# EXPORT CONTROLS The Challenge for U.S. Universities

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### **OVERVIEW**

- Purpose
- Export controls and embargoes
- Application to university research
- The licensing process
- Compliance
  - □ Systems
  - Empowered official
  - □ Elements of a compliance program
  - Foreign national technology control plan
- Penalties
- Trends to watch



### **PURPOSES**

- Advance foreign policy goals
- Restrict goods and technologies that could contribute to military potential/economic superiority of adversaries
- Prevent proliferation of weapons of mass destruction
- Prevent terrorism

## **BACKGROUND: EXPORTS**

- Most export control issues fall under the jurisdiction of the following agencies:
- Department of State Directorate of Defense Trade Controls (DDTC)
  - □ International Traffic in Arms Regulations (ITAR)
- Department of Commerce Bureau of Industry and Security
  - Export Administration Regulations (EAR)



### WHAT ITAR CONTROLS

- ITAR [22 CFR 120-130]
  - Covers military items or defense articles
  - Regulates goods and technology designed to kill or defend against death in a military setting
  - Includes space related technology because of application to missile technology
  - Includes technical data related to defense articles and services



## WHAT EAR CONTROLS

- EAR [15 CFR 730-774]
  - □ Covers dual use items
  - Regulates items designed for commercial purpose but which could have military applications (computers, civilian aircraft, pathogens)
  - □ Covers both the goods and the technology

# **EXPORTS OF BIOLOGICAL MATERIALS & CHEMICALS**

Biological Materials and Chemicals are governed by

- > Export Controls
  - Export controls cover a wider range of biologicals and chemicals than agents and toxins on the Select Agents List
- > USA PATRIOT Act of 2001
- Public Health Security and Bioterrorism Preparedness and Response Act of 2002



#### **BACKGROUND: EMBARGOES**

 U.S. Department of the Treasury, Office of Foreign Assets Control (OFAC)



## WHAT OFAC CONTROLS

- > OFAC prohibits:
  - Payments or providing anything of value to sanctioned countries, nationals of some countries and specified entities/individuals
  - Travel to and other activities with embargoed countries and individuals/entities
- > In general OFAC "trumps" export controls



### **BACKGROUND AND LAW**

- Early 1980's export control laws extended to the IHE's
- Intense reaction from the university community
- Four universities wrote to describe the consequences
- NSDD-189 issued



### **NSDD-189**

#### Provides definition:

- □ "Fundamental research" means basic and applied research in science and engineering, the results of which ordinarily are published and shared broadly within the scientific community. Where national security requires control, the mechanism for control at universities is classification
- No restrictions may be placed on conduct or reporting of federally-funded fundamental research that has not received national security classification except as provided in statutes

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# **NSDD-189** (continued)

University research will not be deemed to qualify as fundamental research if ... the university or research institution accepts any restrictions on publications resulting from the research, other than limited prepublication reviews by research sponsors to prevent inadvertent divulging of the sponsor's proprietary information or for filing of patent applications.

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### **CONDOLEEZA RICE LETTER**

- Reaffirmed NSDD-189
  - "...encourage open and collaborative basic research. The linkage between the free exchange of ideas and scientific innovation, prosperity, and U.S. national security is undeniable."
  - "...policy on the transfer of scientific, technical, and engineering information set forth in NSDD-189 shall remain in effect and we will ensure that this policy is followed."

# **EXCLUSIONS FROM CONTROLS:**FUNDAMENTAL RESEARCH

#### **Fundamental Research Exclusion**

- 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\*
- Once created in fundamental research, the information may be transferred abroad without restriction
- Fundamental research information is public in nature is excluded (not just exempted) from controls

\* There is a difference of opinion between the federal government and universities about whether existing controlled information used in fundamental research is covered

# EXCLUSIONS FROM CONTROLS: FUNDAMENTAL RESEARCH

# Fundamental Research Exclusion (EAR/ITAR) applies to:

- Information resulting from or arising during basic and applied research in science and engineering
- Conducted at an accredited institution of "higher education" (EAR) or "higher learning" (ITAR)
- > Located in the U.S.
- Where the information is ordinarily published and shared broadly in the scientific community
- ➤ Is not subject to proprietary or U.S. government publication or access dissemination controls
  - (e.g. a restriction on foreign national participation)

(22 C.F.R. 120.11(8); 15 C.F.R. 734.8(a) and (b))



# EXCLUSIONS FROM CONTROLS: FUNDAMENTAL RESEARCH

- The fundamental research exclusion (EAR/ITAR) does not apply to items or materials.
- ➤ It is an open question whether the fundamental research exemption applies to information that is already existing and <u>used</u> during research that otherwise meets the criteria for a fundamental research exclusion.

