



## Export Controls for *Researchers and Staff* *at the University of Florida*

*The University of Florida acknowledges and appreciates Virginia Tech for granting UF permission to use, and alter their presentation on Export Controls for Virginia Tech Faculty and Principal Investigators*

# Export Controls for Researchers and Staff

- **What is an Export?**
- **Who Controls Exports?**
- **What Technologies are Restricted?**
- **Why Does the University of Florida Care About Export Controls?**
- **Who are Foreign Nationals/Foreign Persons?**
- **What Countries are of Concern?**
- **Export Controls for Researchers and Staff**
- **Future Trends**

# What is an "Export"?

(ITAR 22CFR § 120.17; EAR 15 CFR § 734.2(b))

- **Sending or taking an article out of the U.S. except by mere personal knowledge, or transferring registration, control, or ownership in the U.S.;**
- **Disclosing (including oral or visual disclosure) controlled info to a Non-U.S. Person, in the U.S. (also known as a deemed export) or abroad;**
- **Performing technical assistance, training, or other defense services for, or on behalf of a Non-U.S. Person, whether in the United States (also known as a deemed export) or abroad; and**
- **Re-exporting from foreign countries items or technology of U.S. origin (including some foreign-made items that incorporate U.S.-origin components or technology).**

# Who Controls Exports?

- **International Traffic in Arms (ITAR)**  
*Department of State*  
“Items that are inherently military in character”
- **Export Administration Regulations (EAR)**  
*Department of Commerce*  
“Items that are Dual Use – military and civil applications”
- **Office of Foreign Asset Control (OFAC)**  
*Department of the Treasury*  
“Financial transactions/travel to embargoed/sanctioned countries”
- **Others** (*DoE, NRC, Census, DHS, Customs*)

# What Technologies are Controlled by ITAR?: U.S. Munitions List (22 CFR § 121)

There are 21 categories of technologies controlled by the US Munitions List under ITAR. A sample of the categories is as follows:

- V Explosives and Energetic Materials, Propellants, Incendiary Agents and Their Constituents
- VIII Aircraft and Associated Equipment
- XI Military Electronics

# ITAR: U.S. Munitions List

(22 CFR § 121 cont'd)

- XII Fire Control, Range Finder, Optical and Guidance and Control Equipment
- XIV Toxicological Agents, Including Chemical Agents, Biological Agents, and Associated Equipment
- XV Spacecraft Systems and Associated Equipment
- XVI Nuclear Weapons, Design and Testing Related Items

# ITAR: U.S. Munitions List

(22 CFR § 121 cont'd)

- XVII Classified Articles, Technical Data and Defense Services Not Otherwise Enumerated
- XX Submersible Vessels, Oceanographic and Associated Equipment

For a more detailed list see the USML at 22 CFR § **122**

# What Technologies are Controlled by EAR: Categories (15 CFR § 774 Suppl 1)

- 0 Nuclear Materials, Facilities & Equipment & Miscellaneous
- 1 Materials, Chemicals, Microorganisms and Toxins
- 2 Materials Processing
- 3 Electronics Design, Development and Production
- 4 Computers
- 5 Telecommunications & Information Security
- 6 Sensors and Lasers
- 7 Navigation and Avionics
- 8 Marine (ships & vessels)
- 9 Propulsion Systems, Space Vehicles and Related Equipment

# Why Does the University of Florida Care About Export Controls?

- Unauthorized transfer of export controlled items to Foreign Nationals/Foreign Persons or transactions with sanctioned countries individuals or entities may violate Export Control Laws
  - Researchers may develop, receive or use export controlled data, materials, equipment, software, and technology/technical data
  - Research may involve sanctioned/embargoed country Foreign Nationals/Foreign Persons or foreign travel

# Violations and Penalties

**Failure to comply with U. S. export control laws can result in severe penalties**

- **ITAR: (Individual and Entity)**
  - Criminal Fines  $\leq$  \$1M and  $\leq$  10 Years in prison
  - Civil Fines:  $\leq$  \$500K and Forfeitures

