



Jurisdiction and Classification Scenarios

- Where do you Start?
 - Order of review
 - Enumerated
 - Specially designed
- What do you need?
 - ITAR and EAR
 - Technical specifications

Order of Review

- ITAR
- CCL 600/500 Series
- CCL Dual-use

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1



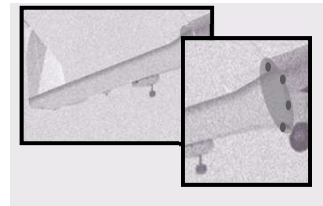
Items for Scenario



Carmella 500 Tactical UAV



Carmella 500 Propeller



Composite Tail Section



Carmella 500 Launcher



Micro-SAR Radar



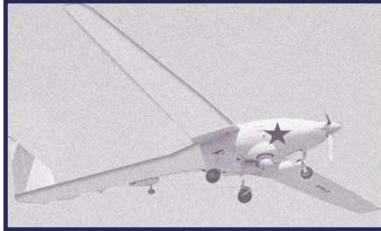
Carmella 500 Launch Rail

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2



Carmella 500 Technical Specifications



Specifications (Carmella 500 Unarmed UAV)	
Payload and Comms	Up to 75 lbs (34 kg)
Wingspan	24 ft (7.2 m)
Length.....	12 ft (3.6 m)
Max. Gross Takeoff Weight	220 lbs (99.8 kg)
Max. Altitude	15,000 ft MSL (4.5 m)
Max. Speed (Level Flight)	89 ktas
Loiter Speed.....	60 ktas
Electrical Power	Up to 1200 watts

AFAS Company unmanned air vehicles that can be configured for tactical missions such as counter IED, communications relay, signals intelligence, electronic warfare (EW), and maritime surveillance. Standard equipment includes a Micro-SAR radar.

The Carmella 500 unarmed UAV has a blended wing-body design, which can carry up to 100lbs with more than 6 cubic feet of payload space. The GAS Company 2-stroke 15.8 HP reciprocating engine powers the Carmella 500.

Runway-independent launch and recovery, and fully autonomous - launches from a rail launcher and runway or portable net recoverable.

Detachable light-weight composite tail section allows for ease of transport by ground or air

Range > 300 km; but cannot carry 500 kg to a range of 300 km

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3



Item #1

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4



Micro-SAR Radar Jurisdiction and Classification

State of the Art Synthetic Aperture Radar

- Provides location, detection, and classification of targets in all weather conditions.
- Provides real-time images from a state-of-the-art radar designed to be mounted on small to medium air platforms, manned or unmanned



Specifications:

- | | |
|-------------------------------------|---|
| • <i>Image Resolution</i> | <i>Less than 0.3, 0.3, 0.5, and up to 10m</i> |
| • <i>Communications</i> | <i>Serial and Ethernet</i> |
| • <i>Sensor Cueing</i> | <i>Cue on target</i> |
| • <i>Real Time Image processing</i> | |
| • <i>Size:</i> | <i>6"x6"x3"</i> |
| • <i>Weight</i> | <i>3.4lbs</i> |

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5



Where To Start? USML Category XI

- (a) Electronic systems and equipment not included in Cat XII of the USML as follows:

- *(1) Underwater Hardware, equipment or systems...
- *(2) Underwater acoustic countermeasures or counter countermeasures systems...
- *(3) Radar Systems and Equipment as follows:
- (4) Electronic Combat (i.e., Electronic Warfare) systems and equipment,...
- (5) Command, control, and communications (C3);
- (6) – (12)

- (b) Electronic systems or equipment, not elsewhere enumerated in this subchapter, (
- (c) Parts, components, accessories and attachments
- (d) Technical data and defense services
- (e) – (w) Reserved
- (x) "subject to the EAR"

Need to Select the Correct Category

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6



Where To Start? USML Category XI

(a)*(3) Radar Systems and Equipment as follows:

- (i) Airborne radar that maintains positional state of an object or objects of interest, other than weather phenomena, in a received radar signal through time;
- (ii) **Synthetic Aperture Radar (SAR) incorporating image resolution less than (better than) 0.3 m, or incorporating Coherent Change Detection (CCD) with geo-registration accuracy less than (better than) 0.3 m**, not including concealed object detection equipment operating in the frequency range from 30 GHz to 3,000 GHz and having a spatial resolution of 0.1 milliradians up to and including 1 milliradians at a standoff distance of 100 m;
- (iii) Inverse Synthetic Aperture Radar (ISAR);
- (iv) Radar that geodetically-locates (i.e., geodetic latitude, geodetic longitude, and geodetic height) with a target location error 50 (TLE50) less than or equal to 10 m at ranges greater than 1 km;
- (v) Any Ocean Surveillance Radar with an average-power-aperture product of greater than 50 Wm²;
- (vi) Any ocean surveillance radar that transmits a waveform with an instantaneous bandwidth greater than 100 MHz and has an antenna rotation rate greater than 60 revolutions per minute (RPM);
- (vii) –(xxix)

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7



Micro-SAR Radar Jurisdiction and Classification

What is the Jurisdiction and classification for the Micro-SAR Radar?

USML XI(a)*(3)(ii)

- What other important information did you find?
 - Hint: “*”

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8



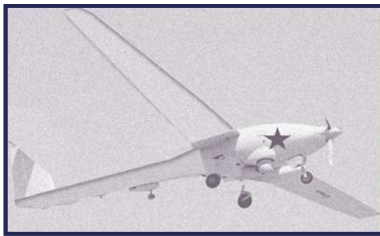
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9



Carmella 500 Jurisdiction and Classification



Specifications (Carmella 500 Unarmed UAV)
 Payload and CommsUp to 75 lbs (34 kg)
 Wingspan 24 ft (7.2 m)
 Length.....12 ft (3.6 m)
 Max. Gross Takeoff Weight 220 lbs (99.8 kg)
 Max. Altitude 15,000 ft MSL (4.5 m)
 Max. Speed (Level Flight) 89 ktas
 Loiter Speed..... 60 ktas
 Electrical Power Up to 1200 watts

AFAS Company unmanned air vehicles that can be configured for tactical missions such as counter IED, communications relay, signals intelligence, electronic warfare (EW), and maritime surveillance. Standard equipment includes a Micro-SAR radar.

The Carmella 500 unarmed UAV has a blended wing-body design, which can carry up to 100lbs with more than 6 cubic feet of payload space. The GAS Company 2-stroke 15.8 HP reciprocating engine powers the Carmella 500.

Runway-independent launch and recovery, and fully autonomous - launches from a rail launcher and runway or portable net recoverable.

