

**FUNDAMENTALS OF EXPORT CONTROLS
AND TRADE SANCTIONS AND EMBARGOES FOR
RESEARCH UNIVERSITIES**

*Jamie Lewis Keith, Vice President and General Counsel, University of Florida
Updated, May 2008¹*

I. THREE EXPORT CONTROLS AND TRADE SANCTIONS AND EMBARGOES REGIMES IN THE U.S.

- A. International Traffic in Arms Regulations (ITAR), Department of State, 22 C.F.R. §§ 120-130
 - 1. Covers “Munitions” and other Military Application Technologies, both offensive and defensive (as determined by DDTC; intent doesn’t control)
 - 2. Licensing by Directorate of Defense Trade Controls (DDTC)

- B. Export Administration Regulations (EAR), Commerce Department, 15 C.F.R. §§ 730-774
 - 1. Dual Use Technologies with Primary Commercial Application, but Also Possible Military Use
 - 2. Licensing by Bureau of Industry and Security (BIS), formerly BXA

- C. Office of Foreign Assets Control (OFAC) Regulations, Treasury Department, 31 C.F.R. § 500 et seq.
 - 1. Impose Trade Sanctions, and Trade and Travel Embargoes Aimed at Controlling Terrorism, Drug Trafficking and Other Illicit Activities
 - 2. Prohibit Payments/Providing Services or Anything of Value to Nationals of Sanctioned Countries and Some Specified Entities/Individuals (foreign nationals and U.S. citizens may be sanctioned or embargoed)
 - 3. May Prohibit Travel and Other Activities with Sanctioned or Embargoed Countries and Individuals (depending on the terms of the sanction or embargo) Even When Exclusions to EAR/ITAR Apply

¹ © Massachusetts Institute of Technology and updated by University of Florida in 2006, 2007, 2008. Originally developed by Jamie Lewis Keith as the Senior Counsel of Massachusetts Institute of Technology with input from Ms. Norris and Mr. Richard Johnson of Arnold & Porter and updated by Ms. Keith as Vice President and General Counsel of University of Florida.

II. AIMS OF EXPORT CONTROLS/TRADE SANCTIONS AND EMBARGOES

- A. Advance U.S. Foreign Policy Goals
- B. Restrict Goods and Technologies that Could Contribute to Military Potential/Economic superiority of other Countries (both adversaries and friendly nations)
- C. Prevent Proliferation of Weapons of Mass Destruction (nuclear, biological, chemical)
- D. Prevent Terrorism and Other Illicit Activities (e.g., drug trafficking)
- E. Fulfill International Obligations (e.g., treaties)
- F. Post September 11, 2001, Seen as Anti-Terrorism Tools – Increased Focus on Research Universities – and on Enforcement
 - 1. Great Focus on Life Sciences – Biological agents and toxins
 - 2. Export Controls and USA PATRIOT Act of 2001 and Public Health Security and Bioterrorism Preparedness and Response Act of 2002 Govern Biologicals and Chemicals
 - a. Export Controls Cover a Wider Range of Biologicals/Chemicals Than Only Select Agents/Toxins
 - b. Must Evaluate and Comply with All Statutory/Regulatory Regimes that Apply
- G. Controls Are Imposed For These, Among Other, Reasons: National Security, Chemical and Biological Weapons Non-proliferation, Missile Technology Control, Anti-terrorism, Crime Control

III. BACKGROUND: THE BASICS

- A. ITAR and EAR Cover U.S. Origin Items (e.g., equipment, chemicals, biological, other materials, software code, computers – “Items or Materials”) Located Anywhere If
 - 1. On the U.S. Munitions List (ITAR, 22 C.F.R. 121.1) and Even if Not on USML, Anything with a Military Application as Determined by the State Department DDTC (Not By Intent of the Researcher)

