

# Export Controls Briefing for ORUBA



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# Export Basics

## Terms you should know

- Export
- Foreign Person
- Technical Data
- Technical Assistance

## Export Regulations

- ITAR
- EAR
- OFAC

## Fundamental Research Exclusion

- Limits
- Jeopardizing FRE

## Export Controlled Items & Technologies

- Civil Use
- Military or Space Applications

Who to Contact?

# What is an Export?

- Export means an actual shipment or transmission of items out of the United States. (EAR 734.2 (b))
- Examples:
  - **Physical shipment**
  - **Hand carry item** or laptop overseas
  - Email
  - Posting or pulling from a FTP site
  - Accessing a server overseas
  - File Sharing with a foreign person or colleague overseas
  - Telephone
  - Fax
  - **Visual inspection by a foreign person in the US** or abroad of controlled technology



# Do You Collaborate Internationally?

- Teaching foreign nationals about the “use” or “design” of export-controlled equipment/tools, or related technologies
- Disclosing or shipping a 3<sup>rd</sup> Party controlled proprietary info to a foreign national in the U.S. (even in your own lab) or to anyone outside the U.S. as part of a research project
  - Make sure you know whether you are receiving any “export-controlled information” or “controlled proprietary info” specified in NDAs, contracts, grants, MTAs, or purchase orders
- Providing any service or anything of value to a sanctioned country (Cuba Iran, North Korea, Syria or Sudan)
- **...then you are an exporter**



# Avoid Delays & Complications

- Transfer of certain data is export restricted
- Licensing could impact project deliverables or research timeline
- Certain imports/exports may be detained or seized by Customs
- Re-export requirements may be in place



# Export Control Areas

- **Life Sciences** (biotech and biomed engineering) and Chemicals (including medical center and health sciences research )
- **Nanotechnology** and materials technologies – ex. composites and ceramics (ex., various nanotech and sensor programs)
- **Advanced computing, microelectronics and telecommunications**
- Information security and encryption
- Applied physics – ex. lasers and directed energy systems
- **Sensors, sensor technology, imaging**
- Advanced avionics and navigation (DOC), and Space-related technologies and prototypes (ITAR exclusive jurisdiction)
- **Marine technologies**
- Sophisticated machine tool technologies and bearings
- Robotics
- **Items or technology specially developed for the military**

# Export Control Hurdles

- **Classification**
  - What is it?
  - Are there country restrictions?
- **Access Controls with IT/Engineering systems**
  - Certain Foreign nationals within may require additional reviews/controls
- **Collaboration with other parties**
  - Who, What, Where?
- **Shipments (export/import) Who, What, Where?**



# US Export Control Regulations



- **Export Administration Regulations (EAR)**

- “Dual use” items are controlled by the Export Administration Regulations (EAR – 19 CFR 730-774) administered by The Department of Commerce, Bureau of Industry and Security (BIS) administers the EAR



- **International Traffic in Arms Regulations (ITAR)**

- Munitions and defense services are controlled under the International Traffic in Arms Regulations (ITAR) are administered by the Department of State



- **Office of Foreign Asset Control (OFAC)**

- Treasury’s Office of Foreign Assets Controls (OFAC) administers economic and trade sanctions
- Research in or collaborations with any of the following countries, require review from Export Control: **Cuba, Iran, North Korea, Sudan, Syria**

- AND OTHERS...



# What is a Deemed Export (EAR)?

Any release of technology or source code subject to the EAR to a foreign national. Such release is deemed to be an export to the home country or countries of the foreign national.