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### FUNDAMENTAL RESEARCH

- ITAR: Recognizes research exclusion, but purposely limited
  - □ Covers information "which is published and generally accessible to the public" through
    - Unrestricted publications
    - Fundamental research in science and engineering at accredited institutions of higher learning in the U.S. where the resulting information is ordinarily published and shared broadly in the scientific community
    - Excludes proprietary information or that with governmentimposed access or dissemination controls



### FUNDAMENTAL RESEARCH

#### EAR

- Allows prepublication review solely to insure no inadvertent release of sponsor's proprietary information or to protect a patent position
- □ Prepublication approval by sponsor or other publication restriction invalidates exclusion except
  - If there are access and dissemination controls explicitly provided for national security in award
- However, some technologies (advanced encryption) always ineligible for fundamental research exclusion

# FUNDAMENTAL RESEARCH EXCLUSION

# Fundamental Research Exclusion applies to information when the research is:

- 1. Basic or applied
- 2. At an institution of higher learning
- 3. In the U.S. and
- No publication or access controls exist for the activity

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### **EMBARGOES**

#### **Department of Treasury**

- Office of Foreign Assets Control (OFAC)
  - Regulates the transfer of items/services of value to embargoed nations
  - Imposes Trade Sanctions, and Trade and Travel Embargoes Aimed at Controlling Terrorism, Drug Trafficking and Other Illicit Activities
  - Prohibit Payments/Providing Value to Nationals of Sanctioned Countries and Some Specified Entities/Individuals
  - May Prohibit Travel and Other Activities with Embargoed Countries and Individuals Even When Exclusions to EAR/ITAR Apply

### **REGULATIONS APPLY TO:**

- ➤ ITAR and EAR cover items of U.S. origin, "Items or Materials", *e.g.* 
  - equipment,
  - chemicals,
  - biologicals,
  - other materials,
  - software code,
  - computers.

# LICENSING AND EXCLUSIONS

ITAR and EAR apply to U.S. items or materials located anywhere if any of the following apply:

- > On the U.S. Munitions List (**USML**)
  - (ITAR, 22 CFR 121.1)
  - Includes other items or technologies "with a significant military application" even if not on USML
- > On the Commerce Control List (CCL)
  - (EAR 15 CFR 774)

# LICENSING AND EXCLUSIONS

- ➤ Are Related Defense Services (ITAR)
  - e.g., training on how to use defense articles (22 C.F.R. 120.9)
- ➤ Are Controlled Technologies or Technical Data (EAR and ITAR)
  - Information beyond basic and general marketing materials on use, development or production of controlled items or materials
    - □ (15 CFR 772, Supp. 1 and 2; 22 CFR 120.10)

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#### LICENSING AND EXCLUSIONS

- An export license may be required before a controlled item or material may be exported, although:
  - Most research and teaching on campus in U.S., and some information transfers on campus and abroad, can qualify for regulatory exclusions or license exemptions.
  - Due to proprietary restrictions fewer commercial activities qualify for exclusions/exemptions.



# SHIPPING OF EQUIPMENT

Remember that shipping of controlled equipment outside the country seldom qualifies for exclusion!