Detachable light-weight composite tail section allows for ease of transport by ground or air

Range > 300 km; but cannot carry 500 kg to a range of 300 km

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10



Where To Start? USML Category VIII

USML Category VIII Aircraft and Related Articles

- (a) Aircraft, whether manned, unmanned, remotely piloted, or optionally piloted, as follows (MT if...
- (b) Reserved
- (c) Reserved
- (d) Launching and recovery equipment...to take off or land on a vessel described in Category VI
- (e) Reserved
- (f) Developmental aircraft
- (g) Reserved
- (h) Parts, components, accessories, attachments, associated equipment and systems, as follows
- (i) Technical data and defense services
- (j) – (w) Reserved
- (x) "subject to the EAR"

Need to Select the Correct Category

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11



Is The Carmella 500 Enumerated? *Category VIII(a) Aircraft*

(a) Aircraft, whether **manned, unmanned, remotely piloted, or optionally piloted**, as follows (MT if the aircraft, excluding manned aircraft, has a range equal to or greater than 300 km):

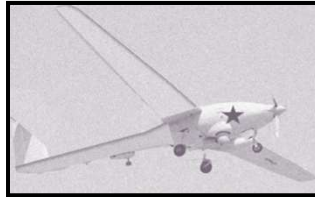
- | | |
|--|---|
| * (1) Bombers; | (10) Target drones; |
| * (2) Fighters, fighter bombers, and fixed-wing attack aircraft; | (11) Reserved; |
| * (3) Turbofan- or turbojet-powered trainers used to train pilots for fighter, attack, or bomber aircraft; | (12) Aircraft capable of being refueled in flight including hover-in-flight refueling (HIFR); or |
| * (4) Attack helicopters; | * (13) Reserved |
| * (5) Unmanned aerial vehicles (UAVs) specially designed to incorporate a defense article | (14) Aircraft with a roll-on/roll-off ramp, capable of airlifting payloads over 35,000 lbs. to ranges over 2,000 nm without being refueled in-flight...; |
| * (6) Reserved | * (15) Aircraft not enumerated in paragraphs (a)(1) through (a)(14) as follows: |
| * (7) performing an intelligence, surveillance, and reconnaissance function | (i) U.S.-origin aircraft that bear an original military designation of A, B, E, F, K, M, P, R, or S; or |
| * (8) Electronic warfare, airborne warning and control aircraft; | (ii) Foreign-origin aircraft specially designed to provide functions equivalent to those of the aircraft listed in paragraph (a)(15)(i) of this category; or |
| (9) incorporate a defense article for the purpose of performing an air refueling function; | (16) are armed or are specially designed to be used as a platform to deliver munitions or otherwise destroy targets (e.g., firing lasers, launching rockets, firing missiles, dropping bombs, or strafing); |

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12



Carmella 500 Jurisdiction and Classification



- What is the jurisdiction and classification for the Carmella 500 Tactical UAV?
USML VIII(a)(5)
- What other important information did you find?
 - Hint: “*” and “MT”

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13



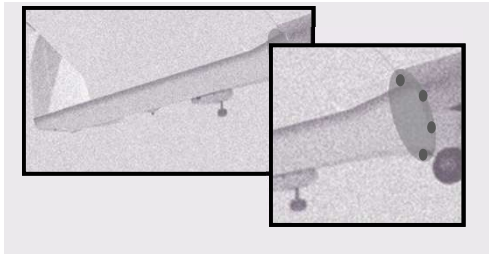
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14



Carmella 500 Tail Section Jurisdiction and Classification



Carmella 500 Jurisdiction And Classification

Specifications (Carmella 500 Unmanned UAV)

Weight and Control	Up to 75 lbs (34 kg)
Wingspan	24 ft (7.3 m)
Length	13 ft (4.0 m)
Max Gross Takeoff Weight	220 lbs (99.8 kg)
Max Altitude	15,000 ft (4,572 m)
Max Speed (Level Flight)	60 kts
Lift-off Speed	60 kts
Electrical Power	Up to 100 watts

AFAS Company unmanned air vehicles that can be configured for tactical missions such as counter IED, communications relay, signals intelligence, electronic warfare (EW), and maritime surveillance.

The Carmella 500 unmanned UAV has a blended wing-body design, which can carry up to 100lbs with more than 6 cubic feet of payload space. The SAS Company 2-stroke 15.5 HP reciprocating engine powers the Carmella 500.

Runway-independent launch and recovery and fully autonomous - launches from a rail launcher and recovery or possible sea recovery.

Detachable light-weight composite tail section allows for ease of transport by ground or air.

Range > 300 km, but cannot carry 500 kg to a range of 300 km

- Detachable light-weight composite tail section allows for ease of transport by ground or air
- Carbon fiber reinforced polymer (CFRP) provides incredible strength-to-weight ratio

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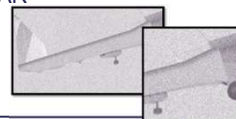
15



Carmella 500 Tail Section Jurisdiction and Classification

USML Category VIII Aircraft and Related Articles

- (a) Aircraft, whether manned, unmanned, remotely piloted, or optionally piloted, as follows (MT if...)
- (g) Reserved
- (b) Reserved
- (h) Parts, components, accessories, attachments, associated equipment and systems, as follows
- (c) Reserved
- (i) Technical data and defense services
- (d) Launching and recovery equipment...to take off or land on a vessel described in Category VI
- (j) – (w) Reserved
- (e) Reserved
- (x) "subject to the EAR"
- (f) Developmental aircraft



Need to Select the Correct Category

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16



Carmella 500 Tail Section Jurisdiction and Classification

0	Nuclear & Miscellaneous
1	Materials, Chemicals, Microorganisms and Toxins
2	Materials Processing
3	Electronics
4	Computers
5	Telecommunications
Part 1	
5	Information Security
Part 2	
6	Sensors and Lasers
7	Navigation and Avionics
8	Marine
9	Aerospace and Propulsion

A. End Items, Equipment, Accessories, Attachments, Parts, Components, and Systems

B. Test, Inspection and Production Equipment

C. Materials

D. Software

E. Technology

Order of Review

- ITAR
- CCL 600/500 Series
- CCL Dual-use

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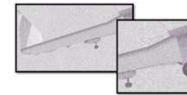
17



Carmella 500 Tail Section Jurisdiction and Classification

Cat VIII(h) Enumerated Parts

- | | |
|--|---|
| <ol style="list-style-type: none"> SD Parts for B-2, F-35 etc. Variety of gearboxes, etc. Tail boom, stabilator, etc. Wing folding systems Tail hooks, arresting equipment etc. Bomb racks, missile launchers, etc. Damage or failure adaptive FCS Threat-adaptive FCS Non-surface-based FCS Radar altimeters (w/LPI) Air to Air, etc. refueling systems UAV FCS Reserved Lift fans etc. for STOVL | <ol style="list-style-type: none"> Integrated Helmets, etc. Fire control computers, etc. SD Mission Computers, etc. SD FCS to function after > 7.62mm hit SD Thrust Reversers Classified Parts, etc. 21-26. Reserved Variable speed gearboxes Elec. power or thermal management systems SD ...equipment if specially designed for a defense article described in paragraph (h)(1): <ul style="list-style-type: none"> • (i) Scale test models; • (ii) Full scale iron bird ground rigs used to test major aircraft systems; or • (iii) Jigs, locating fixtures, templates, gauges, molds, dies, or caul plates. |
|--|---|



FCS – Flight Control Systems. LPI – Low Probability of Intercept, SD – Specially Designed, STOVL – Short Take-off/Vertical Landing, UAV – Unmanned Air Vehicle

Is the Composite A/C structure enumerated or controlled under specially designed?

