### Export Control Program

# **Researcher** Training



University of Wisconsin – Madison

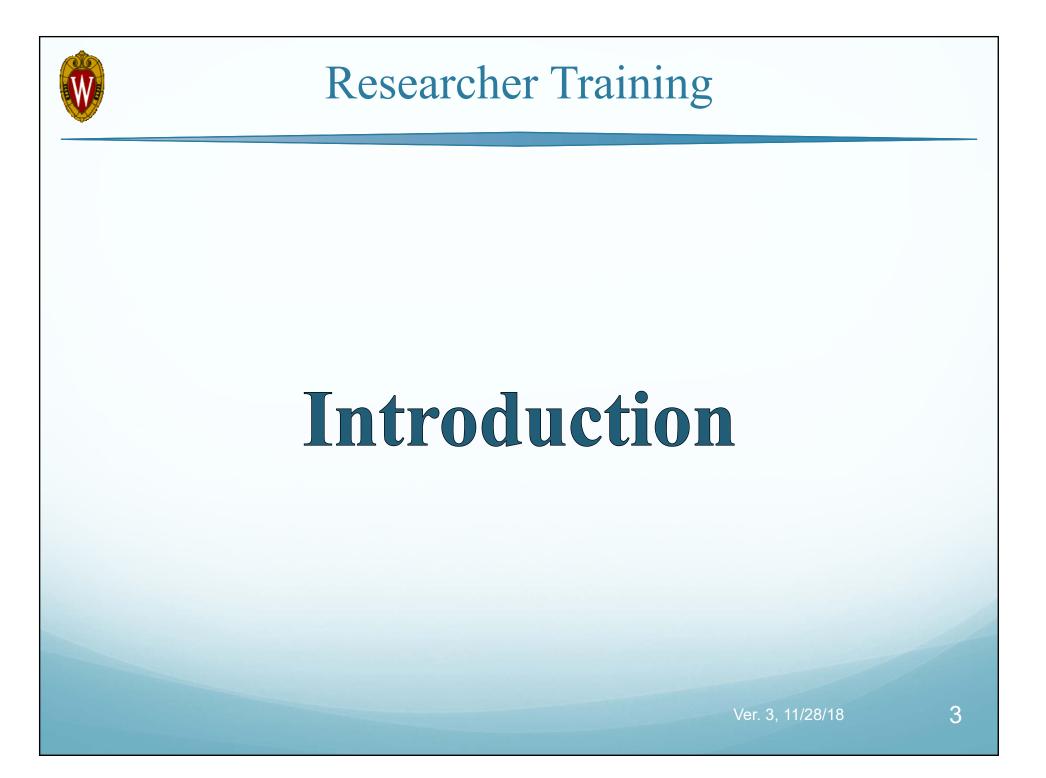
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# **Researcher Training**

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# Introduction

# What is Export Control?

Export control consists of a group of federal laws / regulations that control the distribution of certain commodities, technologies, information and data

- They can limit:
  - What can be shipped out of the country and to whom it can be shipped
  - Access to information for certain foreign nationals and/or organizations
  - Foreign collaborations
- They determine when an export license is required to ship items or information abroad



## Introduction

### **Purpose of the Regulations**

To control the export of military and dual use products, technology and services to foreign persons or organizations

- Primarily for national security purposes
- Some economic reasons as well
- Dual Use: commercial items that could have military, national security or proliferation applications
  - Ex: computer technology and software, sensors, lasers



# Introduction

### Why Do We Care (about Export Control)?

- It's the law (we need to comply with the regulations)
- These regulations can affect:
  - What type of research we do
  - Who we hire
  - Who we can share information with
  - Who we work with (collaborators / sponsors)
  - Where we ship items
  - What items we ship
  - Level of security for projects / labs



### **Researcher Training**

# Definitions



## Definitions

### Export

- <u>Export:</u> Sending or taking anything out of the United States in any manner, except mere travel outside of the U.S. by a person whose personal knowledge includes technical data; including:
  - Shipping commercial shippers or hand-carry
  - Verbal transfer of technical data (i.e., phone, Skype)
  - Electronic transfer of technical data (i.e., e-mail, fax, text, social media)
  - Items: computers, equipment, biological agents, materials, substances, etc.
- Deemed Export: See next page
- <u>Defense Service</u>: Performed for or on behalf of a foreign person or organization



## Definitions

### **Deemed Export**

- Transfer (oral or visual disclosure) of technology, information or data to a foreign person within the U.S. is deemed to be an export to that person's home country
  - Deemed exports are treated in the same manner as a physical export to a foreign country
  - Foreign person needs to have knowledge to understand/interpret what they are seeing/hearing
- Examples of deemed export:
  - Foreign collaborators @ UW working on <u>controlled technology</u>
  - Phone calls regarding <u>controlled technology</u> w/ foreign collaborators working @ another U.S. university
  - Taking foreign visitors on a tour of a lab where they can view design details of <u>controlled</u> <u>technology</u>
  - Discussions regarding <u>controlled</u> technology w/ foreign persons at a conference w/in the U.S.



