



Export Controls

Where Research and National Security Collide

Credits to:

Richard A. Johnson, *U.S. Export Controls – The Challenge for Research Institutions*; presented at NCURA conference, November 8, 2002.

Christina Hansen, *Publication Restriction and Export Control*, presented at COGR conference, June 9, 2005.

MIT Panel Discussion, *Export Controls and Embargos – What You Never Wanted to Know*, presented at NUCRA conference, November 2002.

Overview

- U.S. Export Controls
 - Transfer of controlled technology, information, equipment, software or services to a foreign person in the U.S. or abroad by any means; e.g.,
 - actual shipment outside the U.S.
 - visual inspection in or outside the U.S.
 - written or oral disclosure
 - U.S.-origin items wherever located, in the U.S. or abroad.
 - Jurisdiction follows the item or technology worldwide
 - Excludes technology in the public domain
- Exports of military and most high-technology items, as well as associated technology, require U.S. export authorization (either a license or an applicable exemption).
- Trade Sanctions focus on financing, commodities, and services in countries posing greatest security or foreign policy threats.

Why have export control laws?

Multiple goals ... that sometimes conflict!

- Protect U.S. national security
- Prevent terrorism and other illicit activities
 - drug trafficking
- Restrict export of technologies/goods that could contribute to military potential of U.S. adversaries
 - WMDs, nuclear, biological, or chemical weapons
- Fulfill international treaties obligations
 - Wassenaar, Australia Group, Nuclear Supplier, Missile Technology Control
- Advance U.S. foreign policy and economic goals

U.S. Government Agencies

- U.S. Department of State
 - Munitions
 - The International Traffic in Arms Regulations (ITAR)
 - Administering agency: Directorate of Defense Trade Controls (DDTC)
- U.S. Department of Commerce
 - “Dual-Use” Items
 - The Export Administration Regulations (EAR)
 - Administering agency: Bureau of Industry and Security (BIS)
- U.S. Department of the Treasury
 - Economic and Trade Sanctions
 - Various Restrictions on Transfers to Certain End-Users (countries and/or individuals)
 - Administering agency: Office of Foreign Assets Control (OFAC)

Controlling Regulations

- International Traffic in Arms Regulations (ITAR)
 - Covers military items (munitions or defense articles) on the United States Munitions List (USML)
 - Regulates goods and technology designed to kill people or defend against death in a military setting
 - e.g., tank, fighter aircraft, nerve agent defensive equipment
 - Includes most space-related technology due to application to missile technology
 - Includes technical data related to defense articles and services
 - Services is defined as furnishing assistance including design, engineering, and use of defense articles.
 - Strict regulatory regime
 - Purpose of regulations is to ensure national security
 - No balancing of commercial or research objectives

Controlling Regulations

- Export Administration Regulations (EAR)
 - Covers dual-use items or materials on the Commerce Control List (CCL)
 - Regulates items or materials designed for commercial purpose but that have military applications
 - e.g., computers, pathogens, civilian aircraft
 - Covers both the items or materials and the technological data
 - Technology is defined as information beyond basic and general marketing materials on use, development or production of controlled items or materials.
 - Also, not all controlled items or materials are controlled for use technology.
 - Licensing regime encourages balancing competing interests
 - Balance foreign availability, commercial and research objectives with national security

Controlling Regulations

- Office of Foreign Assets Control (OFAC) Sanctions Program
 - Focus on the end-user or country rather than the technology
 - Blanket prohibitions on trade with countries such as Iran, **Cuba**
 - Limitations on trade in certain areas of countries or with certain actors
 - e.g., terrorists, drug traffickers, etc.
 - OFAC prohibits payments to nationals of sanctioned countries and to entities (*countries or companies*) designated as terrorist-supporting
- BONUS: Separate prohibitions under the ITAR and EAR!
 - State Department arms embargos and general prohibitions
 - Commerce Department embargos and special controls
- NOTE: These lists are subject to change regularly. Contact OR-Compliance for assistance and review regarding embargo and sanctions programs.



