February 1, 2012

Office of Exporter Services
Attn: Ms. Hillary Hess
Director, Regulatory Policy Division
Bureau of Industry and Security
U.S. Department of Commerce
Room 2099B
Washington, DC 20230

EMAIL: publiccomments@bis.doc.gov

RE: RIN 0694-XA37 (Retrospective Regulatory Review Under E.O. 13563)

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 accredited institutions of higher learning in the United States. AUECO members monitor proposed changes in laws and regulations affecting academic activities and advocate reforms that will improve the efficiency and effectiveness of the United States export control system. AUECO is specifically interested in contributing to the export reform effort in order to ensure that the resulting regulations do not have an adverse impact on academic pursuits.

As noted in the Notice of Inquiry referenced above, "The President has emphasized that the regulations must be accessible, consistent, written in plain language, and easy to understand." AUECO is submitting the following comments about the deemed export rule and other aspects of the EAR commonly encountered by university compliance personnel. The recommendations below focus on ways that will reduce the compliance burden at universities while continuing to protect the national security and advance the foreign policy of the United States.

General Comments

Application of the deemed export rule in an university setting has historically presented a challenge to not just universities, but also to the companies and federal agencies that sponsor research. While there are well-established provisions in the EAR that significantly reduce the compliance burden for universities and clearly reflect the intent to shield university research from onerous regulation, it is AUECO's position that room for improvement remains. Since reforming the deemed export rule under the EAR has not been undertaken to date, AUECO appreciates this opportunity to address the issue.

The observations below identify specific provisions of the EAR that are inconsistent, outdated, or are complicating the deemed export rule for universities. It is our hope that by providing a description of the current problems with the deemed export rule, available data on cost or economic impact, and proposed solutions we can affect changes that will foster a robust university environment that will undoubtedly ensure that the U.S. remains at the forefront of technological innovation in science, technology, engineering and mathematics (STEM).

Part 734.8 Fundamental Research

The need to shield university research from the chilling effect of license requirements under the deemed export rule is well recognized under the provisions found in 734.8. The open and free exchange of ideas amongst intellectual peers is a key attribute of universities and has long been recognized in NSDD-189[1]. It is therefore unfortunate that provisions found in 734.8 are not effectively addressing the deemed export licensing concerns that universities have.

Outdated reliance on institutional locus for a determination of Fundamental Research
University activities are becoming increasingly international in scope and include outreach, education and research activities which involve citizens, students, faculty and staff from virtually every country in the world. While many of these activities take place within the United States, it is essential for universities to keep pace with globalization and expand their activities to international locales and involve international populations in the interest of improved cultural and educational opportunities for everyone.

In 734.8(b)1, the EAR states that university based research will normally be considered fundamental research, but then notes that the definition of "university" only includes institutions that are "located in the United States". This requirement of "located in the United States" frequently creates difficult situations where a foreign person is permitted to work on research in the U.S. that qualifies as fundamental research under 734.8. However, the same person may not be permitted to continue the same project outside of the United States, even if it is undertaken at an international location operated and controlled by a U.S. university because the activity no longer squarely fits within the criteria identified for a fundamental research determination.

> **Example**: An example is the creation of SiCN (Silicon Carbonitride)(found in 1C007e, f.2) ceramic composite materials in a U.S. university laboratory for experimental piezoelectric analysis. The research is funded via an NSF program, meets the criteria for fundamental research, and an Australian foreign national graduate student can be involved without a deemed export license. However, the same research could not be performed on the Australian campus of a U.S. academic institution under the auspices of fundamental research.

[1] It is the policy of this Administration that, to the maximum extent possible, the products of fundamental research remain unrestricted. It is also the policy of this Administration that, where the national security requires control, the mechanism for control of information generated during federally-funded fundamental research in science, technology and engineering at colleges, universities and laboratories is classification. Each federal government agency is responsible for: a) determining whether classification is appropriate prior to the award of a research grant, contract, or cooperative agreement and, if so, controlling the research results through standard classification procedures; b) periodically reviewing all research grants, contracts, or cooperative agreements for potential classification. No restrictions may be placed upon the conduct or reporting of federally-funded fundamental research that has not received national security classification, except as provided in applicable U.S. Statutes.