OR

2. On the Commerce Control List (EAR 15 C.F.R. 774)

AND RELATED

3. Defense Services (ITAR): e.g., training (such as lectures or consulting) on how to use defense articles (22 C.F.R. 120.9), and
 4. Technologies/Technical Data (EAR and ITAR): information beyond basic and general marketing materials on use, development or production of controlled items or materials (15 C.F.R. 772, 774, Supp. 1 and 2; 22 C.F.R. 120.10)
 - a. Not all export controlled items or materials are controlled for use technology
- B. Most Research and Teaching on Campus in U.S. -- Some Information Transfers on Campus and Abroad -- Can Qualify for Regulatory Exclusions or License Exemption
- C. Due to Proprietary Restrictions Fewer Commercial Activities Qualify for Exclusions/Exemptions
- D. When Exclusions/Exemptions Don't Apply and a License is Required, It Must Be Obtained
1. Before "Export" (or "Re-Export"): Transferring Abroad in Any Medium -- to Anyone Regardless of Nationality -- Controlled Items or Materials -- or Controlled "Technologies"/"Technical Data"

And

2. Before "Deemed Export": Transferring to Foreign Nationals (Other than Permanent Residents) or Embassies in the U.S. (Even on Campus) in any Medium -- Controlled Information/ Technologies/Technical Data—Is "Deemed" To Equate With A Transfer To The Person's Country of Citizenship
 - a. Deemed Exports Apply to Controlled Technologies/Technical Data/Software Code -- Not to Related Controlled Items or Materials Without Any Accompanying Information
 - b. Security Must be Implemented on Campus/Site in U.S. to Prevent Unlicensed Deemed Exports
- E. If License is Required and Denied, Export or Deemed Export is Prohibited

1. Exporting is a Privilege -- Not a Right
- F. Violations Subject to Civil and Criminal Penalties Against Individuals and Institutions -- Can Also Result in Loss of Export/Deemed Export Privileges and Loss of Funding
1. ITAR (State Department): (Individual and Entity) (22 U.S.C. §2778 (c) and (e))
 - a. Criminal Fines: \leq \$1M and/or \leq 10 Years in Prison/Violation
 - b. Civil Fines: \leq \$500K and Forfeitures/Violation
 2. EAR (Commerce Department) (15 C.F.R. §764.3(a) and (b)):
 - a. Criminal Fines/Entities: \leq Greater of \$1M or 5X Value of Export (proposed changes would increase to \$5M or 10X value)
 - b. Criminal Fines/Individuals: \leq \$250K and/or \leq 10 Years in Prison/Violation (proposed changes would increase to \$1M)
 - c. Civil Fines: \$10K - \$120K/Violation (proposed changes would increase to \$500K)
 3. OFAC: (31 C.F.R. §501.701)
 - a. Criminal Fines/Entities: \leq \$1M/Violation
 - b. Criminal Fines/Individuals: \leq \$250K and/or \leq 10 Years in Prison/Violation
 - c. Civil Fines: \$12K - \$65K/Violation
- G. Violations Affect Reputations of Individuals and Institutions and Can Result in Loss of Exporting and Federal Contracting Privileges for Individuals and Institutions
- H. Regulations are Complex -- Require Both Technical and Regulatory Expertise to Apply Correctly
- I. Best to Qualify for Exclusions -- Universities Focus on These
1. Evaluate Information Transfers/Disclosures Under Potential Exclusions First.
 2. Exports Abroad of Items or Materials Require Greater Review of Applicability of Controls.

- J. Must Understand and Adhere to Prerequisites for Exclusions Or Controls Apply