### LICENSING AND EXCLUSIONS

If a license is required and denied, export or deemed export is prohibited

□ Exporting is a Privilege—Not a Right

# EXEMPTION FOR SOME RESEARCHERS

- Both EAR and ITAR provide exemptions for "full time, regular" employees who maintain residency during term of employment
  - May preclude need for a license, but often unavailable to foreign researchers
    - Visa restrictions (students with F or J visas)
    - Postdocs and students are often not full time, regular employees



#### **OFAC EMBARGOES**

#### **OFAC Embargoes Apply When:**

- Payments of compensation, honoraria, contracts/ services/value to or in embargoed countries or to foreign nationals and entities of some embargoed countries – depends on applicable sanctions
  - Attending or planning international conferences
- Travel to Embargoes Countries
  - □ Travel to Cuba allowed if the university has an export license and the traveler is a full-time employee of the university
  - Students may travel under the university license if they are students enrolled at the university that has the license but with conditions
- > Payments/Services/Value to specifically listed individuals

# OFAC EMBARGOES

### Editing, Reviewing, Authoring Publications

An OFAC letter dated April 2, 2004 allows peer review as well as copy and style editing of articles written by Libyan Nationals

[http://www.treas.gov/offices/enforcement/ofac/rulings/ia040504.pdf]

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)

- The vast majority of exports do not require government licenses. Export controlled transfers generally are from
  - The nature of the export has actual or potential military applications or economic protection issues
  - Government concern about destination
  - □ Government concern about end use

- Even if an item is on one of the lists of controlled technologies, there is generally an exclusion for fundamental research (note the need for no restrictions on publications or foreign nationals)
- Licenses needed not only for the shipment of tangible items but also to the research results themselves

- "Export" does not necessarily mean out of the country; concept of "deemed export" critical and will be discussed in more detail later
- The "T-7: countries where U.S. policy is normally to deny licenses – Afghanistan, Belarus, Cuba, Iran, Iraq, Libya, North Korea, Syria, Vietnam and to countries where U.S. has an arms enbargo (Burma, China, Haiti, Liberia, Rwanda, Somalia, Sudan, Zaire) and in certain circumstances also Armenia and Azerbaijan



- If you need a license it takes (a lot of) time
- Penalties for noncompliance

# DO I NEED TO BE CONCERNED ABOUT EXPORT CONTROLS IN THIS RESEARCH?

- 1. Public domain, and
  - No equipment, encrypted software, listed-controlled chemicals, bio-agents or toxins, or other restricted technologies are involved, and
  - b) Information/software is already published, and
  - There is no contractual restriction on export, or

NO

Pundamental Research

(note definitions and caveats associated with this exemption)

- Equipment or encrypted software is involved, or
- 2. Technology is not in the public domain, and
- 3. Technology may be exposed to foreign nations (even on campus) or foreign travel is involved, and
  - The equipment, software or technology is on the Commerce Control List, or
  - Information or instruction is provided about software, technology, or equipment on the CCL, or
  - The foreign nationals are from or the travel is to an embargoed country
- 4. The contract has terms *e.g.* a publication restriction that affect the Fundamental Research Exclusion

- Equipment, software, chemical, bio-agent, or technology is on the US Munitions List (ITAR), or
- 2. Equipment, software, chemical, bio-agent or technology is designed or modified for military use, use in outer space, or there is reason to know it will be used for or in weapons of mass destruction, or
- Chemicals, bio-agents or toxins on the Commerce Control List are involved, or
- 4. The contract contains a restriction on export or access by foreign nationals

#### **Probably**

(further review is required)

License May Be Required

YES
License Will Be
Required

# EAR CLASSIFICATION NUMBERS

- > Export Control Classification Numbers
  - Items characterized as "dual-use" or commercial and not found on the USML may be identified on the Commerce Control List (CCL)
  - All items subject to the EAR fall into one of 10 categories on the CCL
  - Within each category, items are classified by Export Control Classification Numbers (ECCNs)
  - Items subject to the EAR but not found on the CCL are designated "EAR99"

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# EXPORT OF EQUIPMENT, SOFTWARE, TOOLS OF TRADE

#### **CCL Categories**

- 0. Nuclear items and miscellaneous
- Materials, chemicals, toxins and microorganisms
- Materials processing
- Electronics
- 4. Computers
- 5. Telecommunications and Information Security

### EXPORT OF EQUIPMENT, SOFTWARE, TOOLS OF TRADE

- Sensors and lasers
- Navigation and avionics
- 8. Marine
- Propulsion systems, space vehicles, and related equipment

