

U.S. EXPORT CONTROLS AND RESEARCH UNIVERSITIES: WHAT DEANS SHOULD KNOW

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PROFESSIONAL BACKGROUND

- Seattle partner in 650-attorney international law firm
- International technology lawyer with >25 years experience in international business deals around the world
- Associate member, National Association of College and University Attorneys (NACUA); NACUA lecturer
- Advisor to many state, private universities across U.S. on export control, technology transfer issues
- Former trustee, Stanford University
- Frequent speaker, writer, commentator on U.S. export control laws and former export control policy advisor to U.S. Commerce Department
- White House Fellow, former Justice Department official and federal prosecutor



AGENDA FOR PRESENTATION

- **Overview of three major U.S. export control regimes**
 - U.S. embargo regulations
 - International Traffic in Arms Regulations (ITAR)
 - Export Administration Regulations (EAR)
- **Consideration of unique exclusions, exemptions and licenses for universities in U.S. embargo, ITAR rules**
- **Special review of exemptions for universities in EAR**
 - Published information and software
 - Information resulting from fundamental research
 - Educational information



APPLICABLE U.S. EXPORT CONTROL REGIMES

- **U.S. Treasury Department: Office of Foreign Assets Control (OFAC) embargo and Specially Designated National (SDN) regulations**
- **U.S. State Department: Directorate of Defense Trade Controls (DDTC) and its International Traffic in Arms Regulations (ITAR)**
- **U.S. Commerce Department: Bureau of Industry and Security (BIS) and its Export Administration Regulations (EAR)**



NATIONAL TRADE EMBARGOES

- Administered by OFAC with assistance from State Department, National Security Council, defense and intelligence agencies
- Deals generally with ALL U.S.-origin goods and services, banking facilities, etc., regardless of strategic or military non-importance
- Current list of major OFAC sanctioned countries: Cuba, Iran, Sudan
- Other areas also subject to limited OFAC controls: Burma (Myanmar), North Korea, Syria, Zimbabwe



NATIONAL TRADE EMBARGOES (cont'd)

- Also bars trade with designated narcotics traffickers, terrorists or terrorist organizations called “Specially Designated Nationals” (SDNs)
- For Cuba and North Korea, OFAC rules apply to “persons subject to U.S. jurisdiction”
 - Means BOTH U.S. person AND its foreign subsidiaries
- General rules: (1) no direct exports to embargoed country or SDN and (2) no reexports to embargoed country or SDN with knowledge of final end user location (subject to *de minimis* or “substantial transformation” exception)



NATIONAL TRADE EMBARGOES (cont'd)

- **Common academic issues under OFAC embargoes:**
 - Travel to Cuba by faculty, students under special OFAC travel guidelines – **MAY REQUIRE OFAC CUBAN TRAVEL LICENSES!**
 - Academic field research conducted by faculty, students in embargoed countries
 - Academic collaborations, exchanges with faculty, students of universities in embargoed countries
 - Scholarly publications with co-authors, research collaborators at universities in embargoed countries
 - Government-sponsored, non-university researchers in embargoed countries



NATIONAL TRADE EMBARGOES (cont'd)

- **Key questions for OFAC trade embargo compliance:**
 - Is country or entity embargoed by OFAC?
 - Is proposed activity or payment covered by express OFAC regulatory exemption?
 - Is proposed activity or payment covered by express OFAC “general license”?
 - Is proposed activity or payment capable of being authorized through OFAC “specific license”?
 - If so, prepare and file application with OFAC
 - Are payment mechanisms in place to avoid direct funds transfers to/from embargoed country?