**U.S. Department of the Treasury
Office of Foreign Assets Control**



CUBA

What You Need To Know About The U.S. Embargo

An overview of the Cuban Assets Control Regulations Title 31 Part 515 of the U.S. Code of Federal Regulations

■ **INTRODUCTION** - The Cuban Assets Control Regulations, 31 CFR Part 515 (the "Regulations") were issued by the U.S. Government on 8 July 1963 under the Trading With the Enemy Act in response to certain hostile actions by the Cuban government. They are still in force today and affect all U.S. citizens and permanent residents wherever they are located, all people and organizations physically in the United States, and all branches and subsidiaries of U.S. organizations throughout the world. The Regulations are administered by the U.S. Treasury Department's Office of Foreign Assets Control. The basic goal of the sanctions is to isolate the Cuban government economically and deprive it of U.S. dollars. Criminal penalties for violating the sanctions range up to 10 years in prison, \$1,000,000 in corporate fines, and \$250,000 in individual fines. Civil penalties up to \$55,000 per violation may also be imposed. Please note that the Regulations require those dealing with Cuba to maintain records and, upon request from the U.S. Treasury Department, to furnish information regarding such dealings.

government. The CDA specifically provides that payments to Cuba involving telecommunications may be made pursuant to specific license. In the mid-1970s, Section 515.559 was added to the Regulations to allow OFAC to license foreign subsidiaries of U.S. firms to conduct trade in commodities with Cuba so long as several specific criteria were met. Section 1706(a) of the CDA, however, prohibits the issuance of a license that would have been issued pursuant to § 515.559, except where a contract was entered into prior to enactment of the CDA or where the exports at issue are medicines or medical supplies.

Unless otherwise authorized, no vessel carrying goods or passengers to or from Cuba or carrying goods in which Cuba or a Cuban national has any interest may enter a U.S. port. The prohibition also applies to vessels which enter only to take on fuel and supplies (bunker), whether from U.S. fuel providers within the port limits or at offshore points, as well as vessels discharging or loading merchandise offshore, by lighter or otherwise. In addition, vessels which enter a port or place in Cuba to engage in the

■ **EXPORTING TO CUBA** - Except for publications, other informational materials (such as CDs and works of art), certain donated food, and certain goods licensed for export or re-export by the U.S. Department of Commerce (such as medicine and medical supplies, food, and agricultural commodities), no products, technology, or services may be exported from the United States to Cuba, either directly or through third countries, such as Canada or Mexico. This prohibition includes dealing in or assisting the sale of goods or commodities to or from Cuba, even if done entirely offshore. Such brokering is considered to be dealing in property in which Cuba has an interest. Provision of consulting services is also prohibited. Thus, no U.S. citizen or permanent resident alien, wherever located, and no foreign subsidiary or branch of a U.S. organization may export products, technology, or services to Cuba or to any Cuban national, wherever they may be located, or broker the sale of goods or commodities to or from Cuba or any Cuban national.

■ **WHO CAN GO** - The following travelers are authorized, under OFAC general license, to engage in travel transactions while in Cuba:

- Journalists and supporting broadcasting or technical personnel (regularly employed in that capacity by a news reporting organization and traveling for journalistic activities).
- Official government travelers (traveling on official business).
- Members of international organizations of which the United States is also a member (traveling on official business).
- Full-time professionals whose travel transactions are directly related to professional research in their professional areas, provided that their research 1) is of a noncommercial, academic nature; 2) comprises a full work schedule in Cuba; and 3) has a substantial likelihood of public dissemination.
- Full-time professionals whose travel transactions are directly related to attendance at professional meetings or conferences in Cuba organized by an international professional organization, institution, or association that regularly sponsors such meetings or conferences in other countries. The organization, institution, or association sponsoring the meeting or conference may not be headquartered in the United States unless it has been specifically licensed to sponsor the meeting. The purpose of the meeting or conference cannot be the promotion of tourism in Cuba or other commercial activities involving Cuba, or to foster production of any bio-technological products.
- Travelers who have received specific licenses from OFAC prior to going. Specific licenses are described below.

Key Issues for University Research

- “Deemed Exports”
- Exclusions and Exemptions
- Applying Export Controls to University Research
- Do we need an Export License?
- Penalties
- Compliance Factors
- Trends to Watch
- Case Studies

“Deemed” Exports

- The transfer of controlled technical information (e.g. technical data or services) by any method to a foreign national in the U.S. is deemed to be an export to that individual’s country of citizenship.
- Such transfer may require a license depending on the technology and the country involved.
- Methods of disclosure include:
 - Fax; Telephone discussions; E-mail communications; Computer data disclosure; Face-to-face discussions; Training sessions; Tours which involve visual inspections
- Visa status important
 - Permanent resident (“green card holder”) has same right to controlled information as U.S. citizen
 - e.g.; no license required
 - Non-immigrant visa holders must satisfy export controls
 - A license may be required!