#### EXPORT OF EQUIPMENT, SOFTWARE, TOOLS OF TRADE

**ECCN Structure** 

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First Digit = Category

Second Digit = Product Group

Third & Fourth Digits = Reason For Control

Fifth Digit = Sequential

Numbering

#### EXPORT OF EQUIPMENT, SOFTWARE, TOOLS OF TRADE

- Specific Reasons for Control
  - AT = Anti-Terrorism
  - CB = Chemical & Biological Weapons
  - CW = Chemical Weapons Convention
  - EI = Encryption Item
  - MT = Missile Technology
  - NP = Nuclear Nonproliferation
  - NS = National Security
  - XP = Computers



#### LICENSE DETERMINATION

### Where chemicals or biological materials and foreign nationals are involved:

- License is required for all countries if a substance is listed for chemical/biological (CB) control purposes
- License is required for all non-chemical Weapons Convention (CWC) countries if the substance is listed for CWC purpose
- Licenses are mostly considered on a case-by-case basis if the substance is listed for CB or AT (anti-terrorism) purposes

#### LICENSE DETERMINATION

## If items or materials are on CCL as EAR 99 only, an EAR License will likely be required if:

- The destination or the foreigner recipient's nationality is on EAR entities list
  - China\*, India, Israel, Pakistan, Russia are countries with restricted entities (15 C.F.R. 744, Supp. 4)
- End user is on "Denied Person List", http://www.bis.doc.gov/DPL/Default.shtm
- The destination or foreigner recipient's nationality is an OFAC embargoed country
  - Balkans, Cuba \*1, Iran \*1, Iraq \*2, Libya \*1, N. Korea \*1, Burma \*, Liberia \*, Sudan \*1, Syria \*1, Zimbabwe

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#### LICENSE DETERMINATION

- The destination or foreigner recipient's nationality is another U.S. embargoed country
  - Rwanda \*3, OFAC Embargo List
- The individuals or 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
- The project is associated with a weapons or mass destruction program, a missile program or there are indications of possible diversions ("red flags") (15 C.F.R. 732, Supp. 3)
- Otherwise, a license is not necessary although export documentation and procedures must be followed.

## **EXAMPLES OF COVERED ITEMS**

- Export of research products
  - Underwater research vehicles, regardless of size, covered by ITAR
  - □ Temporary transfer of research equipment abroad may require license (GPS equipment to certain foreign destinations such as Iran, Syria, China, etc)
  - □ Software:
    - If provided free to public, no license
    - If proprietary or encryption technology, may require license or be prohibited

## KEY ISSUES FOR UNIVERSITIES

- Public domain
- Fundamental research exemption
- "Deemed" exports
- Current proposed rulemaking by the Department of Commerce

### EXCLUSIONS FROM CONTROLS: PUBLIC INFORMATION

Publicly Available (EAR) and the Public Domain (ITAR) Information Exclusion:

- Applies to information that is already published, not just ordinarily published, through specified means and found in:
  - 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)
  - published patent information (does not apply to proprietary information not publicly disclosed)



### EXCLUSIONS FROM CONTROLS: PUBLIC INFORMATION

- 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
- Websites accessible to the public for free and without the host's knowledge of or control of who visits or downloads software/information (clearly acceptable under EAR, and likely acceptable under ITAR).

(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)

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### EXCLUSIONS FROM CONTROLS: PUBLIC INFORMATION

### Fundamental Research and Publicly Available/Domain Exclusions:

- ➤ If universities accept restrictions on publications and/or access to, or dissemination of research results the fundamental research/publicly available/public domain exclusions are destroyed.
  - Side deals with sponsors destroy exclusions
  - A short (30 90 days) pre-publication review period (not approval) for patent protection or to permit a sponsor to remove inadvertently included sponsor-proprietary information does <u>not</u> destroy exclusions.

### EXCLUSIONS FROM CONTROLS: EDUCATIONAL INSTITUTIONS

- The Educational Information Exclusion (EAR/ITAR) applies to:
  - > ITAR: General science, math, and engineering commonly taught at schools and universities
    - ITAR is focused on the subject matter
  - EAR: Information conveyed in courses listed in course catalogues and in their associated teaching labs of any academic institution
    - EAR is focused on venue
    - EAR's exemption doesn't cover encrypted software

## LICENSE EXEMPTIONS: MATERIALS & TECHNICAL INFORMATION

#### Exclusions and exemptions don't apply:

- When research equipment, biological samples, or computers with research data or encrypted or proprietary software, are hand-carried or shipped abroad without a license
- When a university has reason to know that sponsors or collaborators are violating controls (15 CFR 736.2(b)(10))
- When sponsors provide proprietary information that is controlled to university researchers who then share it with anyone abroad or with foreigners in U.S.