# Violations and Penalties (cont.)

- **EAR:**
  - Criminal Fines/Entities:  $\leq$  \$1M or 5X value of export
  - Criminal Fines/Individual:  $\leq$  \$250K and or  $\leq$  10 years in prison
  - Civil Fines: \$10K- \$100K
- **OFAC: (Individual and Entity)**
  - Criminal Fines:  $\leq$  \$1M and  $\leq$  10 years in prison
  - Civil Fines: \$12K-\$55K

# Who are U. S. Persons?

(ITAR § 120.15; EAR §§734.2(b)(2) & 772)

- **“U.S. Person” means –Persons usually (but not always) permitted to access export controlled information without restriction.**
  - U.S. citizens
  - Aliens who are “Lawful Permanent Residents” (Green Card) (8 USC § 1101(a)(20))
  - Other “Protected Individuals” under the INA (8 USC §1324b(a)(3))
    - designated an asylee or refugee
    - a temporary resident under amnesty provisions
  - Any entity incorporated to do business in the U.S.

# Who are Foreign Persons/ Foreign Nationals?

- **“Foreign Person” means everyone else.** (ITAR 22CFR § 120.16)
  - **“Foreign Person”**: “Any foreign interest and any US Person effectively owned or controlled by a foreign interest.”
  - Includes foreign businesses not incorporated in the U.S. and persons representing other Foreign Persons
  - Includes: H1B Work Visa, F1 Study Visa, J1 Training Visa, E1 Investors Visa, TN Work Visa, L1 Intra-Company Transfer Visa, K and V Fiancée Visas.
- EAR does not use the term Foreign Person, instead refers to “foreign national”.
  - **“Foreign National”**: “Any person who is not a citizen or national of the United States.” (Note: same as “alien” pursuant to 8 U.S.C. § 1101)

# *ITAR Bona Fide* Employee Exemption

ITAR also allows a *bona fide employee* exception for access to ITAR-restricted technical data: 22 CFR § 125.4(b)(10)

- FTE at U.S. institutions of higher learning;
- With a permanent abode in the United States throughout the period of employment
- **Not applicable** to Wage/GRA
- **Not applicable** to Embargoed/Sanctioned countries
- **Potentially not applicable** to ITAR-restricted defense articles, components of defense articles or defense services (training)
- **Not applicable** to EAR-restricted exports

# Deemed Export

- **ITAR:** “Export” includes “disclosing (including oral or visual disclosure) or transferring technical data to a foreign person, whether in the U.S. or abroad.” and “performing a defense service on behalf of, or for the benefit of, a foreign person, whether in the United States or abroad” (ITAR 22 CFR § 120.17(4)&(5))
- **EAR:** “Any release of technology or source code subject to the EAR to a foreign national. Such release shall be deemed to be an export to the home country or countries of the foreign national.” (EAR 15 CFR § 734.2(b)(ii))

# Technical Data and Deemed Exports (ITAR) (22 CFR §120.10)

- (1) "Information . . . required for the design, development, production, manufacture, assembly, operation, repair, testing, maintenance or modification of defense articles. This includes information in the form of blueprints, drawings, photographs, plans, instructions and documentation;...software directly relating to defense articles...including] but...not limited to the system functional design, logic flow, algorithms, application programs, operating systems and support software for design, implementation, test, operation, diagnosis and repair.
- (2) Classified information relating to defense articles and defense services;
- (3) Information covered by an invention secrecy order;
- (4) Software . . . directly related to defense articles;
- (5) This definition ***does not include*** information concerning general scientific, mathematical or engineering principles commonly taught in schools, colleges and universities or information in the public domain . . . It also ***does not include*** basic marketing information on function or purpose or general system descriptions of defense articles."

# Defense Services and Deemed Exports (ITAR) (22CFR § 120.9)

## Defense service means:

- (1) "The furnishing of assistance (including training) to foreign persons, whether in the United States or abroad in the design, development, engineering, manufacture, production, assembly, testing, repair, maintenance, modification, operation, demilitarization, destruction, processing or use of defense articles;" or
- (2) "The furnishing to foreign persons of any technical data controlled under this subchapter (see § 120.10), whether in the United States or abroad."