Exclusions and Exemptions

- Exclusions, Exemptions, and Exceptions
 - Provided for by Export Regulations
 - EXCLUSION = Regulation Simply Doesn't Apply
 - EXEMPTION = Regulation Generally Applicable, but May Not Apply if Certain Circumstances Exist
 - EXCEPTION = An Exception is Available, but May be Overcome or Lost if Other Conditions Not Met
- Fundamental Research is **EXCLUDED** from the Export Control Regulations

ITAR Fundamental Research

- State Department formally announced that it does not regulate, never has regulated, and does not intend to regulate Fundamental Research.
 - 67 Federal Register 15099, 29 March 2002
- Fundamental Research – 22 CFR 120.11(8)
 - The conduct, products, and results of
 - public domain basic and applied research
 - in science and engineering
 - unfettered by deemed export restrictions.
- Distinguish that definition from government- or industry-sponsored development, design, production, manufacture and/or product research, which ordinarily is disclosure- or access-restricted for proprietary or national security reasons.
- **KEY MESSAGE:** Research that is subject to access, dissemination, or participation restrictions does not qualify as fundamental research!

EAR Fundamental Research

- Fundamental Research – 15 CFR 734.8
 - Basic and applied research
 - in science and engineering
 - where the resulting information is ordinarily published
 - and shared broadly within the scientific community.
- Fundamental research is EXCLUDED from EAR regulations pertaining to “deemed exports.”
- If the research carries access, disclosure, or participation restrictions, it is not “fundamental!”

Fundamental Research

- Keep It Fundamental: Don't Accept Contract Restrictions
- Participation, Access, and Dissemination Restrictions destroy our ability to take advantage of this exclusion. Restrictions may look like:
 - Prepublication reviews
 - U.S. citizen only meetings
 - Classified, proprietary or otherwise secret work
 - Other "national security" controls
- Acceptance of participation, dissemination, and access restrictions sought by the government or other sponsors destroys our ability to characterize the work as "Fundamental Research"
- NEGOTIATE
 - Demonstrate PUBLIC DOMAIN nature of work
 - Offer Alternative Clauses

Fundamental Research

- If the research isn't FUNDAMENTAL, you may be faced with.....
- Restrictions on attendance at conferences and seminars
 - presentation of results or discussions of projects limited to audiences where there are no foreign nationals and precludes presenting at international conferences abroad UNLESS you get a license!
- Control of the export of "technical data" to a foreign national, regardless of whether the foreign national is in the U.S. or abroad, effectively limiting the freedom to publish and talk about research.
- Restrictions on access to information by foreign nationals (including faculty, students & post-docs) could prohibit foreign nationals from working on projects.
- Restrictions on publications of research results could impose time delays, reviews and approvals.

Application to University Research

- Export of research equipment/products
 - Fundamental Research Exclusion **DOES NOT APPLY** to shipments of anything to anywhere outside of the U.S. – even if item created under the exclusion!
 - Any controlled items, either ITAR or EAR controlled, require a review to determine if a license is needed **PRIOR** to shipment.
- Temporary transfer of research equipment abroad
 - Carrying/shipping scientific equipment to certain destinations for a temporary research project may also require licensing.
 - A review should take place for destination and control restrictions.
- Software
 - Software that is openly available to the public may not require licenses, but proprietary software of controlled technology could require licensing.
 - Encryption technology likely would require licenses or could be prohibited for transfers to certain foreign nationals or countries.

Application to University Research

- Government grants may limit access by foreign nationals
 - Agencies may preclude or limit access by foreign nationals to research for national security reasons.
 - Determining whether a restriction is a “specific access and dissemination control” is important and should be done as early as possible in the process to avoid unnecessary delays in contract negotiations.
- Corporate grants may limit access by foreign nationals
 - Proprietary restrictions or restrictions on publication by corporate grants may invalidate fundamental research.
 - Watch for “flow-through” clauses from corporate sponsors when responding to RFPs that are sub-contracts of a government contract.
- Conferences
 - Potential restrictions on participants can lead to restrictions on what you can present or talk about while in attendance.

Application to University Research

- Impact on students
 - Acceptance on publication or other restrictions not only may impact international students, it could impact AMERICAN students as well!
 - Publication restrictions apply to the graduate and post-doctoral students just as much as the restrictions apply to faculty members. THEREFORE – NO PUBLICATIONS BASED ON THE WORK!!!
 - THIS INCLUDES THESISES!!!! Which would keep a graduate student working on a Ph.D. from being able to defend if their work depended on this research. Which means that they cannot graduate!
 - THIS INCLUDES ALL PUBLICATIONS!!! Which would hurt post-doctoral students trying to get published so they can get their CV built up and start hunting for a really good job!
- Faculty members: think back to when you were a graduate or post-doc student. How upset would you be if you found this out after working on such a project?!? Be upfront with ALL your student researchers.