## Definitions

### Foreign Persons/Organizations

A Foreign Person or Organization is anyone who is NOT a U.S. Person. A U.S. Person is:

- U.S. citizen or national
- Permanent resident (green card holder) of the U.S.
- A refugee, someone granted political asylum or someone granted amnesty
- U.S. government agency and any state or local governments therein
- U.S. company, business, LLC or partnership
- U.S. university







### ITAR

Name of Regulation:	International Traffic in Arms Regulations
Agency:	State Dept.
Items Controlled:	Military equipment & information
Listing:	United States Munitions List (22 categories) – 22CFR 121
Comments:	Treats all foreign destinations the same
UW Examples:	<ul> <li>Category IV: Launch vehicles, missiles, rockets,</li> <li>StarTracker</li> <li>Category VII: Tanks and military vehicles</li> <li>Terrain displacement under treaded vehicles</li> <li>Category XII: Fire Control, optical, guidance and control equip.</li> <li>NIR detector</li> <li>AERI crycooler</li> <li>Category XV: Spacecraft systems and associated equipment</li> <li>GOES-R</li> </ul>



### EAR

Name of Regulation:	Export Administration Regulations
Agency:	Commerce Dept.
Items Controlled:	Dual use items & information
Listing:	Commerce Control List (10 categories) – 15CFR 774, Supp 1
Comments:	Need for a license depends on commodity, destination country, reason for control & exemptions
UW Examples:	<ul> <li>Category 1: Select agents</li> <li>Category 3: Electronics, such as multimeters, digital I/Os, D/A converters and integrated circuits</li> <li>Category 4: Computers and related equipment</li> <li>Category 5: Telecommunications equipment, ethernet switches, remote control power switches, encryption software</li> <li>Category 6: Lasers, optical sensors</li> </ul>



### FACR

Name of Regulation:	Foreign Asset Control Regulations
Agency:	Treasury Dept.
Items Controlled:	Foreign assets (bank accounts)
Listing:	Specially designated nationals list
Comments:	More concerned with whom you are communicating rather than what you are communicating
Examples:	<ul> <li>Benevolence International Foundation, Oak Lawn, IL</li> <li>Ukrainian-Mediterranean Airlines, Kiev, Ukraine</li> <li>Electronics Institute, Damascus, Syria</li> <li>A-Team Chemicals Company LTD., Bangkok, Thailand</li> <li>China Enriching Chemistry Limited, Shanghai, China</li> <li>Proton Petrochemicals Shipping Limited, Nicosia, Cyprus</li> </ul>



### **Restricted Party Lists**

*Restricted Party Lists* – Besides the Specially Designated Nationals List, the federal government maintains multiple lists of persons, organizations, companies, universities and vessels with which it has placed restrictions on transactions

- Examples:
  - Specially Designated Nationals List Treasury
  - Entity List, Denied Persons List, Unverified List Commerce
  - AECA Debarred Parties State
  - FBI Most Wanted, ATF Most Wanted Justice
- Reasons parties are added to lists:
  - Terrorists, drug lords, export regulations/sanctions violations, weapon smugglers, oligarchs of governments under scrutiny, WMD developers
- Other governments maintain their own lists:
  - Australia, Japan, Saudi Arabia, Canada, Interpol, EU



### Restricted Party Lists (cont.)

#### **Examples of Restricted Parties**

- People:
  - Wayne Smith Violation of AECA (ITAR)
  - Oleg Deripaska Russian aluminum industrialist
  - Richard Smyth Violation of ITAR
- Universities:
  - Beihang University China
  - National University of Defense Technology China
  - Malek Ashtar University of Technology Iran
- Organizations:
  - Pakistan Atomic Energy Commission Pakistan
  - 13 Institute, China Academy of Launch Vehicle Technology China
- Companies:
  - Aero Systems Aviation Corp. Miami, FL
  - LukOil Russia
- Vessels:
  - Sea Star III



### **Exemptions for Universities**

#### • Fundamental Research Exemption (ITAR, EAR)

 No license is required for fundamental research – basic or applied research in science or engineering – at an accredited institution of higher learning in the U.S. and resulting in information that is ordinarily published and shared broadly in the scientific community

#### Public Domain Exemption (ITAR, EAR)

No license is required to export information or research that are generally available in the public domain. This does not apply to physical equipment, materials, substances, etc.

