

# Export Control Reform Spacecraft/Satellites

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# Space Export Controls Background

- **After Delivery of the 1248 Report to Congress (Apr 2012), Congress added language into the FY13 National Defense Authorization Act that:**
  - Gave the President the authority to transfer certain satellites and related items to the Commerce Control List (CCL)
  - Prohibits export of CCL satellites and related items to China, North Korea, or any state sponsor of terrorism
- **May 24, 2013: Published proposed rules for satellite sections in USML (Cat XV) and CCL (ECCN 9x515) – Public comment period closed July 8, 2013.**
- **May 13, 2014: Final rules published.**
  - Effective date for radiation-hardened integrated circuits (and related software and technology): June 27, 2014
  - Effective date for all other items: November 10, 2014



# Summary of Spacecraft Controls

## Cat XV Before ECR

## CCL Before ECR

### Revised USML

### Revised CCL

#### Cat XV

#### Other

Military Satellites

Military Ground equip

Parts critical for military functions

Services for USML and CCL satellites (IV and XV)

GPS Rcvrs (XV now; future XII)

#### New ECCN 9x515

#### Existing ECCNs

Worldwide license, except Canada.

25% *de minimis*, except 0% for China and other D:5 countries.

STA eligible for A:5, except for certain software and technology

Review microelectronic circuit ECCNs, 7A004, 7A104, and ECCNs using "space qualified" prior to using the catch-all control in 9A515.x.

Sats and Ground equip not in USML

Rad Hard ICs

Parts not on USML or other CCL

New sat related item or tech

Spec electronics

Spec optical sensors

Spec radar systems

# Items Remaining on USML

- Satellites and spacecraft
  - Unique military and intelligence functions, including nuclear detection, intelligence collection, missile tracking, anti-satellite or space-based weapons, classified operation or equipment, and navigation
  - Certain remote sensing with military applications
  - Man-rated habitats with integrated propulsion
- Ground control equipment
  - Performs a uniquely military function for one of satellites above
- Parts & components
  - Twenty one specific technologies critical to military functions
  - Any payload that performs one of military functions listed above
  - DoD funded payloads



# Services Remaining on USML

- Satellite integration and launch services
  - Provided by a U.S. person
  - To a foreign launch integrator or launch vehicle provider
- Launch support considered a defense service, includes furnishing assistance or information for:
  - Integration of any satellite to a launch vehicle
  - Launch failure analysis



# Items Transferred to CCL

- **Satellites**

- Commercial Communication Satellites
- Lower-Performance Remote Sensing Satellites
- Planetary Rovers
- Planetary and Interplanetary Probes

- **Related systems for the above:**

- Ground control systems
- Training simulators
- Test, inspection, and production equipment
- Non-critical software for production, operation or maintenance
- Non-critical technology for development, production, installation, operation or maintenance
- Radiation hardened microelectronics

- **Parts and components of satellite bus and payloads not listed on USML**

- Thousands of *types* of parts and subsystems
- Hundreds of thousands of specific parts



# Notes on Jurisdiction

- Spacecraft in 9A004 or 9A515.a remain subject to the EAR even when incorporating a hosted payload performing a function described in USML Category XV(a). All spacecraft incorporating primary or secondary payloads that perform a function described in XV(a) are controlled in XV(a).
- ITAR “see-through” rule does not apply to parts, components, accessories, attachments, equipment, or systems in XV(e) that are integrated into and included as an integral part of an EAR item prior to export, reexport, or transfer



