket shortly after receipt.

#### List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

#### Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

#### PART 39—AIRWORTHINESS DIRECTIVES

- 1. The authority citation for part 39 continues to read as follows:

**Authority:** 49 U.S.C. 106(g), 40113, 44701.

#### § 39.13 [Amended]

- 2. The FAA amends § 39.13 by adding the following new AD:

**2012-13-04 Empresa Brasileira de Aeronáutica S.A. (EMBRAER):** Amendment 39-17106; Docket No. FAA-2012-0441; Directorate Identifier 2012-CE-011-AD.

**(a) Effective Date**

This airworthiness directive (AD) becomes effective August 6, 2012.

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to the following Empresa Brasileira de Aeronáutica S.A. (EMBRAER) Model EMB-505 airplanes certificated in any category.

(1) *Group 1:* Serial numbers (S/Ns) 50500030, 50500033 through 50500037, 50500039, 50500040, 50500044, and 50500046.

(2) *Group 2:* S/Ns 5050004 through 50500029, 50500031, 50500032, 50500038, 50500041 through 50500043, 50500045, 50500047 through 50500059, 50500061, 50500063, 50500065 through 50500068, 50500070, 50500074, and 50500075.

(3) *Group 3:* S/N 50500072.

(4) *Group 4:* S/Ns 50500069, 50500071, and 50500073.

**(d) Subject**

Air Transport Association of America (ATA) Code 27: Flight Controls.

**(e) Reason**

This AD was prompted by mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as an inadequate amount of drain holes in the primary control surfaces (rudder, elevator, aileron) and their tab surfaces, which may allow water to accumulate in the control surfaces. We are issuing this AD to prevent unbalanced flight control surfaces and reduced flutter margins, which could result in loss of control of the airplane.

**(f) Actions and Compliance**

Unless already done, do the following actions:

(1) *Group 1 airplanes specified in paragraph (c)(1) of this AD:*

(i) Within the next 100 hours time-in-service after August 6, 2012 (the effective date of this AD) or within the next 3 calendar months after August 6, 2012 (the effective date of this AD), whichever occurs first, visually inspect the right-hand (RH) and left-hand (LH) aileron lower skin for the existence of required drain holes.

(ii) Before further flight after the inspection required in paragraph (f)(1)(i) of this AD, if the required drain holes do not exist, drill the drain holes.

(iii) Within the next 24 months after August 6, 2012 (the effective date of this AD), rework the ailerons, aileron trim-tabs, aileron horn covers, rudder, rudder trim-tab, elevators, and elevator auto-tab surfaces by drilling additional drain holes.

(iv) Do the actions required in paragraphs (f)(1)(i) and (f)(1)(ii) of this AD following the

Accomplishment Instructions in EMBRAER Phenom Service Bulletin No. 505-57-0003, dated November 16, 2011.

(v) Do the actions required in paragraph (f)(1)(iii) of this AD following Part I of the Accomplishment Instructions in EMBRAER Phenom Service Bulletin No. 505-57-0002, dated February 13, 2012.

(2) *Group 2 airplanes specified in paragraph (c)(2) of this AD:* Within the next 24 months after August 6, 2012 (the effective date of this AD), rework the ailerons, aileron trim-tabs, aileron horn covers, rudder, rudder trim-tab, elevators, and elevators auto-tab surfaces by drilling additional drain holes. Do the modifications following Part I of the Accomplishment Instructions in EMBRAER Phenom Service Bulletin No. 505-57-0002, dated February 13, 2012.

(3) *Group 3 airplanes specified in paragraph (c)(3) of this AD:*

(i) Within the next 24 months after August 6, 2012 (the effective date of this AD), rework the rudder, rudder trim-tab, elevators, and elevators auto-tab surfaces by drilling additional drain holes.

(ii) Within the next 24 months after August 6, 2012 (the effective date of this AD), inspect the ailerons for the existence of required drain holes.

(iii) Before further flight after the inspection required in paragraph (f)(3)(ii) of this AD, if the required drain holes do not exist, drill the drain holes.

(iv) Do the actions required in paragraph (f)(3)(i) of this AD following Part II of the Accomplishment Instructions in EMBRAER Phenom Service Bulletin No. 505-57-0002, dated February 13, 2012.

(v) Do the actions required in paragraphs (f)(3)(ii) and (f)(3)(iii) of this AD following Part II of the Accomplishment Instructions in EMBRAER Phenom Service Bulletin No. 505-57-0004, dated February 16, 2012.

(4) *Group 4 airplanes specified in paragraph (c)(4) of this AD:*

(i) Within the next 24 months after August 6, 2012 (the effective date of this AD), inspect the ailerons, elevators, and rudder for the existence of required drain holes.

(ii) Before further flight after the inspection required in paragraph (f)(4)(i) of this AD, if the required drain holes do not exist, drill the drain holes.