# Technology and Deemed Exports (EAR)

- **As defined by EAR 15 CFR § 772:**

- “Technology” – is specific information necessary for the development, production, or use of a product. The information takes the form of “technical data” or “technical assistance.”

- “Technical assistance” may take forms such as instruction, skills training, working knowledge, consulting services.

- “Technical data” may take forms such as blueprints, plans, diagrams, models, formulae, tables, engineering designs and specifications, manuals and instructions written or recorded on other media or devices such as disk, tape, read-only memories.

# Export Restricted Countries: ITAR

(22 CFR § 126.1)

- Exports of ITAR-restricted defense articles and technical data to any foreign country or foreign person requires a license or other approval (*some exceptions- Canada, NATO*)
- *Many countries are embargoed and exports to these countries or persons from these countries are prohibited*

# ITAR - Prohibited Destinations for Defense Articles & Research

(22 CFR § 126.1 & <http://pmdtc.org/country.htm>)

- Afghanistan\*
- Burma
- Belarus
- Congo (Formerly Zaire)
- Cuba
- Cyprus\*
- Eritrea\* (eff 3/6/06)
- Haiti\*
- Iran
- Iraq
- Ivory Coast\*
- Lebanon (eff 8/11/06)
- Liberia\*
- Libya
- North Korea
- People's Republic of China (Includes Hong Kong)
- Rwanda\*
- Somalia\*
- Sudan\*
- Syria
- Vietnam
- Venezuela\* (eff 8/17/06)
- Yemen\*
- Zimbabwe\*

\*Source: ODTC Embargo Reference Chart.

# Export Restricted Countries: EAR

- *Restricted countries determined by the technology to be exported*
- *Particularly stringent controls apply to: China, former Soviet Union, Middle East, India, Pakistan, Eastern Europe, North Korea, Vietnam, embargoed or sanctioned countries (e.g., Cuba, Iran, North Korea, Sudan, and Syria)*

# Sanctioned Countries: OFAC

<http://www.treas.gov/offices/enforcement/ofac/programs/index.shtml>

## Comprehensive Sanctions:

- Cuba
- Iran
- Libya
- North Korea
- Palestinian Authority *(added 4/12/06)*
- Sudan
- Syria

## Limited Sanctions:

- Balkans
- Iraq
- Ivory Coast
- Liberia
- Myanmar (Burma)
- Zimbabwe

# Restricted Access Parties

- May include US Persons and entities:
- *Key lists:*
  - Department of Commerce Denied Persons [BIS]
  - Department of Commerce Entity List [BIS]
  - Department of Commerce "Unverified" List [BIS]
  - U.S. Treasury Department Specially Designated Nationals and Blocked Persons, including Cuba and Merchant Vessels, Iran, Iraq and Merchant Vessels, Sudan Blocked Vessels [OFAC]
  - Department of State Designated Terrorist Organizations
  - Department of State Terrorist Exclusion List (TEL)

# How Can Universities Violate Export Laws: ITAR/EAR?

- Transfer export controlled equipment, materials, technology/technical data, software, or provide defense services to an unauthorized Foreign National/Foreign Person without a gov't approved license or other gov't approval (ITAR/EAR)
- Allow a Foreign National to "use" export EAR controlled equipment, materials, items (deemed export) or have access to defense articles and technical data about that defense article (deemed export)

# How Can Universities Violate Export Laws: OFAC?

(31 CFR § 500)

- Transactions involving designated foreign countries or their nationals;
- Transactions with respect to securities registered or inscribed in the name of a designated national;
- Importation of and dealings in certain merchandise; and
- Holding certain types of blocked property in interest-bearing accounts.
- Transactions with specific entities or individuals known as "specially designated nationals," found in the Specially Designated Nationals List ("**SDNL**"),

# Sponsored Programs Export Control Strategy

- Minimize the number of awards with export control restrictions
- Ensure that the cost of security for a Sponsored Project is borne by the Sponsor
- Adequately protect those awards that have export control restrictions to prevent license violations
- PIs play a key role in this strategy