# What is a Foreign Person?

## Foreign Person

- Any person not a U.S. citizen or legal permanent resident (green card holder)
- Any person not granted political asylum
- Any U.S. Person employed or representing a foreign entity

## Foreign Entity

- Any partnership or group not incorporated or organized to do business in the U.S.
- Any foreign government

# I-129 Export Certification

- Required as part of the visa process for H1-B or O-1 visa types
- Must indicate if an export license is required for the foreign national
  - Access to ITAR equipment
  - Access to export restricted data

# What is Technology and Technical Data?

## **Technology (EAR):**

- Specific information necessary for the "development", "production", or "use" of a product. (See part 772 of the EAR)

## **Technical Data (ITAR):**

- Information, other than software as defined in §120.10(a)(4), which is 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 or documentation. (See part 120.10 of the ITAR)

# Technical Assistance . . . “Know-how” . . . Defense Service . . Training

- **Technical Assistance (defense service)** means the **furnishing of assistance** (including training) to Foreign Persons . . . in the United States (deemed export) . . . or abroad (technology transfer)
  - . . . about the design, development, engineering, manufacture, production, assembly, testing, repair, maintenance, modification, operation, demilitarization, destruction, processing, or use of an export controlled item -- whether EAR or ITAR controlled.



# UCSD Foreign National Data

- 1712 Foreign National Faculty Staff & Visitors (on visas)
  - 94% (1603) are in the engineering & sciences
- 2,591 Foreign Students
- 2375 International Scholars

**6678: Total foreign nationals on campus**

# Export Controls for UCSD Activities

Typical scenarios at the UCSD that can involve export controls include:

- Research with pathogenic/toxic materials
- Satellite and space-related research
- Research with military designed equipment (ITAR)
- Shipment of samples and equipment for overseas projects
- Proprietary industry-sponsored research
- Foreign travel

# Risk Areas at UCSD

- SIO, Engineering, Health Sciences
- Physical security need improvement
- No centralized int'l shipping
  - Dangerous goods /freight
  - Mail services- desktop shipping
  - Animals infected with export restricted biological items
- Visiting Scholars



# DD2345 Military Critical Technical Data Form

- Required to participate in ITAR export restricted conferences
- UCSD does not sign on these
- Researchers must sign on their own behalf

# Gifts or Loans of Equipment

- Bomb detecting robot
- Sonobuoys from the military (scrap)
- Use of UCSD equipment by 3<sup>rd</sup> parties
- Involve export control for reviews/questions

# UCSD Initial Review of Export Restricted Biological Items

- Export Restricted Items
  - Bacillus Anthracis
  - Brucella Abortus
  - Dengue
  - Escherichia Coli (pathogenic)
  - H1N1
  - Lymphocytic Choriomeningitis Virus
  - Salmonella Typhi
  - Shigella Dysenteriae
  - Staphylococcus Aureus
  - Vibrio Cholerae
- 32 PIs working with restricted items
- Departments
  - Biological Sciences
  - Cell & Molecular Medicine Program
  - Chemistry & Biochemistry
  - Marine Biology
  - Medicine
  - Office of Grad Studies
  - Pathology
  - Pharmacology
  - SIO Ctr For Marine Biotech & Biomed

# Fed Ex 2012 UCSD data

Direction	Net charges	Total Weight (lbs)	Shipments	Pieces
Exports	\$289,463	35,507	6235	6484
Imports	\$84,629	8,538	767	814
Non-US	\$4,226	830	13	18
Total	\$378,319	44,875	7015	7316

# Potential Export Control Research Issues

- Nature of the research:
  - Involves anything space-related, including satellite instruments and rocket propulsion and navigation systems
  - Research has specific military or national security applications (SIO, Engineering)
  - Has any relation to nuclear, chemical, or biological warfare (including detection equipment and countermeasures)
  - Involves access to advanced prototypes or advanced proprietary equipment

# Potential Issues-Based on Location

- Location of research or travel:
  - Research involving travel to, shipments to, or collaboration with researchers in embargoed countries (Cuba, Iran, North Korea, Syria, Sudan)
  - Overseas projects involving the training of foreign governments & entities with respect to advanced technology (business contracts or recharge centers)
  - Overseas projects involving the shipment of advanced equipment