This problem is only exacerbated by the increased internationalization of U.S. universities. In order to remain competitive with universities in every other country, U.S. universities must keep abreast of globalization and expand their activities to international locales.

Concern: This outdated requirement of physical presence in the U.S. in order to qualify as fundamental research is not realistic and inhibits the type of international collaboration that is necessary for the U.S. to maintain preeminence in higher education.

Recommendation: AUECO respectfully suggests that the definition of "university" found in 734.8(b) be amended to include "any institution of higher education with *accreditation* in the United States" [emphasis added]. With this change, the international research activities of institutions of higher education with accreditation in the United States could proceed in a timely fashion without the burden of seeking a license for low-risk situations. In those situations where additional oversight may be deemed necessary, a record-keeping and reporting requirement could be recommended.

Additionally, AUECO recommends that the language in 734.8 be amended to clearly reflect that collaborative research with a foreign university is eligible to qualify as fundamental research. Provided that the foreign university is not subject to an end-user based control policy in 744 and is not located in a country subject to special restrictions contained in 746[2], AUECO feels that the institutional locus of the research should not be determinative of the fundamental research designation.

Part 734.9 Educational Information

In accordance with 734.9, educational information is excluded from the EAR if it is released by instruction in catalog courses and associated teaching laboratories of academic institutions. However, instruction at a university does not only occur in catalog courses and associated teaching labs. Universities can release educational information and "instruct" individuals in a wide variety of online forums.

Recommendation: AUECO recommends that 734.9 be re-written to remove impediments that are created by use of the terms "instruction" ,"catalog course", and "associated teaching laboratory". AUECO recommends permitting the entire scope of educational activities to be allowed without a license, including research laboratory activities associated with degree requirements.

Part 734.11 Government-Sponsored Research Covered By Contract Controls

The provisions of 734.11 allow a university to accept specific national security controls on U.S. government funded research. Provided that the university abides by the specific national security controls reflected in the research award document, the university will still be able to determine that the activity qualifies as fundamental research under 734.8.

What becomes problematic is U.S. government funded researched that is awarded to a company and then subcontracted to a university. If the specific national security restrictions are "flowed down" to the

[2] AUECO realizes that additional regulations may impact the activity such as those administered by the Office of Foreign Assets Control.

university via the company's subcontract, is the university still safely within the provisions of 734.11(and Supplement No. 1 Questions E(1) and E(2)?

Concern: Confusion about the applicability of 734.11 to U.S. government funded research awarded to a company and subsequently subcontracted to a university may inhibit universities from utilizing 734.11.

> **Example:** Pursuant to its academic freedom policy, a university is limited to only accepting research that qualifies as "fundamental research" under 734.8. A program manager at a defense agency contacted this university to explore the possibility of involving it in an opportunity for research funding. The university expressed interest since the defense agency's request involved a particular area of expertise for the university's faculty. The defense agency funded the activity through a company, and the university submitted its research proposal to that company. The proposed activity was basic in nature and consisted of a general workshop designed to inform future directions of research for the defense agency. The workshop was open to the public.
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> During subsequent contract negotiation, mandatory flow-down restrictions (i.e. pre-publication review and approval by the government) were discovered resulting in the university being forced to withdraw from the contract. The university proposal had been accepted for funding at $150,000, so the contract restrictions involved in this award for an open workshop resulted in a significant loss of research funding for the university.

Recommendation: Amend the language contained in 734.11 to include direct or indirect U.S. Government funding. AUECO recommends that 734.11 apply to situations where U.S. government research funding exists, the only problematic restrictions for a fundamental research designation involved are those being imposed by the government, and the university involved is willing and capable of abiding by those restrictions if they can otherwise designate the activity as fundamental research.