# LICENSE EXEMPTIONS: MATERIALS & TECHNICAL INFORMATION Export Controls Apply:

- Exclusive material transfer agreements or intellectual property licensing agreements that impose publication restrictions or other restrictions on access to or dissemination of materials and/or related technologies or technical data
- Technology transfer disclosures are made abroad before a patent issues (and thus becomes public) except when such disclosure is directly related to applying for a foreign patent

#### **COUNTRIES OF CONCERN**

#### **EAR**

 Particularly stringent controls apply to: China, former Soviet Union, Middle East, India, Pakistan, Eastern Europe, North Korea, Vietnam, embargoed or heavily sanctioned countries (e.g., Cuba, Iran, Libya, Sudan, and Syria)

#### <u>ITAR</u>

Licenses will be denied for exports to Afghanistan \*5,
Belarus, Ivory Coast, Cuba, Cyprus, Indonesia, Iran \*1, Iraq
\*2, Libya \*1, N. Korea \*1, Syria \*1, Vietnam \*, Burma \*, China \*,
Haiti \*, Liberia \*, Rwanda \*3, Somalia \*, Sudan \*1, Yemen,
Zaire \*4 or any UN Security Council Arms Embargoed
Country (e.g., certain exports to Rwanda \*3)

<sup>\*</sup> US Arms Embargo Countries

#### **COUNTRIES OF CONCERN**

- T6 Countries: Cuba, Iran, Libya, Sudan, North Korea, and Syria
- OFAC Embargoes Countries: T6 Countries, Burma (Myanmar), Liberia, Zimbabwe
- Verify on current OFAC Website countries and embargoes change
- ➤ ITAR Prohibited Countries: T6 Countries, OFAC Embargoed Countries, Afghanistan, Belarus, China, Cyprus, Haiti, Indonesia, Iraq, Ivory Coast, Rwanda, Somalia, Vietnam, Yemen, Zaire
- Embargoes are different for various countries



#### DEEMED EXPORT RULE

- ➤ The transfer of technology (e.g., tech. data/defense services) to a foreign national in the U.S. is deemed to be an export to that individual's home country
  - Not to related controlled items or materials without any accompanying information (concern: equipment in laboratories)
  - Licensing issues may arise in controlled technology exchanges with foreign students, foreign national staff, symposium attendees from other countries, etc.

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## PENALTIES FOR NONCOMPLIANCE

#### ITAR

- Criminal: up to \$1M per violation and up to 10 years in prison
- □ Civil: seizure and forfeiture of articles, revocation of exporting privileges, fines of up to \$500K per violation

#### EAR

- ☐ Criminal: \$50K-\$1M or five times value of export, whichever is greater, per violation, up to 10 years in prison
- ☐ Civil: loss of export privileges, fines \$10K-\$120K per violation

#### OFAC

- Criminal: Up to \$1M and 10 years in jail
- ☐ Civil:\$12,000-\$55,000 per instance
- Loss of Export Privileges
- Bad Press!

#### LICENSE PROCESS

- The licensing process may vary depending on the type of export license applied for and the government agencies involved in the decisionmaking
  - > Documentary Requirements

#### **EAR**

- 748P Form required for all exports (commodity, software, and technology including deemed exports)
- Supporting documents that may be applicable are
  - 748 A (Item Appendix) and
  - 748 B (End-User Appendix),
  - · end-user certificate,
  - BIS 711 Statement of Ultimate Consignee & Purchaser
  - a letter of explanation, and
  - technology control plan, etc.