# What is not export controlled?

- Information in the **public domain**.
- Information excluded under the Fundamental Research Exclusion (**FRE**)
- Basic marketing and general system descriptions

# Publicly Available Exclusion

- Allows deemed exports or exports without controls for info ordinarily published (EAR) and that is generally accessible to the public in any form, e.g.,
  - libraries open to public; unrestricted subscriptions; published patents
  - generally accessible free websites
  - published patents & open patent applications
  - Conferences or seminars in the United States accessible to public for a reasonable fee – or also abroad if technology covered by EAR
  - Note: closed conferences do not qualify under either EAR or ITAR
- Preconditions
  - No equipment or encrypted software involved
  - No reason to believe information will be used for WMD
  - U.S. government or funding entity has not imposed any access & dissemination controls as a funding condition



# Fundamental Research Exemption (FRE)

- The Fundamental Research exclusion (FRE) exempts most on-campus university research from export control licensing requirements
- Covers: (1) information (not items); (2) resulting from “basic & applied research in science & engineering; (3) at an “accredited institution of higher education” (EAR); (4) “located in the United States” ; (5) that is “ordinarily published & shared broadly within the scientific community”
- **Caveats:**
  - **Does not apply to sponsor’s or 3<sup>rd</sup> party export-controlled or proprietary information**
  - FRE does NOT apply outside the United States
  - Applies only to FR information – not to physical items or services such as training; Also, does not apply to development information

# Limits of the FRE

Fundamental  
Research does **NOT**  
cover --

**Exports** of Hardware,  
Software, Technology

**Dealings** with  
Restricted Parties or  
Entities

Export Controlled  
**activities** – “defense  
services”

**Other Transactions**  
Involving Embargoed  
or Sanctioned  
Parties/Countries

# You May Need an Export License If...

- Research involves commercial or research equipment, components & applications involving foreign national restrictions
  - **Licensing Agreements or Confidentiality Agreements, NDAs**
  - Material Transfer Agreement terms
- Making vendor payments to entities/persons on a restricted list
- Working with any item or technology that:
  - **Was designed or modified for military or defense uses (ITAR) or has dual use export controls (EAR)**
  - Involves satellites or launch systems
  - Provides a “defense service”, or
  - Relates to the design, development, production or use of weapons of mass destruction (nuclear, chemical, biological, missiles)
- Developing proprietary or non-public software involving controlled-technology or encryption technology

# You May Need an Export License:

Exporting controlled UCSD or 3<sup>rd</sup> party h/w, s/w or technology?

• → Yes

No Exemption or Exclusion applies?

• → Yes

“See through rule” applies? (ITAR)

• → Yes

Foreign Collaboration? Outside FRE?

• → Yes

Denied Party or Sanctioned Country involved?

• → Yes

**STOP!**

• License May be Required!

# Licensing Timeframes, Plan Ahead

- Accommodate export licensing into your research timetable (6 weeks to 3 months for Gov't approval)
  - BEFORE any controlled item/technology can be exported abroad or with a foreign national (even if in your own lab)
  - BEFORE the transfer of information required to develop research proposals
  - BEFORE undertaking the international collaboration or activity

# Good News- UCSD Export Resource

- Determine whether the activity is subject to U.S. jurisdiction
- Classify the technology or goods involved (i.e., subject to ITAR controls, EAR controls, or other controls)
- Determine whether any embargoes apply or whether any prohibited parties or destinations are involved
- Determine if a license is needed for the particular technology and particular end-use and end-user
- Determine whether any license exemptions or exceptions are available (e.g., public domain, fundamental research, etc.)
- If a license is required, apply promptly. Keep records

# Partners in Export Controls



# How to Stay Out of Trouble

- Acceptance of Export Controlled information – Know your responsibility:
  - Safeguard data in locked cabinet
  - Cannot publish without export authority or removal
  - Understand the conditions and restrictions of export licenses, agreements
- Travel Abroad faculty briefings are available
- Exports of export controlled hardware, technology or software require export compliance review
  - Some exports may require an export license.
- No Side-deals
  - Make sure all agreed upon terms are included in the agreement.
- Understand the terms of the agreement:
  - Did you just agree to export an instrument to China that requires a license?  
Did you allocate enough \$\$ for the duties and fees?
- Export Recordkeeping Requirements – keep for at least 5 years from date of export or expiration of the license whichever occurs last.