IV. FUNDAMENTAL RESEARCH EXCLUSION

- A. Fundamental Research Exclusion (EAR/ITAR) (22 C.F.R. 120.11(8); 15 C.F.R. 734.8(a) and (b)) Applies to
 1. Information -- Not to Items or Materials
 2. Resulting From -- Or Arising During (Open Issue: -- Or Already Existing and Used During)
 3. Basic and Applied Research in Science and Engineering
 4. Conducted at an Accredited Institution of Higher Education (EAR)/Higher Learning (ITAR)
 5. Located in the U.S. (Doesn't Apply Abroad with Limited, Specific Exception Under ITAR for Satellites and Related Technology, Subject to Conditions, see 22 C.F.R. §121.1 XV(a) or (e), 123.16(b)(10) (equipment), and 125.4 (services, information; instruction))
 6. Where the Information Is Ordinarily Published and Shared Broadly In The Scientific Community

and

 7. Is Not Subject to Proprietary or U.S. Government Publication or Access Dissemination Controls (e.g., re: approval of publications and foreign national participation)
- B. Allows U.S. Universities to Include Foreign Faculty, Students, Visitors in Research Involving Creation of Controlled Information on Campus in the U.S. Without a License
- C. Once Created in Fundamental Research, the Information May Be Transferred Abroad Without Application of Export Controls
- D. Fundamental Research Information Is Public In Nature – and Is Excluded (Not Just Exempted) From Controls
- E. Based on NSDD 189 (1985)

1. Fundamental Research is “Basic and Applied Research in Science and Engineering, the Results of Which Ordinarily are Published and Shared Broadly Within the Scientific Community, as Distinguished from Proprietary Research and From Industrial Development, Design, Production and Product Utilization, the Results of Which Ordinarily are Restricted for Proprietary or National Security Reasons”
 2. The Classification Process is the Appropriate Means of Securing Information Related to “Fundamental Research” by Colleges and Universities When Security is Warranted -- Otherwise, Except as Required by Statute, “No Restrictions May Be Placed Upon The Conduct or Reporting” Of Fundamental U.S. University Research, Which Should Be Open and Freely Disseminated Because It Supports Our Nation’s Security
- F. Commercial Companies and Independent Research Institutes Have Similar EAR (not ITAR) Exclusion When Research Is Not Subject to Publication/Access/Dissemination Restrictions (15 C.F.R. 734.8(d), (e))

V. DEEMED EXPORTS IN FUNDAMENTAL RESEARCH

- A. Commerce IG (Also Adopted by Energy, Defense and State IGs) Finds
1. A Deemed Export License Is Required for Transfer of Controlled “Use Technology” (Controlled Information Beyond Basic and General Marketing On the Installation, Operation, Repair, Maintenance, Refurbishing, and Overhaul of Controlled Equipment or Software Code) In Any Medium (Even Through Careful Observation/Demonstration) to Foreign Nationals on Campus in Fundamental Research Projects
 2. Concerns Already Existing Controlled Use Information (Not Information Created in Unrestricted U.S. Campus/Fundamental Research, Which Is Clearly Excluded From Controls)
- B. Universities Reasonably Inferred the Ability to Convey Information on Use of Controlled Equipment in Fundamental Research on Campus As Part of the Exclusion Because NSDD 189 Extends Fundamental Research To Conduct As Well As Output Of U.S. University Research
1. Commerce Has Not Previously Taken Another Position in Enforcement or Regulatory Questions and Answers, But Has Been Considering.
 2. Commerce’s Deemed Export Advisory Committee Considered This and Other Issues Raised In The 2004 IGs’ Report to Congress.
 - a. On December 20, 2007, the DEAC Report Was Issued. See <http://tac.bis.doc.gov/2007/deacreport.pdf>

Commerce Is Considering The Recommendations. It Is Undecided Whether Fundamental Research Will Be Redefined, Whether Classification Will Continue To Be The Primary Control For University Research When Security Is Warranted.