Bona Fide Employee Exemption

- ITAR – 22 CFR 125.4(b)(10) Exemptions of general applicability.
 - Access to unclassified technical data in the U.S.
 - By U.S. institutions of higher learning to
 - Foreign persons who are bona fide, full-time, regular employees, only if
 - Employee's permanent abode throughout employment is in the U.S.,
 - Employee is not a national of a prohibited country (*contact OR-Compliance*),
 - And the Institution informs the employee in writing that the technical data may not be transferred to other foreign persons without prior written approval of the Directorate of Defense Trade Controls.
- The EAR does **NOT** provide such an exemption!
- This exemption may preclude the need for licenses, but often is unavailable for foreign national student and post-doc researchers
 - Visa restrictions may preclude regular employment status by requiring the visa holder to maintain a foreign residence.
 - Many researchers, particularly post-docs and students, cannot qualify for the exemption as they are not full-time employees.

Do We Need an Export License?

- Classify the technology or goods involved.
 - i.e., subject to ITAR, EAR, or other controls
- Determine if a license is needed for the particular technology, particular end-use and particular end-user.
- Determine whether any license exclusions or exemptions are available.
 - e.g., public domain, fundamental research, bona fide employee, etc.
- Determine whether any embargoes apply or whether any prohibited parties or destinations are involved.
- Determine whether there are any “red flags” or other warning signs of possible diversion of the goods or technology.
- If a license is required, apply promptly!

Penalties for Noncompliance

- State Department (ITAR)
 - Criminal violations: up to \$1,000,000 per violation, up to 10 years imprisonment
 - Civil penalties: seizure and forfeiture of the articles and any vessel, aircraft or vehicle involved in attempted violation, revocation of exporting privileges, fines of up to \$500,000 per violation
- Commerce Department (EAR)
 - Criminal violations: up to \$1,000,000 or five times the value of the export, whichever is greater per violation (range depends on the applicable law), up to 10 years imprisonment
 - Civil penalties: loss of export privileges, fines up to \$120,000 per violation
- Treasury Department (OFAC)
 - Criminal violations: up to \$1,000,000 per violation, up to 10 years imprisonment
 - Civil penalties: up to \$55,000 fines (depending on applicable law) per violation
 - Violation of specific sanctions laws may add additional penalties

University Compliance Factors

- Universities have been largely immune from export control enforcement. This likely will change – soon.
- Increasing scrutiny of all exports and application of export control regulations following 9/11.
- Government agencies criticized by oversight offices for failure to enforce “deemed exports” rules.
- Acting under a government grant is no defense!
 - Los Alamos and Lawrence Livermore National Labs investigated for their role in providing a 486 computer and other items to a Russian lab to help control Russian material under a U.S. government research program!

University Compliance Factors

- Corporate sponsored research
 - Increasing industry-university ties lead to the possibility for increased contracts with access and publication restrictions.
 - Faculty start-ups are a factor in this as well.
- Material transfer agreements
 - MTAs need to be carefully worded to avoid eliminating the Fundamental Research Exemption.
- Should a violation occur...
 - Most settlements with the Commerce, State or Treasury Departments generally become public.
 - Court cases are always public!
 - HELLO, TRIBUNE AND MISSOURIAN!!

Trends to Watch

- “National security vs. openness”: It no longer is only a technical issue!
- Interagency groups considering “broadening and deepening” export controls and related controls.
- Keep an eye on biology, biotech and bioengineering.
 - increased threat; most unpredictable; least experience; greatest pressure for new export controls
- Contracts and funding are becoming as much a lever for compliance as new regulations.
 - Federal dollars increasingly linked to compliance with export controls and additional contractual restrictions.

Case Study #1

Contract Clause: Army Corp of Engineers

22. FOREIGN NATIONALS

1. In accordance with Engineering Regulation (ER) 380-1-18, Section 4, all foreign nationals who work on any Corps of Engineers' project shall be approved by HQUSACE Foreign Disclosure Officer or higher before beginning work on the project. This regulation includes subcontractor employees. The Contractor shall submit a letter to the CERL Security Officer containing the following:
 - a) The Grant Officer's Representative's Name;
 - b) Grant Number;
 - c) Narrative Title of the Grant;
 - d) A paragraph explaining what tasks the individual will be performing under the grant;
 - e) A list of names identifying all foreign nationals proposed for performance under the grant;
 - f) documentation to verify that he/she was legally admitted into the United States (US) and has authority to work and/or go to school in the US. Such documentation may include a US Passport, Alien Registration Card with photograph (INS Form I-151 or I-551), Employment Authorization Card (INS Form I-688A), INS Form 9, INS Form 20, H1B1, etc.