18



Carmella 500 Tail Section Jurisdiction and Classification

ECCN 9A610

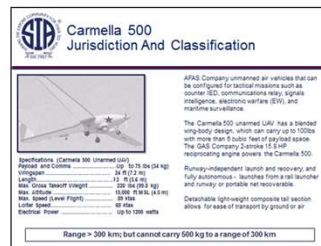
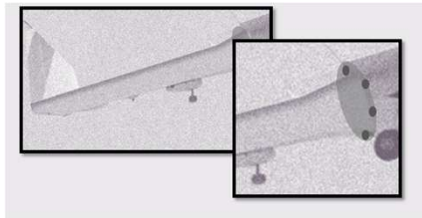
- a: SD Military aircraft not in USML Cat VIII
- b: L-100 aircraft manufactured prior to 2013
- c-d: Reserved
- e: Mobile aircraft arresting and engagement runway systems
- f: SD Pressure refueling equipment and equipment that facilitates operations in confined areas
- g: Aircrew life support/safety equipment
- h: SD Parachutes, paragliders, etc.
- i: Controlled opening equipment or automatic piloting systems
- j: SD Ground effect machines
- k-s: Reserved
- t: SD Composite structures, laminates... for UAVs with a range equal to or greater than 300 km.**
- u. SD devices for handling, control, activation and non-ship-based launching of UAVs w/R > 300km
- v. Radar altimeters designed or modified for use in UAVs or drones
- w: Pneumatic hydraulic, mechanical, electro-optical, or electromechanical flight control systems (including fly-by-wire systems) and attitude control equipment
- x: Parts, components, accessories, attachments that are "specially designed"
- y: Specific parts, components, accessories, attachments that are "specially designed"

Need to check if enumerated in 9A610.a-w, then 9A610.y before reviewing 9A610.x

19



Carmella 500 Tail Section Jurisdiction and Classification



What is the jurisdiction and classification for the Carmella 500 Tail Section?

9A610.t

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20



Item #4

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21



Carmella 500 Engine Propeller Jurisdiction and Classification

Carmella 500 Engine Propeller



Designed exclusively for 15.8 HP reciprocating engine powering the Carmella 500, this 5-Blade aluminum propeller provides all the power you will need.

The Carmella 500 unarmed UAV has a blended wing-body design, which can carry up to 100lbs with more than 6 cubic feet of payload space. The GAS Company 2-stroke 15.8 HP reciprocating engine powers the Carmella 500.

Carmella 500 Jurisdiction And Classification

Specifications (Carmella 500 Unarmed UAV)

Payload and Comms	Up to 75 lbs (34 kg)
Wingspan	24 ft (7.3 m)
Length	12 ft (3.6 m)
Max Gross Takeoff Weight	250 lbs (113.5 kg)
Max Altitude	15,000 ft MSL (4.5 m)
Max Speed (Level Flight)	50 kts
Lift-off Speed	60 kts
Electrical Power	Up to 1200 watts

AFSS Company unmanned air vehicles that can be configured for tactical missions such as counter IED, communications relay, signals intelligence, weapons warfare (EW), and maritime surveillance.

The Carmella 500 unarmed UAV has a blended wing-body design, which can carry up to 100lbs with more than 6 cubic feet of payload space. The GAS Company 2-stroke 15.8 HP reciprocating engine powers the Carmella 500.

Runway-independent launch and recovery, and fully autonomous - launches from a rail launcher and recovery or portable net recoverable.

Detachable light-weight composite tail section allows for ease of transport by ground or air.

Range > 300 kms but cannot carry 500 kg to a range of 300 kms

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22



Where To Start? USML Category VIII

USML Category VIII Aircraft and Related Articles

- (a) Aircraft, whether manned, unmanned, remotely piloted, or optionally piloted, as follows (MT if...
- (b) Reserved
- (c) Reserved
- (d) Launching and recovery equipment...to take off or land on a vessel described in Category VI
- (e) Reserved
- (f) Developmental aircraft
- (g) Reserved
- (h) Parts, components, accessories, attachments, associated equipment and systems, as follows
- (i) Technical data and defense services
- (j) – (w) Reserved
- (x) "subject to the EAR"



Need to Select the Correct Category

23



Carmella 500 Engine Propeller Jurisdiction and Classification

Cat VIII(h) Enumerated Parts

1. SD Parts for B-2, F-35 etc.
2. Variety of gearboxes, etc.
3. Tail boom, stabilator, etc.
4. Wing folding systems
5. Tail hooks, arresting equipment etc.
6. Bomb racks, missile launchers, etc.
7. Damage or failure adaptive FCS
8. Threat-adaptive FCS
9. Non-surface-based FCS
10. Radar altimeters (w/LPI)
11. Air to Air, etc. refueling systems
12. UAV FCS
13. Reserved
14. Lift fans etc. for STOVL
15. Integrated Helmets, etc.
16. Fire control computers, etc.
17. SD Mission Computers, etc.
18. SD FCS to function after > 7.62mm hit
19. SD Thrust Reversers
20. Classified Parts, etc.
- 21-26. Reserved
27. Variable speed gearboxes
28. Elec. power or thermal management systems SD
29. ...equipment if specially designed for a defense article described in paragraph (h)(1):
 - (i) Scale test models;
 - (ii) Full scale iron bird ground rigs used to test major aircraft systems; or
 - (iii) Jigs, locating fixtures, templates, gauges, molds, dies, or caul plates.



FCS – Flight Control Systems. LPI – Low Probability of Intercept, SD – Specially Designed, STOVL – Short Take-off/Vertical Landing, UAV – Unmanned Air Vehicle

Is the propeller enumerated or controlled under specially designed?