#### LICENSE PROCESS

## Example 1: Documents Required for EAR Deemed Export License EAR

- 1. 748 P license application
- 2. 748P-A item appendix for technology ECCNs
- 3. <u>Letter of Explanation</u> letter detailing location of technology transfer, type of technical data, forms which technical data to be released, use of technical data, explanation of processes and technical persons

**Note:** show proof of foreign national's intent to permanently reside in the U.S., if the individual has filed for a green card (or other protected status)

#### LICENSE PROCESS

- 4. Technology Control Plan a plan that describes the various safeguards an institution has taken to protect against the unauthorized access to controlled technology without an export license, such as IT access controls, building access restrictions, "clean desk" and data discard procedures
- Passport/Visa copy of all passport pages and visa information
- 6. Resume copy of current resume
- 7. <u>FBI Checklist</u> personal information such as date/country of birth, country of citizenship, U.S. address/foreign address, passport/visa information, universities attended including dates of attendance, degrees received and field of study, and current employer

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### LICENSE PROCESS ITAR

- ➤ITAR requires that persons who manufacture <u>or</u> export defense articles or provide defense services must register & pay fees
- > License forms used:
  - DSP-5 (Permanent Export),
  - DSP-73 (Temporary Export),
  - DSP-61 (Temporary Import),
  - DSP-85 Classified Articles (Exports and Imports)

#### LICENSE PROCESS

### **Example 2:** Documents Required for ITAR Deemed Export License

- 1. DSP-5 license application
- Current Job Description or Statement of Work detailed description of the foreign national's current job duties and the type of technical data to be transferred
- 3. <u>Professional Work Background</u> equivalent of a resume, describe all past work experience
- Copy of Work Visa valid U.S. visa such as an H1B or L1

#### LICENSE PROCESS

- 5. <u>Technology Control Plan</u> similar to BIS, a plan that describes safeguards to protect against the unauthorized transfer of technical data
- Non-Disclosure Agreement not required if agreement already has ITAR-conditional language
- Other Supporting Documents may include equipment list, technology description, DSP-83 for Significant Military Equipment, etc.

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#### LICENSE PROCESS

- Supporting documents that may be applicable are:
  - additional equipment/parts/technology information,
  - a letter of explanation,
  - Non-Disclosure Agreement,
  - letters of agreement,
  - technology control plan, etc.

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#### LICENSING PROCESS

#### **Documentary Requirements**

**OFAC** – Travel to embargoed country

- Request license in form of letter describing purpose of traveling; who is traveling; period of time; interactions with foreign government, if applicable; equipment / resources to be exported
- Period of license is one year or less, must be renewed annually
- > OFAC payment to individuals in the U.S.
  - General license may be required for Iran, Cuba

## FUNDAMENTAL ELEMENTS OF A COMPLIANCE PROGRAM

- > Top-Level Commitment Statement by University
- Empowered Official
  - Identify the position within the university that is responsible for export control compliance
- Assign expert legal counsel (inside and outside) to support the central office



### FUNDAMENTAL ELEMENTS OF A COMPLIANCE PROGRAM

- Identify who is responsible for performing each part of the process and who is responsible for the overall effectiveness of the system
- Provide university personnel with desktop procedures
- > Provide training and awareness programs
- Protect the university, by implementing an ongoing compliance program, against violations of the EAR, ITAR, and OFAC

## FUNDAMENTAL ELEMENTS OF A COMPLIANCE PROGRAM

#### Notification

 A procedure should be established for determining whether to consult with the appropriate regulatory authority when questions arise regarding the propriety of specific transactions or potential violations have occurred

#### > Self-Audit/Internal Audit

- Regular internal audits should be conducted to ensure that the university's EMS is operating effectively
- Goal is to ensure that the EMS is being followed, that the processes are changed as needed and new processes are added when required



#### **GOOD PRACTICES**

- Centralize administration and oversight of compliance in an office with which researchers routinely interact
  - Maximize expert knowledge of research and applicable controls
  - □ Ensure Application of uniform policy;
- Include clear and consistent institutional policy prohibiting sponsor restrictions on publication or on access to or dissemination of results
- Perform controlled research only in separate, secured facilities where only U.S. citizens work or in facilities where nationalities are tracked and deemed export licenses are obtained through effective controls

#### **GOOD PRACTICES**

### Successful programs can take many forms but have the following characteristics:

- Promote compliance through awareness training
- Simple and Focused
- Emphasize the penalties of non-compliance
  - Focus on how to ensure compliance and qualify for exclusions typically useful in academic research and teaching
- Encourage open and public research under the "public availability", "public domain", and "fundamental research" exclusions
  - Recognize that openness is more natural than security in academia

#### **GOOD PRACTICES**

- Include records of the compliance program, implementation efforts, and the steps to discover and rectify inadequacies
  - Such steps may mitigate the consequences of unintentional violations
  - Encourage prompt disclosure of potential violations to the central office for a knowledgeable and timely response
  - Including appropriate self-disclosure to the cognizant agency to mitigate penalties
- Central Record keeping of all interactions
- Written documentation of the program
  - E.g. in an Export Controls Management Plan



- Avoid technology transfer risks by establishing procedures to ensure only authorized persons have access to controlled technology
- Condition found in Commerce and State deemed export licenses
- The U.S. Government recommends that a foreign national technology control plan have 6 essential elements.