# Who's Who in DSR Export Controls?

- **Empowered Official:**
  - Dr. Winfred Phillips, VP for Research
    - (352) 392-9271
- **Export Control Legal Liaison:**
  - Amy Haas
    - (352) 392-1358
- **DSR Export Control Contact:**
  - Dr. Tom Walsh, Director
    - (352) 392-3516

# Activities Not Subject to Export Controls

- Many university activities are not subject to export controls:
  - Public Domain/ Publicly Available Information
  - Educational Information
  - Fundamental Research
  - Humanitarian Projects
  - Information & Informational Materials
  - National Security Controls

# Public Domain/Publicly Available Information

(22 CFR § 120.11) and (15 CFR § 734.7)

- Materials available in newspapers and libraries, presented at publicly available conferences, trade shows
- Websites accessible to the public for free and without the host's knowledge or control of who visits
- ITAR exclusion definition includes only *already published information*

# Educational Information

- General science, math, and engineering commonly taught at schools and universities (ITAR (22 CFR § 120.11))
- Information conveyed in courses listed in course catalogues and in their associated teaching labs of any academic institution (EAR (15 CFR § 734.9) )

# Fundamental Research

“Fundamental research means basic and applied research in science and engineering, the results of which ordinarily are published and shared broadly...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 concerns.”

-National Security Decision Directive 189

# Fundamental Research

(22 CFR § 125.1(a) , 22 CFR § 120.11 (8)) & (15 CFR §§ 734.8, 734.11)

1. Basic or Applied Research
2. At an accredited U.S. institution of higher learning
3. In the U.S.
4. No publication controls or foreign national access restrictions exist for the activity
5. Federally funded w/ no access and no specific National Security restrictions

*In general: as long as the above conditions are met , research results that “would ordinarily be published and shared broadly within the scientific community” may be excluded from ITAR or EAR restrictions even if the subject area is on the USML or CCL.*

# Fundamental Research

(22 CFR § 125.1(a) , 22 CFR § 120.11 (8)), (15 CFR §§ 734.8, 11 & BIS Deemed Export FAQ22))

## Caution:

- Fundamental research generally covers information not commodities or software
- Fundamental research does not cover technology/software/items that are already designated as subject to export controls
- Fundamental research may not apply to some research areas- e.g. WMDs, encryption

# Fundamental Research

- Publication Clauses- exceptions
  - Sponsor may include “review” clauses to remove:
    - some company business proprietary information  
*see 15 CFR §§734.8 , 11*
    - Patentable information
  - A short (30-90 day) prepublication review period (not approval) for patent protection or to permit a sponsor to remove inadvertently included sponsor-proprietary information does not destroy exemptions

# Humanitarian/Informational

(31 CFR § § 500,.572, 206)

- Humanitarian Projects (OFAC)
  - Country specific restrictions
- Information and informational materials
  - Books, movies, music, etc.
  - Informational materials must be “in being” at time of transaction
- EAR also has a humanitarian gift *exception*  
(15 CFR § 740.12)

# National Security Controls

22 CFR § 125.4(a) & 15 CFR § 734.11(a)

- **ITAR:** "Transmission of classified information must comply with the requirements of the Department of Defense Industrial Security Manual and the exporter must certify to the transmittal authority that the technical data does not exceed the technical limitation of the authorized export."
- **EAR:** "If research is funded by the U.S. Government, and specific national security controls are agreed on to protect information resulting from the research, §734.3(b)(3) of this part will not apply to any export or reexport of such information in violation of such controls. However, any export or reexport of information resulting from the research that is consistent with the specific controls may nonetheless be made under this provision."