24



Carmella 500 Engine Propeller Jurisdiction and Classification

0	Nuclear & Miscellaneous
1	Materials, Chemicals, Microorganisms and Toxins
2	Materials Processing
3	Electronics
4	Computers
5	Telecommunications
Part 1	
5	Information Security
Part 2	
6	Sensors and Lasers
7	Navigation and Avionics
8	Marine
9	Aerospace and Propulsion

A. End Items, Equipment, Accessories, Attachments, Parts, Components, and Systems

B. Test, Inspection and Production Equipment

C. Materials

D. Software

E. Technology

Order of Review

- ITAR
- CCL 600/500 Series
- CCL Dual-use

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25



Carmella 500 Engine Propeller Jurisdiction and Classification

ECCN 9A610

- a: SD Military aircraft not in USML Cat VIII
- b: L-100 aircraft manufactured prior to 2013
- c-d: Reserved
- e: Mobile aircraft arresting and engagement runway systems
- f: SD Pressure refueling equipment and equipment that facilitates operations in confined areas
- g: Aircrew life support/safety equipment
- h: SD Parachutes, paragliders, etc.
- i: Controlled opening equipment or automatic piloting systems
- j: SD Ground effect machines
- k-s: Reserved
- t: SD Composite structures, laminates... for UAVs with a range equal to or greater than 300 km.
- u: SD devices for handling, control, activation and non-ship-based launching of UAVs w/R > 300km
- v: Radar altimeters designed or modified for use in UAVs or drones
- w: Pneumatic hydraulic, mechanical, electro-optical, or electromechanical flight control systems (including fly-by-wire systems) and attitude control equipment
- x: Parts, components, accessories, attachments that are "specially designed"

y: Specific parts, components, accessories, attachments that are "specially designed"

Need to check if enumerated in 9A610.a-w, then 9A610.y before reviewing 9A610.x

26



Carmella 500 Engine Propeller Jurisdiction and Classification

ECCN 9A610.y

y. Specific "parts," "components," "accessories," and "attachments" "specially designed" for a commodity subject to control in this ECCN or a defense article in USML Category VIII and not elsewhere specified in the USML or the CCL, and other aircraft commodities "specially designed" for a military use, as follows:

- y.1. Aircraft tires;
- y.2. Analog cockpit gauges and indicators;
- y.3. Audio selector panels;
- y.4. Check valves for hydraulic and pneumatic systems;
- y.5. Crew rest equipment;
- y.6. Ejection seat mounted survival aids;
- ...

Y.25. Propeller, propeller systems, and propeller blades used with reciprocating engines

- ...
- y.29. 'Military Aircraft' that were first manufactured from 1946 to 1955 that do not...
- y.30. Parts, "components," "accessories," and "attachments," other than electronic items or navigation equipment,;
- y.31. Identification plates and nameplates; *and*
- y.32. Fluid manifolds.

**What still
needs to be
done?**

27

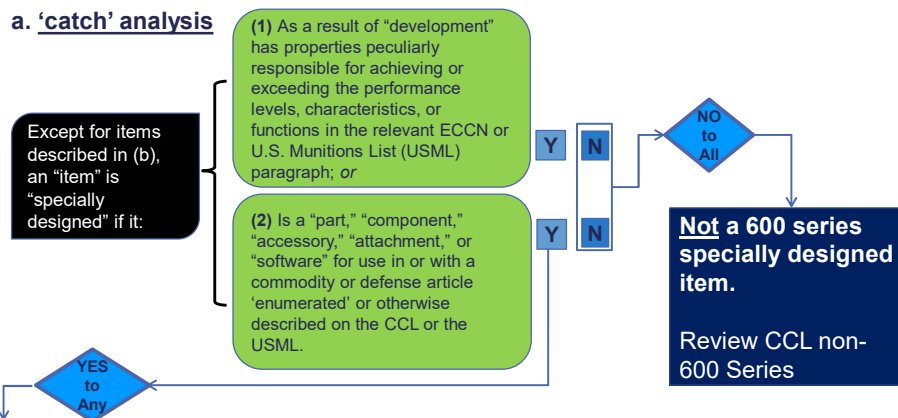


Catch And Release – ("EAR Specially Designed" Determination)

Note: "Specially Designed" Definition Includes Notes To Assist You In Understanding And Applying The Definition.

EAR Section 772.1 Specially Designed Definition

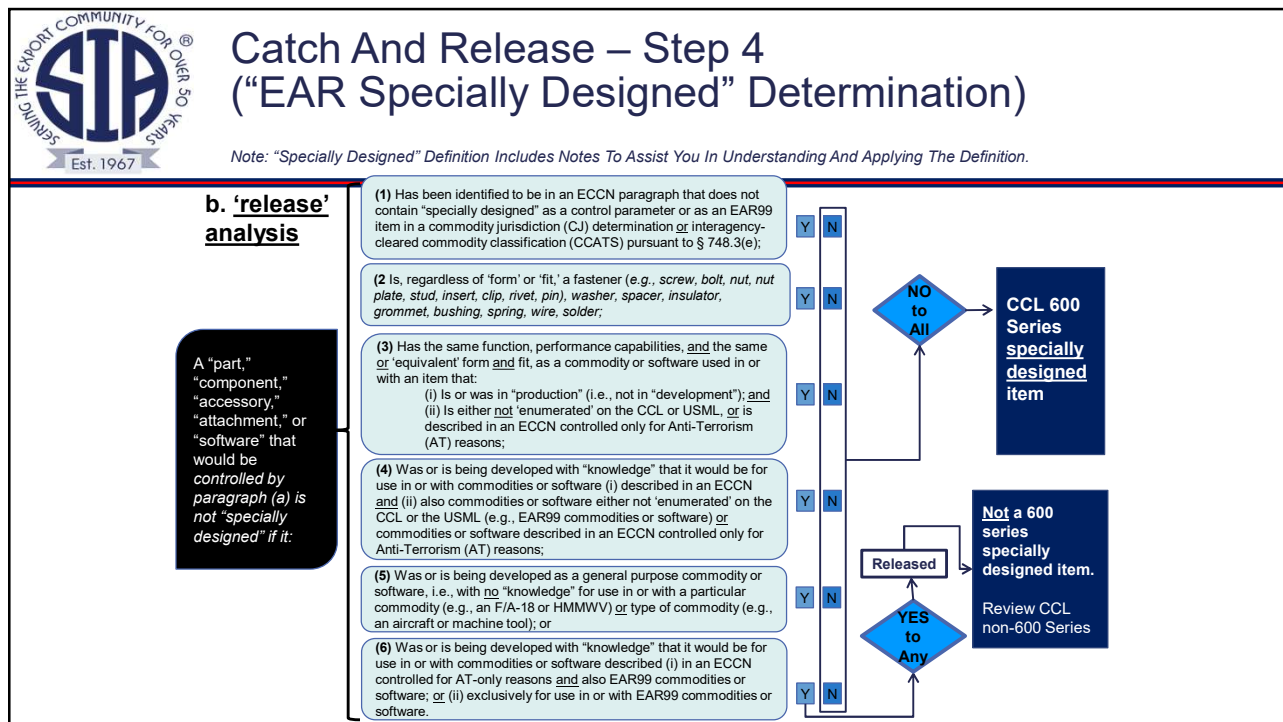
a. 'catch' analysis



b. 'release' analysis

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28



29

SIA SERVING THE EXPORT COMMUNITY FOR OVER 50 YEARS
Est. 1967

Carmella 500 Engine Propeller Jurisdiction and Classification

What is the jurisdiction and classification for the Carmella 500 Propeller?