- C. Deemed Export License Not Technically Required For Mere Use of Controlled Equipment (Without Transfer of Related Controlled “Use Technology”)—But Would Be Required Practically Under the IGs’ Interpretation Due to Dynamic, Spontaneous Transfer of Use Information In Research
- D. Commerce Potential Position/Analysis of Whether Deemed Export License is Required:
 - 1. Is Equipment Controlled?
 - 2. If So, Is It Controlled for Use Technology?
 - 3. If So, For What Aspects of Use Is It Controlled (e.g., installation, repair, mere operation, maintenance, etc.)?
 - 4. If So, Is It Controlled for Use Technology for All Countries or Just Some Countries (Which Ones)?
 - 5. Is the Use Technology Already Publicly Available By Specified EAR Methods? [See Part VI]
 - 6. Is the Use Technology Subject to a Blanket License/Exclusion (e.g., TUR) and, If So, Is the License Applicable to All Countries or Just Some (Which Ones)?
- E. If Controlled Under 1 and 2, Then Under This Interpretation, A Deemed Export License Is Required Before Use Technology of the Type Controlled Under 3 is Conveyed in the U.S. to Any National of a Country That Is Subject to Controls in 4, Unless An Exclusion Applies Under 5 or a License Exception Applies Under 6.
 - 1. An export license would also be required before the use technology is sent abroad to anyone in a controlled country (in 4) or anywhere abroad to a national of a controlled country.

VI. PUBLICLY AVAILABLE/ PUBLIC DOMAIN EXCLUSION

- A. Publicly Available (EAR)/Public Domain (ITAR) Information Exclusion (See 22 C.F.R. 120.10(5), 120.11, 125.1(b), 125.4; 15 C.F.R. 734.3(b)(3), 734.7-734.10) Applies to

1. Information already published, not just ordinarily published, through specified means:
 - a. libraries open to the public, including most university libraries; unrestricted subscriptions, newsstands, or bookstores for a cost not exceeding reproduction and distribution costs (including a reasonable profit);
 - b. published patents;
 - c. conferences, meetings, seminars, trade shows, or exhibits held in the U.S. (ITAR) or anywhere (EAR), which are generally accessible by the public for a fee reasonably related to the cost and where attendees may take notes and leave with their notes; or
 - d. Websites accessible to the public for free and without the host's tracking or control of who visits or downloads software/information (clearly acceptable under EAR, and likely acceptable under ITAR).

B. Broadest Exclusion -- Can Apply to Information Transfers in U.S. and Abroad

VII. PUBLICATION OR ACCESS/DISSEMINATION RESTRICTIONS DESTROY FUNDAMENTAL RESEARCH/PUBLICLY AVAILABLE/PUBLIC DOMAIN EXCLUSIONS

- A. Faculty/Researcher Side Deals With Sponsors Destroy Exclusions
- B. Short (e.g., 30 - 90 days) Pre-publication Review Period (Not Approval) For Patent Protection/to Remove Sponsor-Proprietary Information Does Not Destroy Exclusions

VIII. GOVERNMENT SPONSORED RESEARCH COVERED BY CONTRACT CONTROLS EXEMPTION

- A. EAR License Exemption for Government Sponsored Research Covered by Contract Controls (15 CFR 734.11) Applies Only To:
 1. Information Resulting From Federally-funded Research that Includes Specific National Security Controls in the Government Agreement (e.g., prepublication reviews or dissemination controls)
 2. Does Not Qualify for Fundamental Research Exclusion (15 CFR 734.8) But No License is Required if Comply with All Specific National Security Controls in Contract

3. If All Contract Controls are Not Followed, Fundamental Research Exclusion Is Not Available – Consequently, If License Was Required and Not Obtained, a Violation Occurs
4. Likely Commerce View That Exemption Does Not Extend to Existing Controlled Technology on “Use” of Equipment -- Only to Results of Research

IX. OTHER EXCLUSIONS/EXEMPTIONS

A. Educational Exclusion (EAR/ITAR) (15 CFR 734.3(b)(3)(iii), 734.9, 22 C.F.R. 120.10(5)) Applies to

1. General Science, Math, Engineering Commonly Taught at Schools/Universities (ITAR - Subject Matter Focused), or
2. Information Conveyed In Courses Listed In Course Catalogues and In Associated Teaching Labs of Any Academic Institution (EAR – Venue Focused -- but Doesn’t Cover Encrypted Software)