# Consequences of Non-Compliance



- Imprisonment to employees/officers that export goods with knowledge of or reason to believe that a violation will occur
- Puts federal funding at risk – for UCSD and for the PI
- Denial of export privileges, can destroy int'l activities and collaborations
- Placement on the denied parties list
- Negative publicity

## State Department (ITAR)

- Criminal: up to \$1,000,000 per violation, up to 10 years imprisonment
- Civil: seizure & forfeiture of the articles and any vessel, aircraft or vehicle involved in attempted violation, revocation of exporting privileges, fines of up to \$500,000 per violation

## Commerce Department (EAR)

- Criminal: \$50,000 to \$1,000,000 or up to 5 X the value of the export, whichever is greater per violation (range depends on the applicable law), up to 20 years imprisonment
- Civil: loss of export privileges, fines up to \$250,000 per violation or up to twice the value of the export

## Treasury Department (OFAC)

- Criminal: up to \$1,000,000 per violation, up to 10 years imprisonment
- Civil: \$55,000 to \$250,000 fines (depending on applicable law) per violation

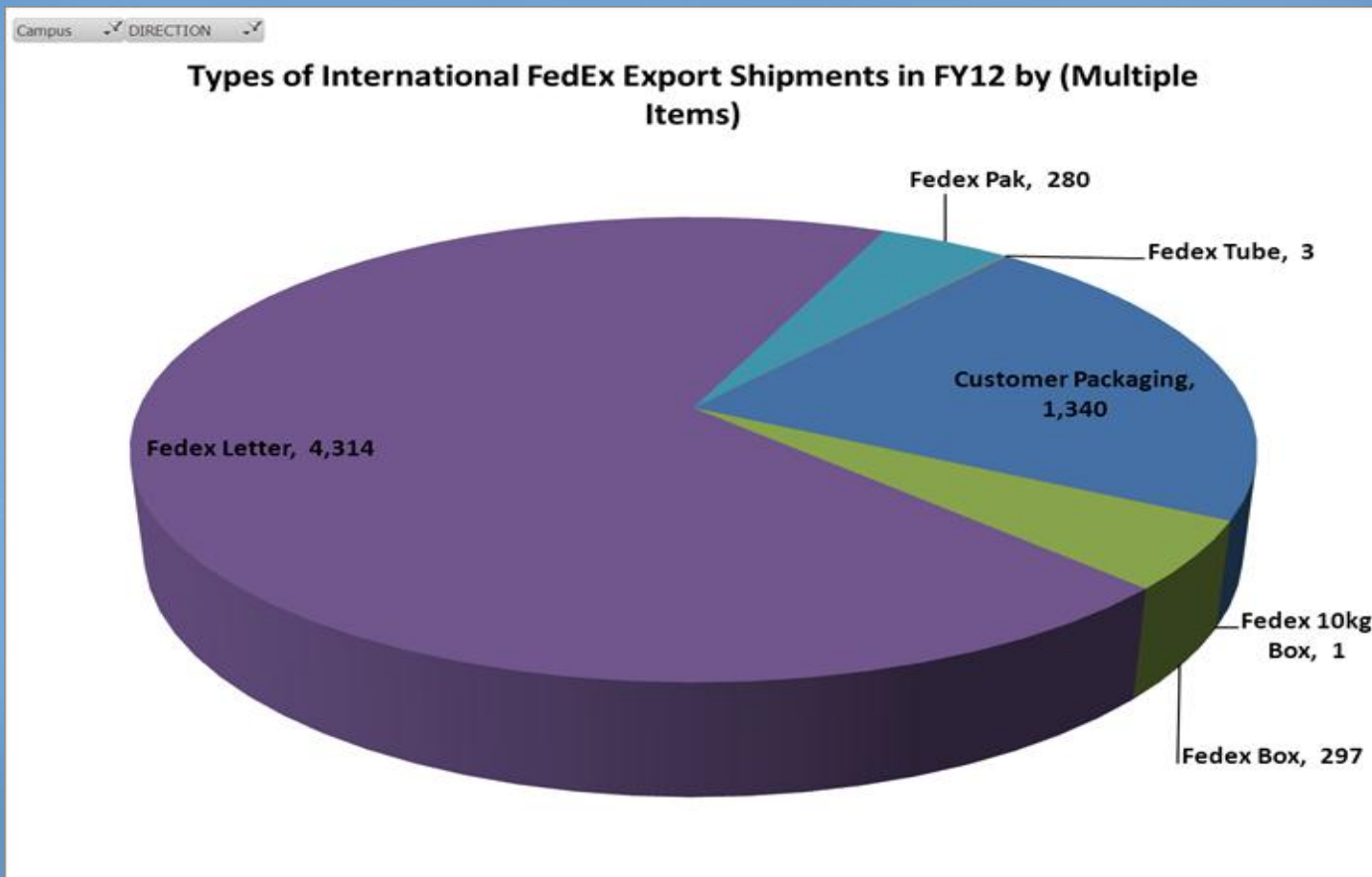
# University Export Fine Example

- University of Massachusetts at Lowell ("UML") through its Center for Atmospheric Research
- was penalized \$100,000