Part 740 License Exceptions

The license exceptions found in Part 740 serve as authorization allowing for the exportation of items subject to the EAR under stated conditions. The exceptions help minimize the compliance burden faced by universities, since they can eliminate the need to obtain a deemed export license in some situations.

The EAR does not have a license exception that is reciprocal to 125.4(b)10 in the ITAR. As noted in our comments to BIS on September 13, 2011 in response to RIN 0694-AF17, 125.4(b)(10) permits disclosures of unclassified technical data in the U.S. by U.S. institutions of higher learning to foreign persons who are their *bona fide* and full time regular employees if certain conditions are met[3]. Without a reciprocating provision under the EAR, transfers of export-controlled technical data by universities to their employees is more restrictive.

> **Example:** University possesses ITAR controlled technical data. The University may share this technical data with its *bona fide* full time employee if the provisions in 125.4(b)10 are met.

[3] The employee must have a permanent abode in the U.S. throughout his/her employment period, must not be a national of proscribed countries, and the institution must inform the employee in writing of the obligation not to transfer the technical data to other foreign nationals. See 22 C.F.R. 125.4(b)10.

However, if dual-use export controlled technical data were involved, the university would need to obtain a deemed export license before sharing it with its employee.

Concern: The license requirements for sharing export controlled technical data under the EAR are more burdensome and restrictive than the ITAR.

Recommendation: AUECO strongly recommends providing a license exception in Part 740 that will serve to decrease the licensing burden on universities in the same manner as 125.4(b)10 of the ITAR.

Additionally, since applying for and obtaining deemed export licenses creates burdensome delays in a time sensitive research climate, and often requires resources that most universities do not have, the creation of a licensing exemption that could be utilized for transfers of dual use technical data to university students is recommended. Any exports made under such a license exception could be limited by BIS for exports that pose the most significant risk or concern. For example, certain ECCNs or countries might be ineligible for the exception. This would help ease the licensing and compliance burden for activities that do not clearly qualify for the exclusions contained in 734.

Part 772 Definition of Use

Part 772 defines use as "Use (All categories and General Technology Note)—Operation, installation (including on-site installation), maintenance (checking), repair, overhaul ***and*** refurbishing" (emphasis ours). This inclusive definition is manageable for universities because fundamental research may utilize CCL controlled equipment for a wide range of research activity. Mere operation of a CCL item does not typically expose a foreign national to technology required for the development, production or threshold of "use." As a result, deemed export licenses are generally not required for foreign nationals to utilize such equipment on university campuses which greatly reduces the compliance burden.

The Deemed Export Advisory Committee (DEAC) Report submitted to the Secretary of Commerce recommended that a simpler process that does not require distinguishing among research results and the use of research equipment be adopted[4]. Additionally, AUECO notes that the U.S. Senate has stated that **the use of technology by universities** should not be treated as a regulated export (and hence should not require a deemed export license)[5].

Recommendation: AUECO feels that the current definition of "use" is practical for U.S. university research activities. AUECO understands that the movement of items from the USML to the CCL presents a particular challenge to BIS because of the potential need for increased national security vigilance for these newly added items. AUECO recommends that the current definition of "use" be maintained during the export control reform initiative. AUECO also recommends that export control reform does not result in the restriction of "developmental" technologies and materials such that universities can no longer conduct fundamental research in those areas.

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[4] See *The Deemed Export Rule In the Era of Globalization*, pg. 23, December 20, 2007.

[5] See Sense of the Senate provision in S.2198, sec. 401, "It is the sense of the Senate that the use of technology by an institution of higher education in the United States should not be treated as an export of such technology for purposes of section 5 of the Export Administration Act of 1979 (50 U.S.C. App. 2404) and any regulations prescribed thereunder, as currently in effect pursuant to the provisions of the International Emergency Economic Powers Act (50 USC 1701 et seq.), or any other provision of law, if such technology is so used by such institution for fundamental research."

Other Observations: A Lack of Awareness/Understanding

It is apparent to AUECO that a great deal of confusion exists in government, industry, and even academia about the applicability of the deemed export rule in the university setting. While AUECO appreciates the efforts that have been made to date to provide guidance and clarification, the following points are being made in the hopes that lingering consternation can be addressed.