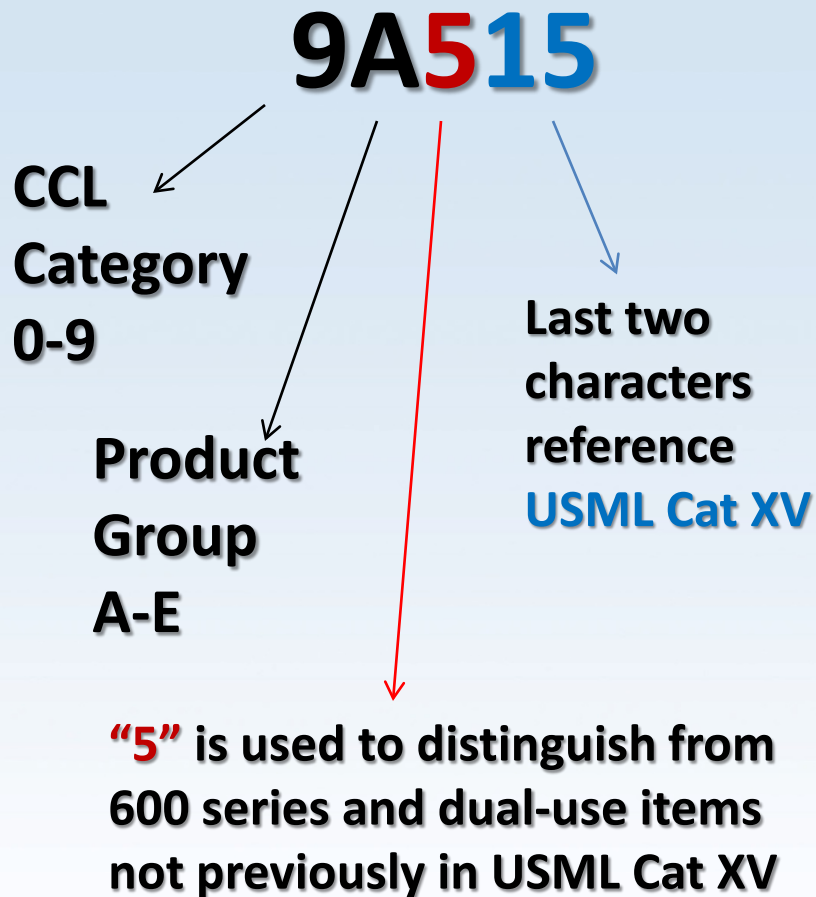
# Non-Controlled Space-Related Technology

- **Technology required for spaceflight passenger or participant experience, as described in Note 2 to 9E515, is not subject to the ITAR or EAR.**
- Technical data is not subject to the ITAR or EAR when transmitted to or from a satellite or spacecraft, when limited to information about the health, operational status, or measurements or function of, or raw sensor output from, the spacecraft, spacecraft payload, or its associated subsystems or components (see Note 3 to 9E515).





# 9x515 Framework



- .a - .w: specifically enumerated end items, materials, parts, components, accessories, and attachments
  - Some items may be “specially designed”
- .x: “specially designed” parts, components, accessories, and attachments that are not specifically enumerated
- .y: items that would otherwise be within scope of 9A515.x but that have been identified in interagency-cleared CCATS (§ 748.3(e))
  - No items currently listed in 9A515.y



# Order of Review - Spacecraft

(Supp. No. 4 to part 774)

- Review USML Category XV
  - Specifically enumerated items
  - “Catch-all” controls and ITAR definition of “specially designed”
- If not on the USML, review the CCL
  - Review applicable 9x515 ECCN
    - Specifically enumerated items
    - “Catch-all” controls and EAR definition of “specially designed”
    - Note: the following ECCNs supersede 9A515.x:
      - ECCNs for microelectronic circuits
      - 7A004, 7A104
      - ECCNs containing “space qualified” as a control criterion
  - Review other applicable non-9x515 ECCNs



# The Published “Specially Designed” Definition

- Read pages 22728 and 22729 of Commerce’s Federal Register notice published on April 16, 2013 (78 Fed. Reg. 22660)
- Refer to Section 772 of the EAR for the current “Specially Designed” definition
  - Code of Federal Regulations
    - 15 CFR 730-774
  - Available on-line:
    - [www.bis.doc.gov](http://www.bis.doc.gov)
    - <http://ecfr.gpoaccess.gov>
  - Order from Government Printing Office
    - 866-512-1800 (toll-free)
    - <http://www.access.gpo.gov/bis/earorder.html>
- The “specially designed” definition is common to the EAR and ITAR, although there are slight differences in wording to make definitions EAR and ITAR specific.



# Feedback, comments or suggest changes to the regs

- The Spacecraft interim final rule. If you want to contribute your ideas in this area, you need to submit your comments before the due date of November 10, which is about one month away. The rule will also describe ground control systems, and some specific parts, components, accessories and attachments for those spacecraft.