# University Export Control Issues

*Many university activities are subject to export controls-*

*exclusions (fundamental research/  
educational/ public domain, other) may  
not always apply!*

# Proprietary Research

(15 CFR § § 734.8, 734.11, 22 CFR § 125.1(a))

- Research having any of the following:
- Publication restrictions
- Access restrictions (foreign nationals)
- Contract-specific national security restrictions

# Development

(FAR 35.101, 15CFR§734.8(a), & 22CFR§125.4(c)(3))  
& BIS Deemed Export FAQ #22

- Activities that are not basic or applied research
  - Design, development, testing, or evaluation of a potential new product or service (or of an improvement in an existing product or service) to meet specific performance requirements or objectives
  - Design engineering, prototyping, and engineering testing (watch especially software!)
  - EAR allows fundamental research to include development (see Deemed Export FAQ 22) where as ITAR does not allow development as fundamental research

# "Use" Technology (15 CFR § 772.1)

- Providing foreign nationals "use" of equipment, or "use" technology as a deemed export may require a license-
- EAR Definition of "Use":
- "Operation, installation (including on-site installation) maintenance (checking), repair, overhaul, ***and*** refurbishing."
- Deemed exports do not include the mere transfer of the actual controlled materials or items without any associated information.

# International

- Research outside the United States
- Research with foreign collaborators & sponsors
- Outreach programs
- Graduate student education

# Defense Services

(22 CFR § § 121.1 Cat XV(f); 124.1; 125.4)

- International Traffic in Arms Regulations:
  - providing a foreign person with technical data on a defense article (*even if in the public domain*) may be considered a defense service that requires a license or Technical Assistance Agreement (TAA)

# Prohibited Activities

(15 CFR § § 732.2(b)(1); 736.2(b)(7); & 744.6)

- Weapons of Mass Destruction Proliferation – *no license exceptions*
  - Chemical or Biological Weapons (*D-3 Countries*)
  - Nuclear Weapons (*D-2 Countries*)
  - Missile Technology (*D-4 Countries*)
- Technical Assistance-Encryption Items

# EAR General Provision 7

(15 CFR § § 732.2 (7) & 732.3(j))

- Prohibited to: " ...engage in activities [ that would] make a material contribution to the design, development, production, stockpiling, or use of nuclear explosive devices, chemical or biological weapons, or of missiles" (15 CFR § 744.6(e))
- There is a similar prohibition on some encryption commodities and software (5A002,5D002), however " the mere teaching or discussion of information about cryptography...in an academic setting... even where foreign persons are present..." would not be prohibited. (15 CFR § 749.6(e))

# PI Activities Potentially Subject to Export Controls

- Technology Research for foreign entities/gov'ts
- USML/CCL related research producing end items or software
- Actual exports of materials, items, outside of the U.S.:
  - *Examples: GPS receivers, Sprayers, select agents, computers with high end encryption*
- Visiting Scientists/International Conferences
- NonDisclosure & Material Transfer Agreements

# Sponsored Programs Strategy

Catch export control restrictions in the proposal phase

- If foreign students/ researchers to be involved, licenses/approvals can be obtained, but may take months to obtain
- There may be security costs associated with controlling access to restricted items- those costs should be included in proposal to be borne by the sponsor

# Sponsored Programs Strategy

## Preserve the Fundamental Research Exemption

- Negotiate out publication/foreign person restrictions
- Modify publication/ foreign person restrictions to give sponsor review rights - not approval rights
- In Master Research Agreements, make export controls applicable on a task by task basis

# What Happens if I Accept Export Controlled Research?

- PI Obligations:
  - Accepting an export controlled project creates a potentially licensable situation for the university requiring extra security measures
  - PI is responsible for preventing any unauthorized disclosure in violation of export control laws

# What Happens if I Accept Export Controlled Research?

- Actions required for your Sponsored Project:
  - Export Control Training
  - Commodity Jurisdiction/Classification
  - Technology Control Plan

*Coordinate with DSR and General Counsel*

# Technology Control Plan (TCP)

## Required Elements

*Based on best practices, contains required elements from ITAR/EAR deemed export licenses*

- *Institutional Commitment*
- *Commodity Jurisdiction and Classification*
- *Physical Security Plan*
- *Information Security Plan*
- *Personnel Screening/ Training Policy*
- *Self-assessment*