B. Bona Fide Full Time Employee License Exemption (ITAR Only) (22 C.F.R. 125.4(b)(10)) Applies to

1. Unclassified Technical Data Provided to Bona Fide Fulltime Regular Employees of U.S. Institutions of Higher Learning With Permanent Abodes in the U.S. Throughout Employment
2. Must Inform Employee in Writing Not to Transfer to Other Foreign Nationals
3. Does Not Apply to Students with F-1 Visas or Others With Visas Allowing Only Part-time Work
4. Does Not Apply to Nationals of ITAR -- Prohibited or Embargoed Countries

X. IF EXCLUSIONS/EXEMPTIONS DON’T APPLY – IS LICENSE REQUIRED? OBTAINABLE?

A. If Exclusions/Exemptions Do Not Apply and

1. If Items or Materials Are on Commerce Control List -- Related Technologies/Technical Data May Be Controlled

a. EAR License May Be Required Before Any Export or Deemed Export Depending on Type of Listing/Destination

[1] Most EAR Licenses are Considered Case-by-Case (but see XI.B. re: EAR 99 Listings)

[2] Where Chemicals/Biologicals Involved:

a] License Required for All Countries if Listed for CB (chemical/biological controls) Purpose

b] License Required for All Non-Chemical Weapons Convention (CWC) Countries if Listed for CW (CWC) Compliance Purposes and Export is to Non-CWC Countries

c] License Mostly Considered Case-by-Case if Listed for CB or AT (anti-terrorism) Purposes -- Will be Denied if Listed for CW Purposes and Export is to Non-CWC Countries

d] License Will be Denied to Syria and Embargoed Countries and End Users -- and, for Ricin D and E and CWC Chemicals/Toxins for Countries Not a Party to the CWC

2. If Items or Materials Are On Commerce Control List as EAR 99 Only

a. Likely Will Need EAR License If

[1] Destination-Foreigner's Nationality is on EAR Entities List -- 15 C.F.R. 744, Supp. 4

[2] End User is on "Denied Person List"
<http://www.bis.doc.gov/DPL/Default.shtm>

[3] Destination-Foreigner's Nationality is an OFAC Embargoed Country

[4] Destination/Foreigner's Nationality is Another US Embargoed Country (Rwanda*3, OFAC Embargo List)

[5] The Individuals/Institutions involved are on an OFAC Prohibited List (e.g., the Specially Designated Nationals

List, Certain Individuals Associated with War Crimes in the Balkans or the Taliban in Afghanistan) or

[6] The Project is Associated with a Weapons of Mass Destruction Program, a Missile Program or There are Indications of Possible Diversions (“red flags”) (15 C.F.R. 732, Supp. 3)

b. Otherwise, Don’t Need License (Just Follow Export Documentation and Procedures)

B. If Items or Materials On/Covered by the ITAR US Munitions List (USML) – Related Technical Data or Defense Services Controlled

and

Even if Not On/Covered by Lists, IF Reason to Know that Items or Materials Will be Used In/For Weapons of Mass Destruction or

Even if Not On/Covered by Lists, If Items or Materials, Technical Data is Designed or Modified for Military Use (As Determined By The State Department, Not The Researcher)

An ITAR License Will be Required Before Any Export or Deemed Export

1. Will Not Get License

a. If Destination/Foreigner’s Nationality is an ITAR Prohibited Country

2. May Get a License Otherwise

XI. BEWARE

A. **Export Controls May Apply/Be Violated Without Appropriate Licenses:**

1. When Research Equipment--Biological Samples -- Computer with Research Data or Encrypted or Proprietary Software -- Are Hand-Carried or Shipped Abroad Without a License
2. When University or Researcher Has Reason to Know that Sponsors or Collaborators are Violating Controls (15 CFR 736.2(b)(10))