9A610.y.25

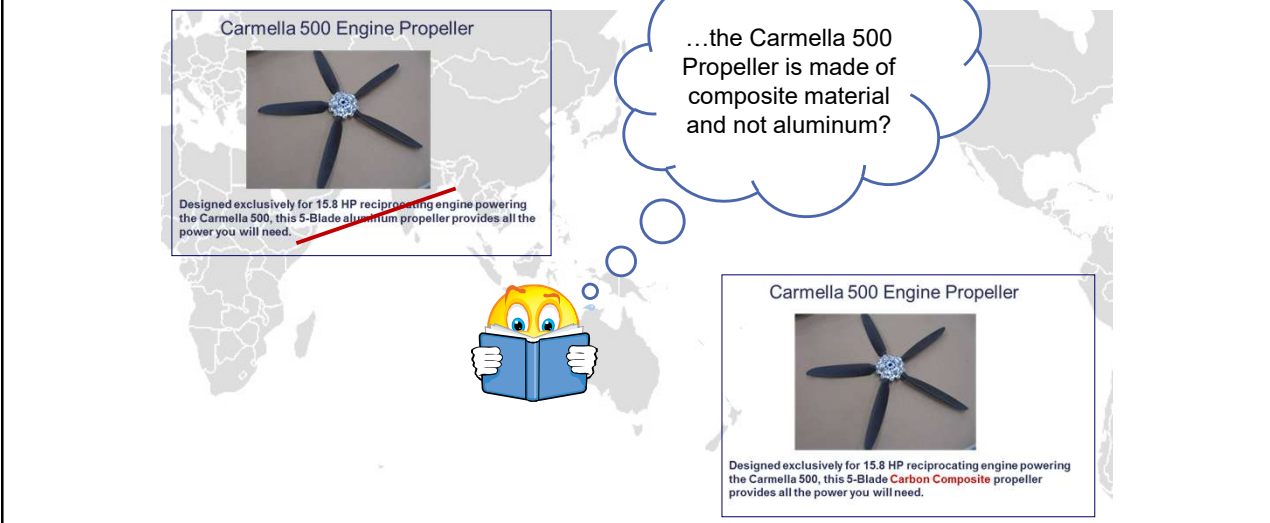


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30

SIA SERVING THE EXPORT COMMUNITY FOR OVER 50 YEARS
Est. 1967

What if...?

Carmella 500 Engine Propeller



Designed exclusively for 15.8 HP reciprocating engine powering the Carmella 500, this 5-Blade aluminum propeller provides all the power you will need.

...the Carmella 500 Propeller is made of composite material and not aluminum?

Carmella 500 Engine Propeller



Designed exclusively for 15.8 HP reciprocating engine powering the Carmella 500, this 5-Blade Carbon Composite propeller provides all the power you will need.

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31

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Est. 1967

What if...? Composite Propeller



...
t: SD Composite structures, laminates... for UAVs with a range equal to or greater than 300 km.
...
...
y: Specific parts, components, accessories, attachments that are "specially designed"
Y.25. Propeller, propeller systems, and propeller blades used with reciprocating engines

Is a "UAV Propeller" or "Propeller System" considered a UAV structure?



MTCR Annex Handbook: Composites and laminates are generally used in critical structural components of ballistic missiles or unmanned aerial vehicles (UAVs), including cruise missiles. Uses include solid rocket motor cases, interstages, wings, inlets, nozzles, heat shields, nosetips, structural members, and frames.

Significant Difference in Controls between .t and .y

May wish to submit a CCATS

32



Item #5

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33



Carmella 500 Launcher Jurisdiction and Classification



- Does not have a commercial equivalent
- Unique to the Carmella 500 Program

Provides the thrust required to propel the pre-activated aircraft with adequate lift for the ground controller to gain and maintain flight

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34



Carmella 500 Launcher Jurisdiction and Classification

USML Category VIII Aircraft and Related Articles

- (a) Aircraft, whether manned, unmanned, remotely piloted, or optionally piloted, as follows (MT if...
- (b) Reserved
- (c) Reserved
- (d) Launching and recovery equipment...to take off or land on a vessel described in Category VI
- (e) Reserved
- (f) Developmental aircraft
- (g) Reserved
- (h) Parts, components, accessories, attachments, associated equipment and systems, as follows
- (i) Technical data and defense services
- (j) – (w) Reserved
- (x) "subject to the EAR"



Need to Select the Correct Category

Distribution Limited to SIA Members/Attendees and Subject to SIA Code of Conduct

35



Carmella 500 Launcher Jurisdiction and Classification

Cat VIII(h) Enumerated Parts

1. SD Parts for B-2, F-35 etc.
2. Variety of gearboxes, etc.
3. Tail boom, stabilator, etc.
4. Wing folding systems
5. Tail hooks, arresting equipment etc.
6. Bomb racks, missile launchers, etc.
7. Damage or failure adaptive FCS
8. Threat-adaptive FCS
9. Non-surface-based FCS
10. Radar altimeters (w/LPI)
11. Air to Air, etc. refueling systems
12. UAV FCS
13. Reserved
14. Lift fans etc. for STOVL
15. Integrated Helmets, etc.
16. Fire control computers, etc.
17. SD Mission Computers, etc.
18. SD FCS to function after > 7.62mm hit
19. SD Thrust Reversers
20. Classified Parts, etc.
- 21-26. Reserved
27. Variable speed gearboxes
28. Elec. power or thermal management systems SD
29. ...equipment if specially designed for a defense article described in paragraph (h)(1):
 - (i) Scale test models;
 - (ii) Full scale iron bird ground rigs used to test major aircraft systems; or
 - (iii) Jigs, locating fixtures, templates, gauges, molds, dies, or caul plates.



FCS – Flight Control Systems. LPI – Low Probability of Intercept, SD – Specially Designed, STOVL – Short Take-off/Vertical Landing, UAV – Unmanned Air Vehicle

Is the Launcher enumerated or controlled under specially designed?