INTERNATIONAL TRAFFIC IN ARMS REGULATIONS

- Administered by DDTC with assistance from defense and intelligence agencies, National Security Council
- Deals with “defense articles and services”
- Generally viewed as “harder” on U.S. exporters
- DDTC has authority over civilian communication satellite technology, military-level encryption
- DDTC staffed with rotating military personnel



INTERNATIONAL TRAFFIC IN ARMS REGULATIONS (cont'd)

- U.S. Munitions List: Core of ITAR system, listing all key military items subject to ITAR controls
- Divided into 21 “categories” with many sub-listings
- As examples:
 - Category VI: Naval vessels
 - Category VII: Tanks and military vehicles
 - Category VIII: Aircraft and associated equipment
 - Category IX: Military training equipment
 - Category XV: Spacecraft systems, associated equipment



INTERNATIONAL TRAFFIC IN ARMS REGULATIONS (cont'd)

- If entity produces or provides USML-controlled items, then entity must register with DDTC, even if no export
 - Often, DARPA or other DoD-related funding can lead to “production” of USML-controlled items
- ITAR controls mean no export unless specifically licensed by DDTC → license applications for any export
 - Canadian exemption possible
- Complex set of exemptions, exclusions within ITAR for academic research, publishing
 - Exclusion from “technical data” definition in §120.10(a)(5)
 - Definition of “public domain” in §120.11(a)(8)
 - Exclusion of “public domain” information in §125.1(a)
 - “Basic research” exemption in §125.4(c)(3)



INTERNATIONAL TRAFFIC IN ARMS REGULATIONS (cont'd)

- Key questions for ITAR compliance:
 - Is technology at issue controlled by ITAR?
 - Is university registered with DDTC under ITAR?
 - Is proposed activity or export covered by express ITAR regulatory exemption or exclusion?
 - Is proposed activity or payment capable of being authorized through DDTC license?
 - If so, prepare and file application with DDTC
 - Are “deemed export” control measures needed for any non-U.S. faculty, staff, students?



EXPORT ADMINISTRATION REGULATIONS

- Administered by BIS with assistance from rest of national security, intelligence communities
- Focuses on “dual use” goods, technology, software
 - Primarily for civilian use
 - But capable of strategic or military use as well
- Key historic: Soviet Union, China, allied nations (Warsaw Pact countries, Vietnam, North Korea)
- Still concerns about former Soviet republics but also “rogue nation” threats such as North Korea, Iran
- Additional new concerns about non-state sponsored terrorists’ access to WMD-related technologies
- Highly specific and technically detailed regulations



SAMPLE ENTRY FROM CATEGORY 5 IN EAR COMMERCE CONTROL LIST

5A991 Telecommunication equipment, not controlled by 5A001.

License Requirements

Reason for Control: AT

Control(s) Country Chart

AT applies to entire entry AT Column 1

License Exceptions

LVS: N/A
GBS: N/A
CIV: N/A

List of Items Controlled

Unit: \$ value
Related Controls: N/A
Related Definitions: N/A
Items:

a. Any type of telecommunications equipment, not controlled by 5A001.a, specially designed to operate outside the temperature range from 219 K (-54° C) to 397 K (124° C).

b. Transmission equipment, as follows:

b.1. Modems using the “bandwidth of one voice channel” with a “data signalling rate” exceeding 9,600 bits per second;

b.2. “Communication channel controllers” with a digital output having a “data signalling rate” exceeding 64,000 bit/s per channel; or

b.3. “Network access controller” and their related common medium having a “digital transfer rate” exceeding 23 Mbit/s.

b.4. Being “stored program controlled” digital cross connect equipment with “digital

transfer rate” exceeding 8.5 Mbit/s per port.

b.5. Radio equipment operating at input or output frequencies exceeding:

b.5.1. 31 GHz for satellite-earth station applications; or

b.5.2. 26.5 GHz for other applications;

Note: 5A991.b.5. does not control equipment for civil use when conforming with an International Telecommunication Union (ITU) allocated band between 26.5 GHz and 31 GHz.

b.6. Providing functions of digital “signal processing” employing circuitry that incorporates “user-accessible programmability” of digital “signal processing” circuits exceeding the limits of 4A003.b.

c. “Stored program controlled” switching equipment and related signalling systems as follows:

c.1. “Data (message) switching” equipment or systems designed for “packet-mode operation” and assemblies and components therefor, n.e.s.

c.2. Containing “Integrated Service Digital Network” (ISDN) functions and having any of the following:

c.2.a. Switch-terminal (e.g., subscriber line) interfaces with a “digital transfer rate” at the highest multiplex level exceeding 192,000 bit/s, including the associated signalling channel (e.g., 2B+D); or

c.2.b. The capability that a signalling message received by a switch on a given channel that is related to a communication on another channel may be passed through to another switch.