3. When Sponsors Provide Controlled Proprietary or Confidential Information to University Researchers Who Then Share It With Anyone Abroad or With Foreigners in U.S.
4. If Exclusive Material Transfer Agreements or IP Licensing Agreements Impose Publication/Access-Dissemination Restrictions and the Materials and/or Related Technologies/Technical Data are Controlled -- Deemed Export and Export Controls Apply
5. When Technology Transfer Disclosures Of Controlled Information are Made Abroad Before a Patent Issues (Becomes Public) -- Except When Directly Related to Applying for a Foreign Patent

B. OFAC Trade Sanctions/Embargoes May Apply to

1. U.S. Citizens as well as Foreign Nationals
2. Payments (Compensation, Honoraria, Contracts) to Embargoed Countries/Nationals/Entities/Individuals
3. Attendance At/Planning of International Conferences In Or With Embargoed/Sanctioned Countries, Nationals, Entities
4. Surveys/Services to Embargoed/Sanctioned Countries/Nationals/Entities/Individuals
5. Editing/Joint Authorship of Articles of/with Nationals of Embargoed Countries or Individuals
 - i. December 17, 2004 OFAC General License for Cuba, Sudan and Iran Allows Most Editing/Joint Authorship with Nationals of these Countries (But Not the Governments or Government Employees) (31 C.F.R. 515, 538, 560)
 - ii. OFAC April 2, 2004 Letter Allows Peer Review/Copy + Style Editing of Libyan Nationals' Articles
[<http://www.treas.gov/offices/enforcement/ofac/rulings/ia040504.pdf>]
 - iii. Raises 1st Amendment Issues

C. Licenses Can Take Weeks--Months—Longer to Obtain—Compliance Is Critical

1. Apply Early Through The Division of Sponsored Research
2. Encourage Open and Public Research Under the “Public Availability”/“Public Domain” and “Fundamental Research” Exclusions - Recognizing Openness is More Natural Than Security in Academia;
3. Central Administration/Oversight of Compliance is in the Director of DSR;
4. Institutional Policy Prohibits Sponsor Restrictions on Publication or on Access/Dissemination without the prior written approval of the Vice President for Research or his designee, the Director of DSR;
5. Expert Legal Counsel (inside and outside) Supports DSR;
6. Educational Programs Emphasize What Faculty and Staff Can Know Without Being Export Experts - How to Qualify for Exclusions - Triggers of Possible Control Requiring Advice from DSR- and the Risks of Non-compliance;
7. Records of the Compliance Program, Implementation Efforts, and Steps to Discover and Rectify Inadequacies Is Important;
8. Encourage Prompt Disclosure of Potential Violations to DSR or General Counsel for a Knowledgeable and Timely Response After Consultation With Counsel (Including Through Appropriate Self-disclosure to the Cognizant Agency to Mitigate Penalties);
9. Refer to the UF Export Control Compliance Program Guidelines on DSR’s web site <http://rgp.ufl.edu/research/compliance.html#conduct> .

XII. RESOURCES

- A. Paper: Part VI of “The War on Terrorism Affects The Academy: Principal Post-September 11, 2001 Federal Anti-Terrorism Statutes Regulations and Policies That Apply to Colleges and Universities”
http://www.generalcounsel.ufl.edu/exportControl/Final25_Apr04_JLKversion_Same_As_PDF_Journal_version.pdf
- B. Paper: October 2006 Update on Developments in “Deemed” Export Controls in the University Context
http://www.generalcounsel.ufl.edu/exportControl/Update_on_Developments_in_Deemed_Export_Controls_in_the_University_Context.pdf

- C. Chart: Export Controls and Embargoes Country Key²
<http://www.generalcounsel.ufl.edu/exportControl/AppendixG.pdf>;
http://web.mit.edu/osp/www/resources_export.htm

² © Massachusetts Institute of Technology and updated by University of Florida in 2006, 2007, 2008. Originally developed by Jamie Lewis Keith as the Senior Counsel of Massachusetts Institute of Technology with input from Ms. Norris and Mr. Richard Johnson of Arnold & Porter and updated by Ms. Keith as Vice President and General Counsel of University of Florida.