36



Carmella 500 Launcher Jurisdiction and Classification

0	Nuclear & Miscellaneous
1	Materials, Chemicals, Microorganisms and Toxins
2	Materials Processing
3	Electronics
4	Computers
5	Telecommunications
Part 1	
5	Information Security
Part 2	
6	Sensors and Lasers
7	Navigation and Avionics
8	Marine
9	Aerospace and Propulsion

A. End Items, Equipment, Accessories, Attachments, Parts, Components, and Systems

B. Test, Inspection and Production Equipment

C. Materials

D. Software

E. Technology

Order of Review

- ITAR
- CCL 600/500 Series
- CCL Dual-use

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37



Carmella 500 Launcher Jurisdiction and Classification

ECCN 9A610

- a: SD Military aircraft not in USML Cat VIII
- b: L-100 aircraft manufactured prior to 2013
- c-d: Reserved
- e: Mobile aircraft arresting and engagement runway systems
- f: SD Pressure refueling equipment and equipment that facilitates operations in confined areas
- g: Aircrew life support/safety equipment
- h: SD Parachutes, paragliders, etc.
- i: Controlled opening equipment or automatic piloting systems
- j: SD Ground effect machines
- k-s: Reserved
- t: SD Composite structures, laminates... for UAVs with a range equal to or greater than 300 km.
- u: SD devices for handling, control, activation **and** non-ship-based launching of UAVs w/R > 300km
- v: Radar altimeters designed or modified for use in UAVs or drones
- w: Pneumatic hydraulic, mechanical, electro-optical, or electromechanical flight control systems (including fly-by-wire systems) and attitude control equipment
- x: Parts, components, accessories, attachments that are "specially designed"
- y: Specific parts, components, accessories, attachments that are "specially designed"

Need to check if enumerated in 9A610.a-w, then 9A610.y before reviewing 9A610.x

38



Carmella 500 Launcher Jurisdiction and Classification

ECCN 9A610

- a: SD Military aircraft not in USML Cat VIII
- b: L-100 aircraft manufactured prior to 2013
- c-d: Reserved
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- x: Parts, components, accessories, attachments that are "specially designed"

y: Specific parts, components, accessories, attachments that are "specially designed"

Need to check if enumerated in 9A610.a-w, then 9A610.y before reviewing 9A610.x

39



Carmella 500 Launcher Jurisdiction and Classification

ECCN 9A610.y

y. Specific "parts," "components," "accessories," and "attachments" "specially designed" for a commodity subject to control in this ECCN or a defense article in USML Category VIII and not elsewhere specified in the USML or the CCL, and other aircraft commodities "specially designed" for a military use, as follows:

- y.1. Aircraft tires;
- y.2. Analog cockpit gauges and indicators;
- y.3. Audio selector panels;
- y.4. Check valves for hydraulic and pneumatic systems;
- y.5. Crew rest equipment;
- y.6. Ejection seat mounted survival aids;
- ...
- Y.25. Propeller, propeller systems, and propeller blades used with reciprocating engines
- ...
- y.29. 'Military Aircraft' that were first manufactured from 1946 to 1955 that do not...
- y.30. Parts, "components," "accessories," and "attachments," other than electronic items or navigation equipment,;
- y.31. Identification plates and nameplates; *and*
- y.32. Fluid manifolds.

Not There

40



Carmella 500 Launcher Jurisdiction and Classification

- **9A610.x.** “Parts,” “components,” “accessories,” and “attachments” that are **“specially designed”** for a commodity enumerated or otherwise described in ECCN 9A610 (except for 9A610.y) or a defense article enumerated or otherwise described in USML Category VIII and not elsewhere specified on the USML or in 9A610.y, 9A619.y, or 3A611.y.

- **What still needs to be done?**

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41

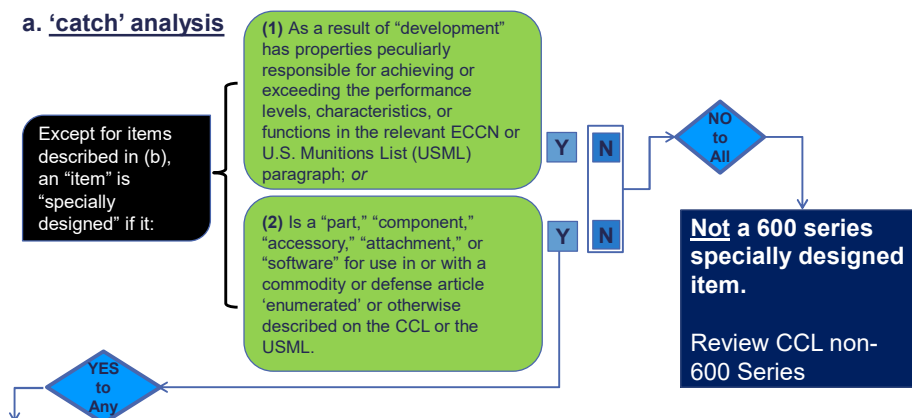


Catch And Release – (“EAR Specially Designed” Determination)

Note: “Specially Designed” Definition Includes Notes To Assist You In Understanding And Applying The Definition.