# Feedback, comments or suggest changes to the regs (cont'd)

- Weekly teleconference Q&A with A/S Wolf. You can submit a question about any aspect of the Export Control Reform Initiative including any BIS proposed rule that is open for comment.
  - The email address to use for submitting questions for the weekly teleconferences is [ecrweekly@bis.doc.gov](mailto:ecrweekly@bis.doc.gov)



# Feedback, comments or suggest changes to the regs (cont'd)

- Meeting with DOC representatives. The DOC is always willing to accommodate industry representatives and carefully listen to their concerns, feedback, and recommendations.



# Useful tools and resources

- Export Administration Regulation Downloadable files
  - <http://www.bis.doc.gov/index.php/regulations/export-administration-regulations-ear>
- Decision Tree Tools (Specially Designed, Order of Review, STA eligibility)
  - <http://www.bis.doc.gov/index.php/decision-tree-tools>
- Weekly ECR teleconference Q&A with A/S Wolf
  - Inside U.S. Dial 1-888-455-8218, participant code: 6514196
  - Outside U.S. Dial 1-212-547-0330, participant code: 6514196



# Contact Information

## Technical and Licensing Questions on Satellites: Office of National Security and Technology Transfer Controls

- Mark Jaso, [mark.jaso@bis.doc.gov](mailto:mark.jaso@bis.doc.gov)
- Reynaldo Garcia, [reynaldo.garcia@bis.doc.gov](mailto:reynaldo.garcia@bis.doc.gov)
- Dennis Krepp, [dennis.krepp@bis.doc.gov](mailto:dennis.krepp@bis.doc.gov)

## Regulatory Interpretation and Transition Guidance

- Regulatory Policy Division: [rp2@bis.doc.gov](mailto:rp2@bis.doc.gov) , 202-482-2440

**Web:** [www.bis.doc.gov](http://www.bis.doc.gov)    [www.export.gov/ecr](http://www.export.gov/ecr)



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# BACKUP SLIDES



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## Paragraph (a)(1) 'catch'

- Paragraph (a)(1) 'catches' any item that:

*as a result of “development” has properties  
peculiarly responsible for achieving or exceeding the  
performance levels, characteristics, or functions in the relevant:*

*-ECCN, or*

*-U.S. Munitions List (USML) paragraph.*



## Paragraph (a)(2) 'catch'

- Paragraph (a)(2) 'catches' any "part," "component," "accessory," "attachment" or "software" that:

Is for use in or with a  
**commodity or defense article**  
'enumerated' or otherwise described  
-on the CCL or  
-the USML.



# Understanding *the 'release'* - introduction to paragraphs (b)(1)-(b)(6)

- Paragraph (b) is only used for ‘releasing’ “parts,” “components,” “accessories,” “attachments” or “software.”
- A “part,” “component,” “accessory,” “attachment,” or “software” that meets the criteria of one or more of the paragraphs under (b) is ‘released’ from “specially designed.”
- If you are reviewing a decontrol on the CCL that uses “specially designed,” stop at paragraph (a) in your analysis.
  - Do not review paragraph (b) for decontrols on CCL that use “specially designed.”



# Paragraph (b)(1) “release”

Paragraph (b)(1) criteria	Meets (b)(1) criteria	Does not meet (b)(1) criteria
<b><u>CJs</u></b> . Has it been identified in an ECCN paragraph that does not contain “specially designed” or as an EAR99 item in a CJ determination?	Yes.  <b><u>NOT</u> “specially designed.”</b>	No.  <b><u>NOT</u> ‘released’</b> under (b)(1). Review other (b) ‘releases.’
<b><u>748.3(e)</u></b> . Has it been identified in an ECCN paragraph that does not contain “specially designed” or as an EAR99 item in an interagency-cleared CCATS pursuant to § 748.3(e)?	Yes.  <b><u>NOT</u> “specially designed.”</b>	No.  <b><u>NOT</u> ‘released’</b> under (b)(1). Review other (b) ‘releases.’