While it is the express intent of various agencies of the United States Government to exclude fundamental research from export control restrictions, there is still a significant amount of confusion regarding precisely what type of research qualifies for this exclusion, in what setting the exclusion will apply and which party is responsible for ensuring compliance.

> **Example:** A U.S. government agency makes several multi-million dollar research awards to multiple recipients, including universities. At a proposer's day conference, attendees are informed that research results will be publishable. However, the research award contains a publication restriction requiring review and approval of all information pertaining to any part of the contract. Two university recipients of the award object to the presence of this restriction on the basis that it could jeopardize the fundamental research status of the activity. The funding agency assures them that the presence of the restriction is not problematic for fundamental research because they will provide approval for all publications pursuant to the assurances made at the proposer's day conference.

Recommendation: AUECO believes there is still a significant amount of confusion regarding precisely what type of research qualifies as "fundamental research" and encourages the Bureau of Industry and Security to provide specific guidance to ***government and industry***, as well as academic institutions.

As noted in the DEAC Report, other nations depend largely upon their visa processes, intelligence information and commercial intellectual property controls rather than a formalized deemed export licensing scheme. AUECO strongly recommends that BIS fully evaluate these approaches and consider implementing reforms that will not burden U.S. universities with deemed export licensing requirements that peer universities in other countries do not have. The chilling effect of a burdensome regulatory climate results in a less prepared workforce with new graduates well -grounded in theoretical knowledge, but with little or no experience in practical application of that knowledge. The costs of this lack of experience are passed on to the U.S. industrial base that becomes obliged to provide additional on the job training. Additionally, U.S. graduates may become less competitive in a global workforce if practical education is less restrictive outside the U.S.

Recommendation: AUECO notes that the UK Department for Business Innovation & Skills, Export Control Organisation has published specific "Guidance on Export Control Legislation for Academics and Researchers in the UK"[6]. AUECO feels that BIS should fully evaluate this document, the UK's approach to export controls, academics and research, and determine if a similar approach would benefit not only U.S. universities, but also members of industry and the government that sponsor research.

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[6] Export Control Organisation. "Guidance on Export Control Legislation for Academics and Researchers in the UK." UK Department for Business Innovation & Skills. (2010, March) Retrieved 12 January 2012, from http://www.bis.gov.uk/assets/biscore/eco/docs/guidance-academics.

Finally, AUECO recognizes the effort and resources that BIS has expended to provide guidance on the topic of deemed exports. However, most guidance to date is not specifically tailored to university issues. Merely having university representatives attending BIS training seminars does not provide the type of specialized guidance that is needed.

Recommendation: AUECO recommends that BIS should customize a webpage to address issues that are particularly challenging for universities such as the deemed export rule. AUECO believes that while the current BIS website has a breadth of relevant and helpful information, the content is peppered across too many webpages, is overly complex, and is not as useful as possible. AUECO also believes that guidance for industry and government on what to consider when sponsoring research at a university would also prove helpful.

Closing

AUECO appreciates this opportunity identify provisions in the EAR that could be simplified, updated or clarified in an effort to minimize the disruptive impact of the deemed export rule on university research. We strongly recommend that deemed export reform be prioritized in the President's Export Control Reform Initiative. Modernization of the deemed export rule is essential to allowing U.S. universities to produce graduates with not only theoretical knowledge, but also experience in the practical application of that knowledge such that graduates are prepared to contribute to the U.S. industrial base.

AUECO supports the efforts of the Bureau of Industry and Security to improve existing rules of the EAR in concert with export reform. However, we believe that unless specific measures are taken to reduce the burden for the academic community, export reform will be a fruitless endeavor that will not increase U.S. competitiveness. AUECO is providing the comments above in the hopes that they will foster a clearer understanding of the deemed export rule's impact on university research. This understanding, coupled with the recognition that such research is essential to the health of the U.S. industrial base and the overall economy, should serve as the impetus to make deemed export reform a priority.

Sincerely,

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