(iii) Do the actions required in paragraphs (f)(4)(i) and (f)(4)(ii) of this AD following Part I of the Accomplishment Instructions in EMBRAER Phenom Service Bulletin No. 505-57-0004, dated February 16, 2012.

**(g) Other FAA AD Provisions**

The following provisions also apply to this AD:

(1) *Alternative Methods of Compliance (AMOCs):* The Manager, Standards Office, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Jim Rutherford, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4165; fax: (816) 329-4090; email: [jim.rutherford@faa.gov](mailto:jim.rutherford@faa.gov). Before using any approved AMOC on any airplane to which the AMOC applies, notify your appropriate principal inspector (PI) in the

FAA Flight Standards District Office (FSDO), or lacking a PI, your local FSDO.

(2) *Airworthy Product:* For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

(3) *Reporting Requirements:* For any reporting requirement in this AD, a federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a 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 current valid OMB Control Number. The OMB Control Number for this information collection is 2120-0056. Public reporting for this collection of information is estimated to be approximately 5 minutes per response, including the time for reviewing instructions, completing and reviewing the collection of information. All responses to this collection of information are mandatory. Comments concerning the accuracy of this burden and suggestions for reducing the burden should be directed to the FAA at: 800 Independence Ave. SW., Washington, DC 20591, Attn: Information Collection Clearance Officer, AES-200.

**(h) Related Information**

Refer to MCAI Agência Nacional de Aviação Civil (ANAC) Brazilian Airworthiness Directive 2012-03-01, dated March 20, 2012; EMBRAER Phenom Service Bulletin No. 505-57-0002, dated February 13, 2012; EMBRAER Phenom Service Bulletin No. 505-57-0003, dated November 16, 2011; and EMBRAER Phenom Service Bulletin No. 505-57-0004, dated February 16, 2012, for related information.

**(i) Material Incorporated by Reference**

(1) You must use the following service information to do the actions required by this AD, unless the AD specifies otherwise. The Director of the Federal Register approved the incorporation by reference (IBR) under 5 U.S.C. 552(a) and 1 CFR part 51 of the following service information on:

(i) EMBRAER Phenom Service Bulletin No. 505-57-0002, dated February 13, 2012;

(ii) EMBRAER Phenom Service Bulletin No. 505-57-0003, dated November 16, 2011; and

(iii) EMBRAER Phenom Service Bulletin No. 505-57-0004, dated February 16, 2012.

(2) For service information identified in this AD, contact Empresa Brasileira de Aeronáutica S.A. (EMBRAER), Phenom Maintenance Support, Av. Brigadeiro Faria Lima, 2170, São José dos Campos—SP, CEP: 12227-901—P.O. Box 36/2, BRASIL; fax: ++55 12 3927-2619; email [phenom.reliability@embraer.com.br](mailto:phenom.reliability@embraer.com.br); Internet: <http://www.embraer.com>.

(3) You may review copies of the service information at the FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the

availability of this material at the FAA, call (816) 329-4148.

(4) You may also review copies of the service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at an NARA facility, call 202-741-6030, or go to [http://www.archives.gov/federal\\_register/code\\_of\\_federal\\_regulations/ibr\\_locations.html](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html).

Issued in Kansas City, Missouri, on June 21, 2012.

**James E. Jackson,**

*Acting Manager, Small Airplane Directorate, Aircraft Certification Service.*

[FR Doc. 2012-15752 Filed 6-29-12; 8:45 am]

BILLING CODE 4910-13-P

## DEPARTMENT OF COMMERCE

### Bureau of Industry and Security

#### 15 CFR Part 774

[Docket No. 120112039-2176-03]

RIN 0694-AF45

#### Implementation of the Understandings Reached at the 2011 Australia Group (AG) Plenary Meeting and Other AG-Related Clarifications to the EAR

**AGENCY:** Bureau of Industry and Security, Commerce.

**ACTION:** Final rule.

**SUMMARY:** The Bureau of Industry and Security (BIS) publishes this final rule to amend the Export Administration Regulations (EAR) to implement the understandings reached at the June 2011 plenary meeting of the Australia Group (AG). This rule amends the Commerce Control List (CCL) entry in the EAR that controls human and zoonotic pathogens and “toxins” and the entry that controls genetic elements and genetically modified organisms to reflect changes to the AG “List of Biological Agents for Export Control” that were made based on the understandings adopted at the June 2011 AG plenary meeting. In addition, this rule amends the CCL entries in the EAR that control chemical manufacturing facilities and equipment, and equipment capable of use in handling biological materials to reflect the June 2011 AG plenary changes to the “Control List of Dual-Use Chemical Manufacturing Facilities and Equipment and Related Technology and Software” and the “Control List of Dual-Use Biological Equipment and Related Technology and Software,” respectively.