### FOREIGN NATIONAL TECHNOLOGY CONTROL PLAN

#### **Element No. 1: Commitment**

- Similar to EMS management policy, shows university commitment to export controls
- Demonstrates export compliance reporting structure
  - Government wants senior management to have export compliance responsibilities

#### Element No. 2: Physical Security Plan

- Physical security access restrictions to areas where controlled equipment/technology is located
  - Badging
  - Building Access
  - Visitor Logs
  - Escorts

#### **Element No. 3: Information Security Plan**

- > IT access controls
  - Server folder access
  - Firewall protection
  - Passwords

#### Technical discussions control

 Guidelines on meetings, foreign travel, emails, symposiums, etc. where unlicensed controlled technology will be discussed

#### Clean desk policy

 Guidelines on securing (e.g., central storage, locked desk) hard copy controlled technical data

#### Data discard policy

 Guidelines on the appropriate method of disposal (e.g., hard drives, CDs, papers) for controlled technical data

### Element No. 4: Personnel Screening Procedures

- Guidelines to vet faculty, staff, students, and contractors for possible export control issues and more
  - Review Denied Persons List, Entity List (work/education affiliations), Specially Designated Nationals List and Debarred Parties List
  - Conduct background checks (e.g., criminal, credit, etc.)
  - Know screening procedures 3<sup>rd</sup> party contractors (e.g., temp agencies) use



### Element No. 5: Training and Awareness Program

- Informing the University's foreign national employees of any technology access limitations
- Training U.S. employees on any technology access limitations for foreign national employees

#### **Element No. 6: Self Evaluation Program**

- Similar to EMS audit process
  - Review schedule
  - Audit module
  - Audit report with review methodologies (e.g., procedural/transactional analyses), findings, and recommendations
  - Corrective actions



#### **CURRENT ISSUES**

- The National Defense Authorization Act requires:
  - > The Departments of Commerce, Energy, Defense, and State along with CIA, FBI, and recently Homeland Security, on the adequacy of U.S. export controls to prevent acquisition of sensitive U.S. items or materials and/or technology/technical data and services by foreign governments, entities, or individuals.
  - The focus of reports on 2003 (filed March/April 2004) is university compliance with deemed exports.
    - Department of Commerce, Department of State, OFAC



#### **CURRENT ISSUES**

### What the Department of Commerce IG found:

- Universities embrace the shield provided by the fundamental research exemption
- Commerce believes that deemed export provisions apply
  - Foreign national access to controlled equipment and related proprietary technology
  - Regardless of how use is defined

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#### **CURRENT ISSUES**

#### The Department of Commerce IG also found:

- The actual publication of information may be a more appropriate indicator that technology is publicly available than the fact that the research is intended for publication.
- > Deemed export policy should take into account:
  - all the nationalities a foreign national has ever maintained, and
  - 2. require employers to obtain export licenses based on country of origin regardless of an individual's most recent citizenship or residency status.

### Summer 2005 Key Concerns

- Visas Country of Origin
- Identifying and securing all controlled equipment
- Access to equipment in research laboratories
- > Projects in progress
  - Implications for student projects

#### MAJOR TRUTHS

- Easier to make it public than keep it proprietary
- Beware of equipment, encrypted software, listed/controlled chemicals, bio-agents, and toxins
- Side deals are dangerous
- Publish or perish!
- Fear works!

#### BEST PRACTICES

- Keep it simple!
- Keep it open!
  - No side deals!!!
- Centralize administration/oversight
- Support responsible office with legal counsel
- Educate the community
- Provide threshold guidelines



## FURTHER INFORMATION AND QUESTIONS?

GOOD LUCK!!