Note: 5A991.b. does not preclude the



SAMPLE PAGE FROM EAR COUNTRY CHART

Commerce Country Chart

Reason for Control

Countries	Chemical & Biological Weapons			Nuclear Nonproliferation		National Security		Missile Tech		Regional Stability		Firearms Convention		Crime Control		Anti-Terrorism	
	CB	CB	CB	NP	NP	NS	NS	MT	MT	RS	RS	FC	FC	CC	CC	AT	AT
Colombia	X	X		X		X	X	X	X	X	X	X	X	X	X		
Comoros	X	X		X		X	X	X	X	X	X			X	X		
Congo	X	X		X		X	X	X	X	X	X			X	X		
Costa Rica	X	X		X		X	X	X	X	X	X	X	X	X	X		
Cote d'Ivoire	X	X		X		X	X	X	X	X	X			X	X		
Croatia	X	X		X		X	X	X	X	X	X			X	X		
Cuba	See part 746 of the EAR to determine whether a license is required in order to export or reexport to this destination.																
Cyprus	X	X		X		X	X	X	X	X	X			X	X		
Czech Republic	X					X	X	X	X	X				X	X		
Denmark	X					X		X	X								
Djibouti	X	X		X		X	X	X	X	X	X			X	X		
Dominica	X	X		X		X	X	X	X	X	X	X	X	X	X		
Dominican Republic	X	X		X		X	X	X	X	X	X	X	X	X	X		
Ecuador	X	X		X		X	X	X	X	X	X	X	X	X	X		
Egypt	X	X	X	X		X	X	X	X	X	X			X	X		
El Salvador	X	X		X		X	X	X	X	X	X	X	X	X	X		
Equatorial Guinea	X	X		X		X	X	X	X	X	X			X	X		
Eritrea	X	X		X		X	X	X	X	X	X			X	X		
Estonia	X	X		X		X	X	X	X	X	X			X	X		



EAR APPLICABILITY TO UNIVERSITIES

- EAR applies to “U.S. persons”
- U.S. university and U.S. faculty members, staff, students = “U.S. persons”
- EAR covers both physical exports, “deemed exports”
- Physical exports mean any shipment outside U.S.
- “Deemed exports” mean:
 - Visual inspection by foreign nationals of U.S.-origin equipment and facilities
 - Oral exchanges of information in the U.S. or abroad
 - Application to situations abroad of personal knowledge or technical experience gained in U.S.



EAR EXEMPTIONS FOR UNIVERSITIES

- Frequent references to “FRE” or “fundamental research exemption” in export control compliance
- EAR actually contains three separate, distinct exemptions applicable to universities and their work:
 - “Published information and software”
 - “Fundamental research”
 - “Educational information”
- Many situations in university settings may blend or combine aspects of more than one EAR exemption
 - Activity may be exempt even if not “fundamental research”
 - Don’t be confused by shorthand of “FRE”



1. PUBLISHED INFORMATION/SOFTWARE

- Codified in § 734.7 of EAR
- Information or software is “published” if:
 - Published in periodical, book, print, electronic or other media available for general distribution, either free or at nominal cost, to:
 - Any member of the public *or*
 - “community of persons interested in the subject matter, such as those in a scientific or engineering discipline”;
 - Readily available at public or university libraries;
 - Contained in issued patents or opened patent applications;
 - Released at open conference, meeting, seminar, trade show or other open gathering
- Regulation includes express definitions of “open” and “publication” with illustrations in FAQs



2. RESULTS OF FUNDAMENTAL RESEARCH

- Codified in § 734.8 of EAR
- Covers both “basic and applied research in science and engineering, where the resulting information is ordinarily published and shared broadly within the scientific community”
- Distinguishes from “proprietary research” and “industrial development, design, production and product utilization” where research results are restricted, not published openly
- Applies to accredited institutions of higher education and their scientists, engineers or students in U.S.