EAR Section 772.1 Specially Designed Definition

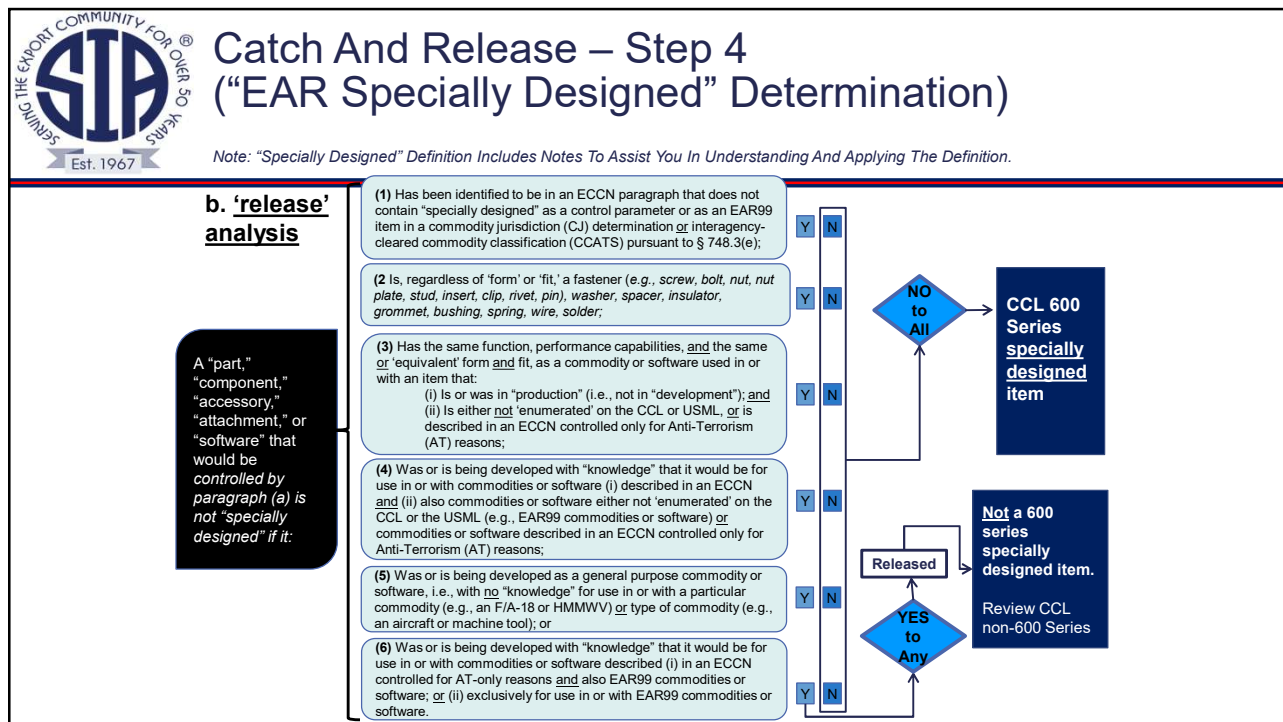
a. ‘catch’ analysis



b. ‘release’ analysis

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42



43

SEMPER PARATUS
SERVING THE EXPORT COMMUNITY FOR OVER 50 YEARS
Est. 1967

Carmella 500 Launcher Jurisdiction and Classification

What is the Jurisdiction and classification for the Carmella 500 Launcher?

9A610.x



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44



What just happened?



MTCR ANNEX:

12.A.1. Apparatus and devices, designed or modified for the handling, control, activation **and** launching of the systems specified in 1.A., 19.A.1., or 19.A.2.

Does "and" mean "or"?

USML CAT IV(c)

(c) Apparatus and devices specially designed for the handling, control, activation, monitoring, detection, protection, discharge, **or** detonation of the articles enumerated in paragraphs (a) and (b) of this category

USML makes translation from "and" to "or"

CCL 9A610.u

.u. SD devices for handling, control, activation **and** non-ship-based launching of UAVs w/R > 300km

CCL - Does "and" mean "or"?

BIS Verification: "**and**" means "**and**"

CCL 9A610.x

.x. Parts, components, accessories, and attachments that are "specially designed"

Launcher does not meet definition of Parts, components, accessories, and attachments. Could go to EAR 99

Submit CCATS.

Do not believe the intent is to drop to EAR 99. Classify as 9A610.u until determined

CCATS Determination – 9A610.x

45



Jurisdiction and Classification

Item #6

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46



Carmella 500 Launch Rail Jurisdiction and Classification

- Part of the Carmella 500 Launcher
- Unique design to launch the Carmella 500



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47



Carmella 500 Launch Rail Jurisdiction and Classification

USML Category VIII Aircraft and Related Articles

- | | |
|---|---|
| • (a) Aircraft, whether manned, unmanned, remotely piloted, or optionally piloted, as follows (MT if... | • (g) Reserved |
| • (b) Reserved | • (h) Parts, components, accessories, attachments, associated equipment and systems, as follows |
| • (c) Reserved | • (i) Technical data and defense services |
| • (d) Launching and recovery equipment...to take off or land on a vessel described in Category VI | • (j) – (w) Reserved |
| • (e) Reserved | • (x) "subject to the EAR" |
| • (f) Developmental aircraft | |



Need to Select the Correct Category

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48



Carmella 500 Launch Rail Jurisdiction and Classification

Cat VIII(h) Enumerated Parts

1. SD Parts for B-2, F-35 etc.
2. Variety of gearboxes, etc.
3. Tail boom, stabilator, etc.
4. Wing folding systems
5. Tail hooks, arresting equipment etc.
6. Bomb racks, missile launchers, etc.
7. Damage or failure adaptive FCS
8. Threat-adaptive FCS
9. Non-surface-based FCS
10. Radar altimeters (w/LPI)
11. Air to Air, etc. refueling systems
12. UAV FCS
13. Reserved
14. Lift fans etc. for STOVL

FCS – Flight Control Systems. LPI – Low Probability of Intercept, SD – Specially Designed, STOVL – Short Take-off/Vertical Landing, UAV – Unmanned Air Vehicle

15. Integrated Helmets, etc.
16. Fire control computers, etc.
17. SD Mission Computers, etc.
18. SD FCS to function after > 7.62mm hit
19. SD Thrust Reversers
20. Classified Parts, etc.
- 21-26. Reserved
27. Variable speed gearboxes
28. Elec. power or thermal management systems SD
29. ...equipment if specially designed for a defense article described in paragraph (h)(1):
 - (i) Scale test models;
 - (ii) Full scale iron bird ground rigs used to test major aircraft systems; or
 - (iii) Jigs, locating fixtures, templates, gauges, molds, dies, or caul plates.



Is the Launch Rail enumerated or controlled under specially designed?

49



Carmella 500 Launch Rail Jurisdiction and Classification

ECCN 9A610

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- h: SD Parachutes, paragliders, etc.
- i: Controlled opening equipment or automatic piloting systems
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- k-s: Reserved
- t: SD Composite structures, laminates... for UAVs with a range equal to or greater than 300 km.
- u. SD devices for handling, control, activation and non-ship-based launching of UAVs w/R > 300km
- v. Radar altimeters designed or modified for use in UAVs or drones
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- x: Parts, components, accessories, attachments that are "specially designed"

y: Specific parts, components, accessories, attachments that are "specially designed"

Need to check if enumerated in 9A610.a-w, then 9A610.y before reviewing 9A610.x

50



Carmella 500 Launch Rail Jurisdiction and Classification

ECCN 9A610.y

y. Specific “parts,” “components,” “accessories,” and “attachments” “specially designed” for a commodity subject to control in this ECCN or a defense article in USML Category VIII and not elsewhere specified in the USML or the CCL, and other aircraft commodities “specially designed” for a military use, as follows:

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- y.2. Analog cockpit gauges and indicators;
- y.3. Audio selector panels;
- y.4. Check valves for hydraulic and pneumatic systems;
- y.5. Crew rest equipment;
- y.6. Ejection seat mounted survival aids;
- ...
- y.25. Propeller, propeller systems, and propeller blades used with reciprocating engines
- ...
- y.29. ‘Military Aircraft’ that were first manufactured from 1946 to 1955 that do not...
- y.30. Parts, “components,” “accessories,” and “attachments,” other than electronic items or navigation equipment,;
- y.31. Identification plates and nameplates; *and*
- y.32. Fluid manifolds.