# TCP: Commodity Jurisdiction and Classification

- **Under what law is the project restricted?**
  - Commodity Jurisdiction ITAR/EAR/OFAC
- **What exactly in the project is restricted?**
  - Technology Classification (in collaboration with Sponsor, DSR, Gen Counsel and/or Commerce/State Department)
- **Who can have access and who can't?**
  - License/ license exception determination

# TCP: Commodity Jurisdiction

## The USML and the CCL

- United States Munitions List (ITAR)
  - <http://pmdtc.org/reference.htm>
  - Part 121
- Commerce Control List (EAR)
  - [http://www.access.gpo.gov/bis/ear/ear\\_data.html](http://www.access.gpo.gov/bis/ear/ear_data.html)
  - Part 774

# TCP Commodity Jurisdiction and Classification

- Seek government/ sponsor concurrence
- Resolve intellectual property issues-
  - *If your invention becomes defined as an ITAR “defense article” , it may prevent you from using your IP in other civilian applications without a license from the Government*

# TCP: Institutional Commitment

- University-wide Technology Control Plan specifies the university's commitment to comply with export control laws
- UF's DDD dated October 8, 2004 on Export Controls provides information on Export Controls in sponsored research at the University of Florida

# TCP: Physical Security Plan

## *Suggested Measures:*

- Physically Segregated Space
- Badging
- Building/Lab/Office Access
- Visitor Logs
- Escorts

# TCP: Information Security Plan

## *Suggested Measures:*

- Server Folder Access, Firewalls, Passwords/ backup to US Persons only server or BU harddrive
- Clean Desk Policy, Central Storage, Locked Desk
- Security Marking
- Data Discard Policy
- Transfer- secure email/ mail policy

# TCP: Personnel Screening/Training

- Required Measures
  - Screen all project personnel/ visitors, subcontractors against restricted access lists *(provide names - as they appear on Passports- to DSR and we will conduct this check for you)*
  - Train all project personnel with access to export controlled items, software or technical data on security procedures, penalties for noncompliance

# TCP: Self Assessment

- PI notify DSR when there are changes to the project that may affect export control status (e.g., change or project scope, addition of new personnel)
- PI and Department responsible for annual project certification of compliance

# Managing the Export Controlled Project



***Are there any Export Control Violations  
Under My Bed?***

# What Can Trigger an Export Control Review?

- Change of Project Scope
  - Coordinate with DSR and Sponsor
- Change of project personnel/parties (e.g., subcontractors, grad students)
  - DSR can conduct the restricted parties screening for you
- Foreign Travel
  - DSR can advise you of potential restrictions

*PI must coordinate with DSR and General Counsel to ensure that an export control violation does not occur*

# What Can Trigger an Export Control Review?

- Visiting foreign scientists/others
- Shipping export controlled equipment/materials/software overseas without a license or other required approval
- Notification of a potential export control violation

*PI must coordinate with DSR and General Counsel to ensure that an export control violation does not occur*

# What If An Export Control Violation Occurs?

- Remove foreign persons/foreign nationals from access
- Secure the export control restricted commodity, software, technology, or technical data
- Contact DSR

# What if I am Contacted by an Enforcement Agency?

- Determine if the Security Officer has been notified, if not, direct the agent to the Security Officer
  - Cindy Holmes (352) 392-9330
- Contact DSR
- Cooperate with the agent

# Future Trends

- More export control restrictions
- DoD may develop ITAR contract terms that will identify ITAR-restricted research (DFAR clauses)
- Widespread China-specific restrictions for many EAR-restricted technologies
- More projects that will be considered export control restricted
- Audits by enforcement agencies

# Export Control Glossary

- **CCL** *Commerce Control List*
- **EAR** *Export Administration Regulations*  
*Department of Commerce/ dual use technologies*
- **ECCN** *Export Control Classification Number*
- **ITAR** *International Trafficking in Arms Regulations*  
*Department of State/ Military technology and defense services*
- **OFAC** *Office of Financial Assets Control*  
*Department of the Treasury/financial dealings with sanctioned/embargoed countries*
- **TCP** *Technology Control Plan*
- **USML** *United States Munitions List*