#### Education Exemption (ITAR, EAR)

No license is required to transfer information to students, including foreign nationals, concerning general scientific, mathematical or engineering principles commonly taught in schools, colleges or universities

#### Employment Exemption (ITAR only)

No license is required to transfer export controlled information to a foreign national if the foreign national:
 (1) is a bonafide, full-time employee of the UW, (2) is not a national of certain countries of concern, (3) has a permanent residence in the U.S. while employed at the UW, (4) has been informed in writing not to transfer information to other foreign persons



### **Researcher Training**

# Non-Compliances



# Non-Compliances

### **Results of Non-Compliance**

- Civil & criminal penalties levied against <u>individual</u>s & organizations
- Disciplinary action by university toward responsible individual
- Bad press
- Loss of research funding

### You can be held personally liable for non-compliance





# Non-Compliances

### - Responsibility to comply lies with individual -

#### Case of J. Reece Roth - U of Tenn (Sept 2008)

- Retired professor in plasma physics
- Convicted on 18 counts of conspiracy, fraud & violating ITAR
- Gave 2 grad students from China & Iran access to sensitive info
- Sentence 48 months in prison
  - Worst case: 175 yrs in prison; \$15.5M

#### Teledyne LeCroy, New York (June 2015)

- Exporting 2 oscilloscopes (3A292) to Beihang University, China (an entity-listed university)
- Failed to get export licenses & file accurate shipping documentations;
- Value of oscilloscopes < \$16K
- *Fine = \$75K*

#### FLIR Systems – Wilsonville, OR (Apr 2018)

- Fined \$30M for violating ITAR
  - Half the fine suspended for continual remedial measures
  - \$15M paid over 5 years
- 347 violations
- Transfer of ITAR-restricted equipment to dual national employees of Iran, Iraq, Lebanon and Cuba
- Example: Multi-sensor thermal imaging system



### **Researcher Training**

# What Should You Look Out For?



### Finding export control issues is much like looking for a golf ball in a haystack





#### **Processes for Discovering Issues**

The Export Control Office has a number of processes in place to unearth issues, including:

- **Project Screening** Using the WISPER screening tool
- Visa Certification For H-1B and O-1 visas
- Visa Screening J-1 scholars
- Outgoing International Material Transfer Agreements (MTAs)
- International Travel Weekly review of Concur bookings
- Vendor Screenings Daily for PO/direct payments
- Project Reviews Questions from staff regarding projects, staffing, shipping, etc.



### **Contract Clauses**

#### Publication restrictions

- Sponsor needs to approve publication
- Nullifies the fundamental research exemption

#### Personnel restrictions

Sponsor will not allow participation by persons from certain countries

#### Export control paragraph

- Does it apply to your project
- Ask for ITAR or EAR classification

#### NDA (for technical information)

- May not allow you to publish some of your research
- DoD Funding
  - Budget Activities 1 & 2 Typically considered fundamental research
  - Budget Activities 4 7 Development, not fundamental research





### **Example Export Control Clause**

With regard to exports and re-exports, you represent and warrant that no (COMPANY) software or service supplied to Licensee will be provided, directly or indirectly, to any person or organization (i) in Cuba, Iran, North Korea, Sudan or Syria, or who is consisted a part of the government of those countries. (ii) who is involved in Improper development or use of nuclear weapons, or of chemical/biological weapons (CBW) or missiles, or in terrorist activities, or (iii) who is listed by the government of the United States, or of any other country as prohibited from receiving the product, technology or service, or as prohibited from participating in export transactions involving the product.

- Places restrictions on distribution to certain countries
- Places restrictions on distribution to persons involved in WMD development and terrorism
- Requires us to screen persons receiving the software



### **International Shipping**

Who?

- To whom are you shipping? Is the recipient a restricted party?
- Do you know who the end user is?



#### • What?

Some items require an export license (i.e., military equipment; spaceflight H/W or S/W; select agents; some lasers; high speed cameras; night vision goggles)

#### Where?

- E:1/E:2 Countries: Cuba, Iran, North Korea, Sudan, Syria Major restrictions
- OFAC & US Embargo List: Balkans (western), Belarus, Burundi, Central African Republic, Cuba, Congo, Iran, Iraq, Lebanon, Libya, N. Korea, Somalia, South Sudan, Sudan and Darfur, Syria, Ukraine, Russia, Venezuela, Yemen, Zimbabwe
- ITAR Prohibited Countries (22CFR 126.1): Afghanistan, Belarus, Burma, Central African Republic, China, Congo, Cuba, Cyprus, Eritrea, Haiti, Iran, Iraq, Lebanon, Libya, N. Korea, Somalia, South Sudan, Sudan, Syria, Venezuela, Zimbabwe