ESSENTIAL ELEMENTS OF FUNDAMENTAL RESEARCH EXEMPTION (FRE)

- FRE meant to protect academic freedom: normal teaching, learning, research within U.S. universities
- Covers non-U.S. national students, staff who study or work at U.S. university – *ON U.S. CAMPUS ONLY, NOT OVERSEAS*
- Covers visits, conferences, presentations of papers by U.S. persons in other countries
- Covers publications of articles, papers, books, etc., regardless of media
- Regulation includes illustrations in FAQs



LIMITATIONS ON FUNDAMENTAL RESEARCH EXEMPTION

- FRE only applies to research activity conducted **INSIDE** United States
- FRE alone may not be sufficient to conduct actual field research or collaboration **outside** U.S. if such work involves export of U.S.-controlled technology
 - Must assess export control status of required exports
 - Other EAR exemptions, exclusions may apply
 - University may need to apply for export license
- Research inside U.S. **NOT** within FRE if subject to:
 - Restrictions on publication (other than basic, time-limited review to ensure patent protection)



RECENT CONCERNS ABOUT EROSION OF FRE

- Inspectors General reports: apparent inconsistency between FRE, private sector compliance regarding access to high technology
 - Certain technology subject to export licensing to specified countries of concern
 - Yet students, researchers from same countries of concern can access same technology in U.S. university setting
- Earlier Bush Administration proposal to hold U.S. universities, industry essentially to **same** “deemed export” legal standard – now dormant
 - Special Commerce Department “deemed export” advisory committee (DEAC) appointed in September 2006
 - No clear revival of original proposal
 - Term of DEAC extended out 12 months in May 2007



3. EDUCATIONAL INFORMATION

- Codified in § 734.9 of EAR
- Information that is released “by instruction in catalog courses and associated teaching laboratories of academic institutions”
- Special express exclusion for certain encryption-related software
- Covers virtually all instructional, illustrative materials used by university faculty in normal teaching
- Regulation includes illustrations in FAQs
- Note: not limited to use within U.S. – could help universities in “distance learning” situations



“QUICK” EAR EXPORT CONTROL COMPLIANCE QUESTIONS FOR DEANS

- **WHAT?** What is the technology involved? Is it “military” or “dual use”?
- **WHERE?** What are the “destination countries”?
- **WHO?** Who are the proposed export recipients?
- **HOW?** What is the method by which the physical or “deemed” export will occur?
- **WHY?** What is the purpose of the export?
 - Published information?
 - Fundamental research?
 - Educational information?



EAR LICENSE EXCEPTIONS

- Even if exported item nominally controlled for export, university may be able to rely on “license exception”
- Several possible “license exceptions” in Part 740:
 - Limited value shipment (LVS)
 - Shipment to Group B country (GBS)
 - Civil end users (CIV)
 - Technology/software under restriction (TSR)
 - Computers (APP)
 - Encryption technology (KMI or ENC)
 - Temporary imports, exports and reexports (TMP)
 - Service or replacement parts/equipment (RPL)
 - Baggage (BAG)



CONCLUSION

- Government agencies concerned about university compliance with U.S. export control laws
 - Visits to campuses by federal agents
 - Inspector General reports that led to Bush Administration proposal to revise “deemed exports”
 - GAO report on uneven university export compliance
- Three distinct, complex sets of U.S. export control laws that require specialty knowledge, experience
- Each set of U.S. export control laws has unique rules uniquely applicable to U.S. universities
- Compliance is not “optional”!



QUESTIONS?



THANK YOU FOR ATTENDING!

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