Not There

51



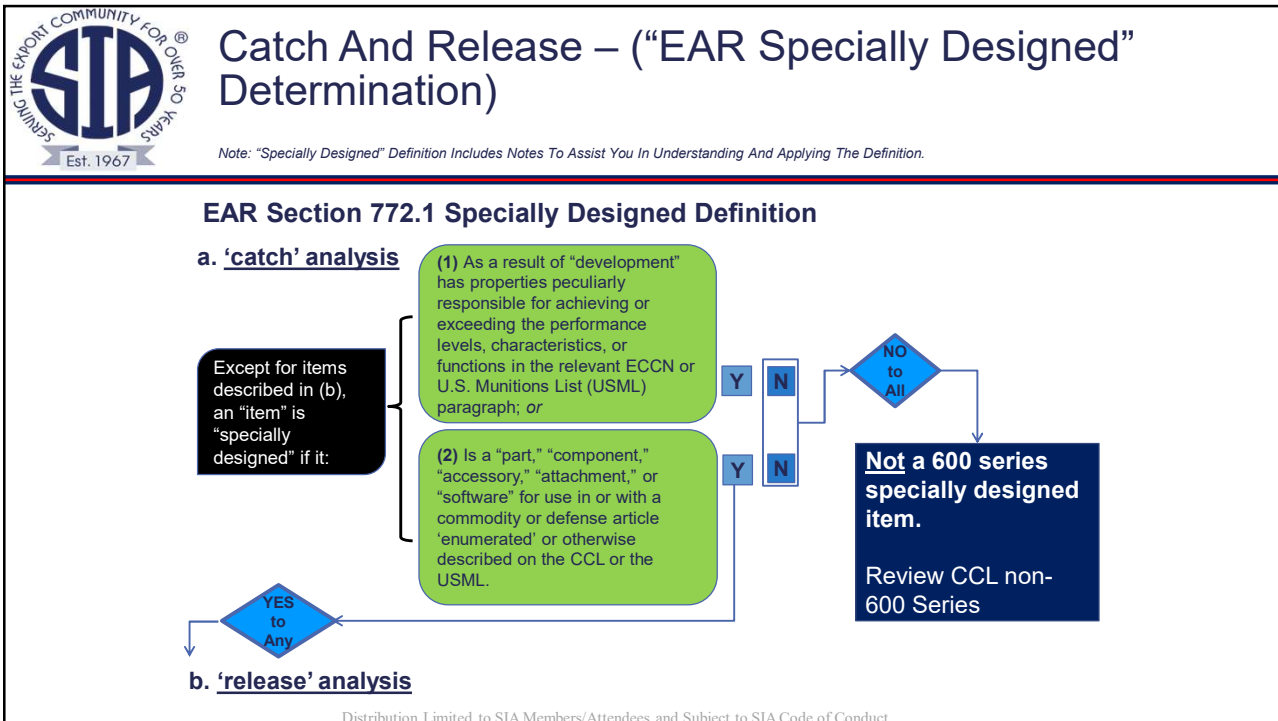
Carmella 500 Launch Rail Jurisdiction and Classification

- **9A610.x.** “Parts,” “components,” “accessories,” and “attachments” that are **“specially designed”** for a commodity enumerated or otherwise described in ECCN 9A610 (except for 9A610.y) or a defense article enumerated or otherwise described in USML Category VIII and not elsewhere specified on the USML or in 9A610.y, 9A619.y, or 3A611.y.

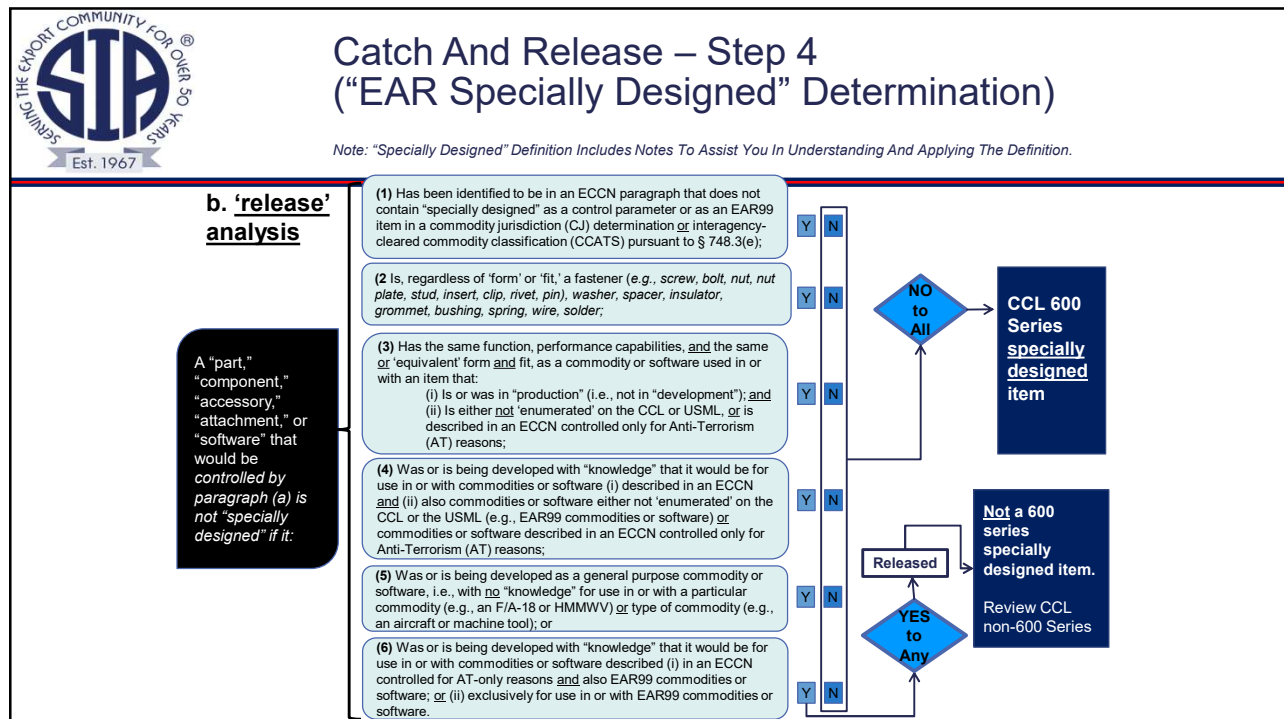
- **What still needs to be done?**

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52



53



54



Carmella 500 Launch Rail Jurisdiction and Classification

What is the Jurisdiction and classification for
the Carmella 500 Launch Rail?

9A610.x

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