**DATES:** This rule is effective July 2, 2012.

**ADDRESSES:** Send comments regarding this collection of information, including

suggestions for reducing the burden, to Jasmeet Seehra, Office of Management and Budget (OMB), by email to [Jasmeet\\_K\\_Seehra@omb.eop.gov](mailto:Jasmeet_K_Seehra@omb.eop.gov), or by fax to (202) 395-7285; and to the Regulatory Policy Division, Bureau of Industry and Security, Department of Commerce, 14th Street & Pennsylvania Avenue NW., Room 2705, Washington, DC 20230.

#### FOR FURTHER INFORMATION CONTACT:

Elizabeth Sangine, Director, Chemical and Biological Controls Division, Office of Nonproliferation and Treaty Compliance, Bureau of Industry and Security, Telephone: (202) 482-3343.

#### SUPPLEMENTARY INFORMATION:

##### Background

The Bureau of Industry and Security (BIS) is amending the Export Administration Regulations (EAR) to implement the understandings reached at the June 2011 plenary meeting of the Australia Group (AG). The AG is a multilateral forum consisting of 40 participating countries that maintain export controls on a list of chemicals, biological agents, and related equipment and technology that could be used in a chemical or biological weapons program. The AG periodically reviews items on its control list to enhance the effectiveness of participating governments' national controls and to achieve greater harmonization among these controls.

The June 2011 AG plenary meeting adopted understandings that affected the AG “List of Biological Agents for Export Control,” the AG “Control List of Dual-Use Chemical Manufacturing Facilities and Equipment and Related Technology and Software” and the AG “Control List of Dual-Use Biological Equipment and Related Technology and Software.”

This rule amends Export Control Classification Numbers (ECCNs) 1C351 and 1C353 to reflect the AG changes to the “List of Biological Agents for Export Control.” Specifically, ECCN 1C351 (Human and zoonotic pathogens and “toxins”) is amended by removing and reserving paragraph .b (Rickettsiae), since these organisms are more appropriately identified as bacteria. *Coxiella burnetii* and *Rickettsia prowasecki* (a.k.a. *Rickettsia prowazekii*), which were previously controlled under ECCN 1C351.b.2 and .b.3, respectively, are now controlled as bacteria under ECCN 1C351.c.10 and .c.13, respectively. *Bartonella Quintana* (*Rochalimea Quintana*, *Rickettsia Quintana*) and *Rickettsia rickettsii*, which were previously controlled under ECCN 1C351.b.1 and .b.4, respectively,

are removed from ECCN 1C351, since they are no longer included on the AG “List of Biological Agents.”

ECCN 1C353 (Genetic elements and genetically modified organisms) is amended by revising Technical Note 1 and adding a new Technical Note 4 to clarify that this ECCN controls certain de novo chemically synthesized genetic material and artificially-produced organisms. Specifically, Technical Note 1 to ECCN 1C353 is revised to indicate that “genetic elements” also include chromosomes, genomes, plasmids, transposons, and vectors that have been “chemically synthesized in whole or in part.” New Technical Note 4 to ECCN 1C353 indicates that “genetically modified organisms” include “organisms in which the genetic material (nucleic acid sequences) has been altered in a way that does not occur naturally by mating and/or natural recombination, and encompasses those produced artificially in whole or in part.”

This rule also amends ECCN 2B350 (Chemical manufacturing facilities and equipment) by adding a new Technical Note 3, at the end of the entry, to clarify that materials used for gaskets, packing, seals, screws or washers, or other materials performing a sealing function, do not determine the control status of the items listed in ECCN 2B350, provided that such components are designed to be interchangeable.

In addition, this rule amends ECCN 2B352 (Equipment capable of use in handling biological materials) by revising the introductory text of paragraph .d.1 to remove the phrase “without propagation of aerosols.” Participating countries at the 2011 AG plenary agreed that this phrase was redundant, as it applied to cross (tangential) flow filtration equipment capable of separation of pathogenic microorganisms, viruses, toxins or cell cultures.

Finally, this rule amends ECCNs 2B350 and 2B352 to clarify certain control parameters for pumps (*i.e.*, multiple-seal and seal-less pumps and vacuum pumps) and steam sterilizable freeze-drying (lyophilization) equipment, respectively. Specifically, ECCN 2B350.i is amended by adding two parenthetical phrases in the introductory text to specify the maximum flow-rate of such pumps in liters of water per hour, as follows: “multiple-seal and seal-less pumps with manufacturer’s specified maximum flow-rate greater than 0.6 m<sup>3</sup>/hour (600 liters/hour), or vacuum pumps with manufacturer’s specified maximum flow-rate greater than 5 m<sup>3</sup>/hour (5,000 liters/hour).” ECCN 2B352.e is amended