Case Study #1 - solution

- Interpretation of the ER 380-1-18 is that the screening of foreign nationals would be invoked only if access to a secure or controlled Army facility is required for the purpose of conducting the project.
- Contracting Officer agreed to interpretation in writing.
- Variation Notes:
 - You will probably see “DFARS Section XXX” often in contracts from military and military contractors. DFARS is the Defense Department’s standard contract regulations.
 - In analysis, trigger is restriction on access (“...shall be approved by...”). Try to argue out of contract, irregardless of potential for options in controlling clause, as there may not be any options in that clause!
 - **KEY:** Need to find out what the controlling clause says. DFARS clauses are often referred to by reference and the actual language is not included in the contract itself.

Case Study #2

Contract Clause: NASA

1. Export Licenses clause

- a. The Recipient shall be responsible for obtaining export licenses, if required, before utilizing foreign persons in the performance of this contract, including, if applicable, instances where the work is to be performed on-site at (location), where the foreign person will have access to export-controlled technical data or software.

Case Study #2 - solution

- No publication restrictions; no access restrictions – Fundamental Research Exclusion applies!
- Due diligence still requires:
 - Investigator's determination that technology and technical data is not on the EAR and/or the ITAR.
 - Investigator's affirmation that project staff will not access a NASA facility or require NASA technical data to perform the work.

Case Study #3

International Research Project: Spain

- U.S. University faculty member (U.S. national) has developed an un-manned submersible vessel to explore the ocean floor off the coast of Spain and seeks to ship the vessel to Spain where either he will collect data, or teach a Spanish colleague to collect the data.
- The data collection is part of a basic scientific research project funded by NSF. There is no intended military application.
- Spain is a NATO-member country with which the U.S. has many diplomatic ties and trade agreements.
- KEY: Multiple issues can appear in one case. Look for all angles – here, shipping and training a foreign national

Case Study #3 - solution

- The submersible falls under the USML (22 CFR §121.15) and, consequently, is a “defense article,” regardless of its intended use.
- Sending the submersible to Spain is an “export” under ITAR (22 CFR §120.17) and requires a license.
- Teaching a Spanish-national in the U.S. or abroad how to use/collect data with the Submersible is a “defense service” and also requires a license.
 - Unless the information is in the public domain (applies to disclosures in U.S. or Spain) -- or is the result of fundamental research conducted in the U.S. at an accredited university -- or is basic science or engineering taught in a course listed in a university course catalogue.
- KEY: Multiple issues in one case. Look for all angles – here, shipping and teaching a foreign national are both present.

Case Study #4

Contract Clause: FBI

I. Release of Information

- i. For the purposes of this clause, "Information" shall include without limitation, in any media or all media including on the Web or web sites; publications, studies, books, theses, photographs, films, and public announcements...except to the extent it is already known or required by law.
- ii. No release of information shall be made without the prior written consent of the Contracting Officer. Consent shall not be unreasonably withheld.
- iii. These obligations do not cease upon completion of the contract.

Actual Outcome of this Case!

- University of California - Irvine
- Proposed Solution: add to the definition of “Information” an exception for academic research results
- Proposed Solution: change Contracting Officer “approval” to “review” and limited it to 60 days
- Negotiation: FBI would not negotiate and UCI could find no other alternatives.

RESULT

- **Lost: \$158,000 grant**
- **Lost: \$135,000 subcontract from research institution**
- **TOTAL: Passed on \$293,000!**

Negotiating Strategies

- Define the scope of work.
 - Fundamental Research, as defined in ITAR or EAR
- CAREFULLY read the ENTIRE agreement!
- Educate industry partners.
- Leverage your position.
- Insert affirmative statements regarding publications and access.
- Stand on principles.
- Be willing to walk away – or – be willing to deal with the restrictions that come along with the export control regulations.

Communicating Internally

- Be involved in reviewing the agreement terms and conditions.
- Give and ask for regular updates on conversations with the sponsor.
- Use all University resources to bring pressure on the sponsor's program officers and staff.
- Advise University negotiating team (PI, OSPA, Compliance, General Counsel, etc.) quickly when there is an unacceptable provision.



THANK YOU!

Questions?

Please contact the Office of Research Compliance

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Additional MU Export Control Information

<http://www.research.missouri.edu/complia/export.htm>