



8 February 2011

Directorate of Defense Trade Controls
Attn: Category VII Revision
Bureau of Political Military Affairs, U.S Department of State
Office of Defense Trade Controls Policy
PM/DDTC, SA-1, 12th Floor
Washington, D.C. 20522-0112

RE: Revision of U.S. Munitions List Category VII (75 CFR 76930, December 10, 2010, Public Notice 7256)

To Whom It May Concern:

I am writing on behalf of the Association of University Export Control Officers (AUECO), a group of senior export practitioners at nineteen accredited institutions of higher learning in the United States. AUECO members monitor proposed changes in laws and regulations affecting academic activities, and advocate policies and procedures that advance effective university compliance with applicable U.S. export/import and trade sanctions regulations. AUECO is specifically interested in contributing to the export control reform effort in order to ensure that the resulting regulations do not have a disproportionate impact on academic pursuits. As a result, AUECO is providing the following comments in response to the Department of State (DoS) request for comments on the proposed amendment to Category VII of the U.S. Munitions List (USML).

In the Federal Register notice, the DoS acknowledged that difficulties in interpreting the existing USML arise because the categories “are general and include design intent as an element of causing an item to be controlled.” AUECO would like to emphasize that in order to create a “positive list” with a “bright line” between what is controlled on the USML, and what is controlled on the Commerce Control List (CCL), it is critical for each entry to contain precise and specific terms as well as all relevant definitions for those terms. Steps should be taken to avoid ambiguous entries and should instead provide qualifying and clear descriptive terms as much as possible. With these considerations in mind, AUECO carefully examined the proposed rule and is providing the following suggestions.

Definition of Unmanned Ground Vehicle

The entries describing military vehicles and tanks controlled in Category VII(a)(1)(i) through (vi) contain descriptive terms and qualifications indicating the unique functions of these vehicles that make them subject to control on the USML. For example, vehicles “specially designed” for deploying weapons of mass destruction (WMDs), tanks, and armored combat vehicles are listed. The descriptive terms in these entries alert the exporter to the types of applications that could make an item subject to control on the USML. While it is undoubtedly challenging to articulate all functions that warrant control on the USML, WMDs, tanks, and armored combat functions are all direct qualifications that clarify items controlled by those entries.

In contrast, proposed rule 121.1(a)(1)(vii)(C) includes unmanned ground vehicles (UGVs) that “are capable of off-road or amphibious operation.” Technical Note 1 to paragraph (a)(1)(vii) defines unmanned vehicles as “vehicles which are fitted with controls for either manned or unmanned operation.” Since a variety of UGVs with non-military and non-intelligence uses exist, this definition warrants closer examination. As currently drafted, the definition does not provide a “bright line” between what is and is not as a USML item.

As proposed, the category would include all UGVs that are capable of off-road or amphibious operation. UGVs built and used for search and rescue, agricultural, and firefighting purposes would be captured by this definition. Without clarification or qualification, the category could also be interpreted to include hobbyist UGVs (e.g., remote controlled toy trucks) or UGVs that aid law enforcement and industries such as automated underground mining vehicles.

Also problematic is the lack of relevant definitions. What is “off-road” operation? What is “amphibious” operation? Without precise definitions for these terms, robotic devices that are used to gather shopping carts and push them into grocery stores could be considered “off-road” UGVs. Similarly, robotic swimming pool cleaners could be controlled as a UGV capable of “amphibious” operation. While somewhat farcical in nature, these examples are merely offered as an illustration of just how overly broad 121.1(a)(1)(vii)(C) is and how important it is that clear definitions be established for critical concepts.

AUECO recommends that Category VII be revised to include additional qualifications or descriptive terms for unmanned ground vehicles, such that only UGVs that provide a critical, substantial or significant military (or intelligence) advantage are controlled in Advanced Notice of Proposed Rulemaking: Revisions to the United States Munitions List 75 CFR 76940, December 10, 2010. Additionally, in order to prevent overly-broad interpretations of this entry, definitions for key terms such as “off-road” operation and “amphibious” operation should also be included using objective criteria or thresholds, such as precise terms or technical parameters that do not lend themselves to multiple interpretations by reasonable people.

Definition of Armor

The entries describing materials controlled in Category VII(c) are troubling primarily due to the lack of a definition for what constitutes “armor”, leaving open to the possibility of overly broad or narrow interpretation on the part of exporters and regulators. This imprecision seems to be at odds with the stated intent to create a “bright line” demarcating what is subject to the jurisdiction of the ITAR and EAR. The lack of precision is particularly troublesome in subsections VII(c)(1-2) where no performance criteria, materials or standards are provided. Without performance standards, the proposed wording of VII(c)(1), “Developmental armor for the vehicles controlled in this Category” is in essence a re-wording of the problematic “specifically designed, developed or modified for military use” phrase currently prevalent in the USML. What the armor has been developed for (i.e. a specific military vehicle) seems less critical than the level of performance that armor or armor system achieves in a threat environment.

AUECO suggests using performance criteria that would eliminate the need to specifically call out “developmental armors” as they will be covered under each specific subtype identified in the regulations.

This is the approach taken by the armor classification guide and is the approach taken for armors controlled in Category VII(c)(3-7). Such an approach will allow fundamental research with new designs and materials to continue to advance the state of scientific/engineering knowledge and thereby provide critical information to the defense industry and government.

Category VII(c)(2) states simply "Spaced armor" and the Note 2 to paragraph (c) defines spaced armors to be "metallic or non-metallic armors that incorporate an airspace and/or obliquity or discontinuous material path effects as part of the defeat mechanism"; like Category VII(c)(1) this is overly broad and lacks the specific performance or material characteristics necessary to create a "bright line". As currently written, the category would include spaced armors that fail to provide any real protection from threats. Spaced armors rely on unique combinations of material, structural design, and layer thickness to provide increased protection with less weight. In many cases controlling the materials used in spaced armors, is impractical and unrealistic as they are often composed of widely available materials such as steel and titanium. Recent advances in spaced armors have come from fundamental research in materials science and structural engineering which will be in jeopardy if Category VII(c)(2) as currently proposed is adopted.

Also, using objective performance criteria or thresholds similar to those used in Category VII(c)(3-7) need to be included for spaced armors to create a "bright line". The criteria should be those that provide a critical, substantial or significant military advantage, in as precise terms or technical parameters as possible that do not lend themselves to multiple interpretations by reasonable people. Categories VII(c)(4-7) provide minimum plate sizes that would be controlled and we strongly recommend that similar criteria be added Category VII(c)(2) covering "spaced armor" and Category VII(c)(3) "transparent armor containing transparent crystalline laminate such as spinel, aluminum oxynitride, or sapphire" which would allow for research and testing to continue.

Closing

In closing, AUECO would like to express its appreciation for the opportunity to provide comments on these proposed changes. AUECO supports converting the USML into a "positive list", and hopes that this step will reduce jurisdictional disputes and uncertainty. As currently written, the category could encompass items that do not appear to provide a critical, substantial or significant military advantage, and other justifications for a USML designation are not apparent. Additionally, the entry for unmanned ground vehicles does not provide a bright line for determining what is and is not controlled as a USML item. Since this is one of the key stated objectives of the current export control reform efforts, AUECO recommends that the Category VII entry for unmanned ground vehicles be reviewed for additional qualifying and/or clarifying language, as well as the relevant definitions that will be necessary to ensure proper administration of this proposed regulatory change.

Sincerely,

A handwritten signature in black ink, appearing to read "J. May", with a large, stylized flourish at the end.

Jennifer P. May
Chair