# Paragraph (b)(2) “release”

Paragraph (b)(2) criteria	Meets (b)(2) criteria	Does not meet (b)(2) criteria
Is the “part” or minor component, regardless of ‘form’ or ‘fit,’ a fastener ( <i>e.g.</i> , screw, bolt, nut, nut plate, stud, insert, clip, rivet, pin), washer, spacer, insulator, grommet, bushing, spring, wire, or solder?	<b>Yes.</b>  <b><u>NOT</u> “specially designed.”</b>	<b>No.</b>  <b>NOT ‘released’ under (b)(2). Review other (b) ‘releases.’</b>



# Paragraph (b)(3) “release”

Paragraph (b)(3) criteria	Meets (b)(3) criteria	Does not meet (b)(3) criteria
<p>Does the “part,” “component,” “accessory,” “attachment,” or “software” have same function, performance capabilities, and same or ‘equivalent’ form and fit, as a commodity or software used in or with an item that:</p> <p>(i) is or was in “production” (i.e., not in “development”); <u>and</u></p> <p>(ii) is either not ‘enumerated’ on the CCL or USML, or is described in an ECCN controlled only for Anti-Terrorism (AT) reasons?</p>	<p><b>Yes.</b></p> <p><b><u>NOT</u> “specially designed.”</b></p>	<p><b>No.</b></p> <p><b><u>NOT</u> ‘released’ under (b)(3). Review other (b) ‘releases.’</b></p>



# Paragraph (b)(4) “release”

Paragraph (b)(4) criteria	Meets (b)(4) criteria	Does not meet (b)(4) criteria
<p>Was or is “part,” “component,” “accessory,” “attachment,” or “software” developed with “knowledge” it would be for use in or with commodities or software:</p> <p>(i) described in ECCN <u>and</u></p> <p>(ii) also commodities or software either not ‘enumerated’ on CCL or USML (e.g., EAR99 commodity or software) or commodity or software described in ECCN controlled only for AT?</p>	<p>Yes.</p> <p><u>NOT</u> “specially designed.”</p>	<p>No.</p> <p><u>NOT</u> ‘released’ under (b)(4). Review other (b) ‘releases.’</p>





# Paragraph (b)(5) “release”

Paragraph (b)(5) criteria	Meets (b)(5) criteria	Does not meet (b)(5) criteria
<p>Was or is the “part,” “component,” “accessory,” “attachment” or “software” developed as a general purpose commodity or software, i.e., with <u>no “knowledge” for use in or with:</u></p> <p><b>particular commodity</b> (e.g., an F/A-18 or HMMWV) <i>or</i></p> <p><b>type of commodity</b> (e.g., an aircraft or machine tool)?</p>	<p><b>Yes.</b></p> <p><b><u>NOT</u> “specially designed.”</b></p>	<p><b>No.</b></p> <p><b><u>NOT</u> ‘released’ under (b)(5). Review other (b) ‘releases.’</b></p>



# Paragraph (b)(6) “release”

Paragraph (b)(6) criteria	Meets (b)(6) criteria	Does not meet (b)(6) criteria
<p>Was or is the “part,” “component,” “accessory,” “attachment,” or “software” being developed with “knowledge” that it would be for use in or with commodities or software:</p> <p>(i) described in ECCN controlled for AT-only reasons and also for EAR99 commodities or software, <u>or</u></p> <p>(ii) exclusively for use in or with EAR99 commodities or software?</p>	<p><b>Yes.</b></p> <p><b><u>NOT</u> “specially designed.”</b></p>	<p><b>No.</b></p> <p><b><u>NOT</u> ‘released’ under (b)(6). Review other (b) ‘releases.’</b></p>



## Note to (b)(4), (5), and (6)

- *For a commodity or software to be not “specially designed” on the basis of paragraphs (b)(4), (b)(5) or (b)(6), documents contemporaneous with its “development,” in their totality, must establish the elements of paragraphs (b)(4), (b)(5) or (b)(6). Such documents may include concept design information, marketing plans, declarations in patent applications, or contracts. Absent such documents, the “commodity” may not be excluded from being “specially designed” by paragraphs (b)(4), (b)(5) or (b)(6).*

# Examples of Applying ‘Equivalent’

- Scenario 1 (meets ‘equivalent’ standard): A steering wheel used in “production” of EAR99 designated trucks was modified for use in a military vehicle. Steering wheel has same function, performance capabilities, but needed to be modified solely for fit purposes (shaft extended 4 inches so it reaches through the armor) for use in a military vehicle.
- Scenario 2 (does **NOT** meet ‘equivalent’ standard): A steering wheel used in “production” of EAR99 designated trucks was modified for use in a military vehicle. However, in addition to modifying steering wheel for fit purposes (shaft extended 4 inches so it reaches through the armor) for use in a military vehicle, steering wheel has been reinforced to absorb the shock from firing a cannon.