### **International Travel**

- Where?
  - Similar destination concerns as shipping
- Why?
  - Conferences, meetings What do you plan to discuss?
  - Research Is this fundamental research?
- Who?
  - Are you meeting with specific persons?
  - Some foreign universities are subject to restrictions by the federal gov't
- What?
  - An export license may be required when traveling and taking something on a plane either in checked or hand-carried luggage
  - Hand-carry to a foreign country = ship to a foreign country





#### International Travel (cont.)

#### AES Submissions

- U.S. Customs will require you to submit an Electronic Export Information filing (EEI) two (2) hours prior to your departure if you are carrying:
  - An item being that requires an export license
  - The value of the items hand-carried are  $\geq$ \$2500 for a single tariff code (Schedule B code)
  - Rough diamonds

#### Hand-carried Items

• Complete a commercial invoice and forward to your customs broker to complete the EEI filing

#### Exemptions

- Tools of the Trade: For UW-owned equipment that is used for work purposes
- BAG: For personally-owned equipment that is taken out the country
- Clean laptop program



### **Purchasing**

- Are you purchasing goods, software, information or data from a foreign supplier?
  - Are they in an E:1 country?
  - Are they a restricted party?

#### Purchasing Screening



• POs and direct payments screened daily (prior to payment) for vendors on restricted party lists

#### P-Card Purchases

- P-Card purchases are not screened prior to payment; screened retrospectively
- Difficult to screen due to poor vendor info & payment services (i.e., PayPal)
- Huawei / ZTE
  - Equipment from Huawei/ZTE may not be used for gov't contracts
  - Research collaborations with Huawei/ZTE may prevent getting awards from DoD and NIH Ver. 3, 11/28/18 29



### **Foreign Staff & Collaborations**

#### Visas

• All H-1b/O-1 applicants reviewed for export control compliance



- J-1 scholars (and affiliated organizations) from restricted countries screened for restricted parties
- F-1 students not screened unless requested

#### Controlled Projects / Technology

- A deemed export license may be needed to transfer controlled technology to foreign staff
- An export license may be needed to transfer controlled technology to foreign collaborators
- Depends on regime (ITAR or EAR), technology involved, country of citizenship and tasks

#### Students

- Students are people too Remember your students when looking at export compliance
- A foreign student in your lab is treated the same as a full-time, foreign staff member



### **Software**

- Software can be included in any of the export control categories
  - Please review any software that is involved with a project to determine if it is export controlled
- Encryption
  - Encryption presents its own set of special rules under EAR and ITAR
  - Use of encryption on any project may require a license when foreign nationals are involved
  - Even if a license is not required, a classification report may need to be submitted





#### **Services**

- Service Work done for hire that is not considered research
  - University exemptions do not apply
- Examples:
  - Analysis of unknown pharmaceutical substances
  - Manufacturing items that are incorporated into commercial devices
  - Providing materials for outside university or commercial research

#### Concerns

- Physical export of controlled items, technology or information to foreign persons
- Services conducted at UW by foreign staff/students using controlled technology (deemed export)





### **Researcher Training**

# Outcomes



### Outcomes

### **Technology Control Plan (TCP) / Lab Security**

- Prevent unauthorized access to controlled equipment, materials, technology, software, information or data
- Written plan describing:
  - What items are controlled
  - Where the items are located
  - Who can have access



- How the access is controlled Door locks, keypad access, lockouts, lock boxes, password protection, encryption
- Developed in collaboration between PI and Export Control Office
- All lab staff should review and sign off on TCP
- Adequate control may prevent need for deemed export licenses



### Outcomes

### **Export Licenses**

#### Not the "end of the world"

- Typically takes 1-2 months to submit and receive approval on licenses from the Depts. of Commerce and State
- Export Control Office submits about 6 license applications a year (average 2010-2018)

#### Notify Export Control Office if an export license may be needed

- Can we manage information to prevent the need for a license?
- Is there an exception we can use?
- Develop license strategy
  - Type of license (EAR or ITAR)
  - What does the license cover?
  - When is the license needed?



### **Researcher Training**

# **Contact Information**



### **Contact Information**

#### **For Additional Information, Contact:**

- Tom Demke, UW-Madison Export Control Officer tom.demke@ssec.wisc.edu 262-8659
- Bethany Nelson, UW-Madison Export Control Coordinator bcnelson2@wisc.edu 261-1128
- Ben Griffiths, UW Senior Legal Counsel ben.griffiths@wisc.edu 263-7400
- Or e-mail: <u>exportcontrol@grad.wisc.edu</u>

#### **UW Export Control Website:**

https://research.wisc.edu/compliance-policy/export-control/