- For export of atmospheric testing device & related antennae & cables (EAR99) to a Listed Entity in Pakistan, Pakistan Space & Upper Atmosphere Research Commission ("SUPARCO"), without the required license.

# QUESTIONS

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New website <http://export.ucsd.edu>

# Types of Fed Ex Packages 2012



# Fed Ex Detail

DIRECTION	TRANSPORTATION	DISCOUNT	SURCHARGE	DUTY TAX	NET CHARGES	WEIGHT
Export	\$592,906.94	(\$371,494.10)	\$39,814.90	\$28,236.14	\$289,463.88	35,507
Import	\$129,763.27	(\$61,118.91)	\$11,507.36	\$4,478.00	\$84,629.72	8,538
Non-US	\$5,784.45	(\$2,344.67)	\$786.58	\$0.00	\$4,226.36	830
	\$728,454.66	(\$434,957.68)	\$52,108.84	\$32,714.14	\$378,319.96	44,875

## UCSD:

DIRECTION	TRANSPORTATION	DISCOUNT	SURCHARGE	DUTY TAX	NET CHARGES	WEIGHT
Export	\$565,300.09	(\$353,967.65)	\$38,058.14	\$26,735.56	\$276,126.14	34,440
Import	\$118,368.48	(\$55,819.23)	\$10,544.73	\$4,403.00	\$77,496.98	7,999
Non-US	\$5,784.45	(\$2,344.67)	\$786.58	\$0.00	\$4,226.36	830
	\$689,453.02	(\$412,131.55)	\$49,389.45	\$31,138.56	\$357,849.48	43,269

## UCSD Medical Inbound:

DIRECTION	TRANSPORTATION	DISCOUNT	SURCHARGE	DUTY TAX	NET CHARGES	WEIGHT
Export	\$27,606.85	(\$17,526.45)	\$1,756.76	\$1,500.58	\$13,337.74	1,067
Import	\$11,394.79	(\$5,299.68)	\$962.63	\$75.00	\$7,132.74	539
	\$39,001.64	(\$22,826.13)	\$2,719.39	\$1,575.58	\$20,470.48	1,606