Export Controls at UH

- **2008:**
  - Executive Policy E5.218 was promulgated; OTTED once handled export controls.

- **2011:**
  - OEC was established by the former Vice President for Research, Dr. James Gaines

- **2013:**
  - OEC was fully staffed with 3 full-time personnel; now under VP for Research and Innovation, Dr. Vassilis Syrmos

- **2014:**
  - OEC website was re-launched
    - [http://www.hawaii.edu/offices/export/](http://www.hawaii.edu/offices/export/)
Background

- Worked in the technology industry, doing export and import regulation compliance from 1996 to 2007.


- Joined the UH Office of Export Controls in 2013.

- Accredited export compliance professional in ITAR and EAR.
What We’ll be Covering

I) Defining Export Controls
II) Why Export Controls Apply to You
III) How to Identify Export Controls Scenarios
IV) What to Avoid
V) Consequences
VI) UH Resources and Export Control Policy Developments
Defining Export Controls
I) Defining Export Controls

Three Primary Sets of Relevant Regulations:

<table>
<thead>
<tr>
<th>US Dept. of Commerce</th>
<th>US Dept. of State</th>
<th>US Dept. of Treasury</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bureau of Industry and Security (BIS)</td>
<td>Directorate of Defense Trade Controls (DDTC)</td>
<td>Office of Foreign Assets Controls (OFAC)</td>
</tr>
<tr>
<td>Commerce Control List (CCL), Parties of Concern</td>
<td>U.S. Munitions List (USML), Debarred Parties</td>
<td>Country Sanctions Programs and Specially Designated Nationals</td>
</tr>
</tbody>
</table>
“Export Controls” are United States (US) laws and regulations which control conditions under which certain strategically important information, technologies, and commodities (i.e., goods, items, equipment, etc., all of which are specifically identified in U.S. Laws and Regulations) [collectively referred to as “Export–Controlled Information”], can be transferred:

1) overseas (outside of the US) to anyone (foreigners and US citizens); or

2) to a foreign national inside of the US.
I) Defining Export Controls

IMPORTANT:

**Export Controls apply to **ALL** activities, not just sponsored research!

**Includes RCUH activities as well.
The bottom line...

Export controls are complicated! The regulations contain a whole lot of “moving parts” that require detailed analysis on a case-by-case basis.
Why Export Controls Apply to You
Principal Investigators ultimately have responsibility for the identification of export control scenarios and putting protection measures in place to prevent violations...

however, export control compliance is everyone’s responsibility.
How to Identify Export Controls Scenarios
How do I know if I have something that is export controlled?

Step 1: Check ITAR’s US Munitions List (USML)
III) How to Identify Export Controls Scenarios

Index of the USML

http://www.ecfr.gov/cgi-bin/text-idx?SID=86008bdfffd1fb2e79cc5df41a180750a&node=22:1.0.1.13.58&rgn=div5

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
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<tbody>
<tr>
<td>Category I</td>
<td>Firearms, Close Assault Weapons, and Combat Shotguns</td>
</tr>
<tr>
<td>Category II</td>
<td>Guns and Armament</td>
</tr>
<tr>
<td>Category III</td>
<td>Ammunition/Ordnance</td>
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<tr>
<td>Category IV</td>
<td>Launch Vehicles, Guided Missiles, Ballistic Missiles, Rockets, Torpedoes, Bombs, and Mines</td>
</tr>
<tr>
<td>Category V</td>
<td>Explosives and Energetic Materials, Propellants, Incendiary Agents, and Their Constituents</td>
</tr>
<tr>
<td>Category VI</td>
<td>Surface Vessels of War and Special Naval Equipment</td>
</tr>
<tr>
<td>Category VII</td>
<td>Ground Vehicles</td>
</tr>
<tr>
<td>Category VIII</td>
<td>Aircraft and Related Articles</td>
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<tr>
<td>Category IX</td>
<td>Military Training Equipment</td>
</tr>
<tr>
<td>Category X</td>
<td>Personal Protective Equipment</td>
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<tr>
<td>Category XI</td>
<td>Military Electronics</td>
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<tr>
<td>Category XII</td>
<td>Fire Control, Range Finder, Optical, and Guidance, and Control Equipment</td>
</tr>
<tr>
<td>Category XIII</td>
<td>Materials and Miscellaneous Articles</td>
</tr>
<tr>
<td>Category XIV</td>
<td>Toxictological Agents, Including Chemical Agents, Biological Agents, and Associated Equipment</td>
</tr>
<tr>
<td>Category XV</td>
<td>Spacecraft Systems and Associated Equipment</td>
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<tr>
<td>Category XVI</td>
<td>Nuclear Weapons Related Articles</td>
</tr>
<tr>
<td>Category XVIII</td>
<td>Directed Energy Weapons</td>
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<tr>
<td>Category XIX</td>
<td>Gas Turbine Engines and Associated Equipment</td>
</tr>
<tr>
<td>Category XX</td>
<td>Submersible Vessels and Related Articles</td>
</tr>
<tr>
<td>Category XXI</td>
<td>Articles, Technical Data, and Defense Services Not Otherwise Enumerated</td>
</tr>
</tbody>
</table>

Note: Current as of the date of this presentation. This list changes frequently.
*(c) Infrared focal plane array detectors specifically designed, modified, or configured for military use; image intensification and other night sighting equipment or systems specifically designed, modified or configured for military use; second generation and above military image intensification tubes (defined below) specifically designed, developed, modified, or configured for military use, and infrared, visible and ultraviolet devices specifically designed, developed, modified, or configured for military application. Military second and third generation image intensification tubes and military infrared focal plane arrays identified in this subparagraph are licensed by the Department of Commerce (ECCN 6A002A and 6A003A)) when part of a commercial system (i.e., those systems originally designed for commercial use). This does not include any military system comprised of non–military specification components. Replacement tubes or focal plane arrays identified in this paragraph being exported for commercial systems are subject to the controls of the ITAR.

(e) Components, parts, accessories, attachments and associated equipment specifically designed or modified for the articles in paragraphs (a) through (d) of this category, except for such items as are in normal commercial use.

(f) Technical data (as defined in §120.10) and defense services (as defined in §120.9) directly related to the defense articles enumerated in paragraphs (a) through (e) of this category. (See §125.4 for exemptions.) Technical data directly related to manufacture and production of any defense articles enumerated elsewhere in this category that are designated as Significant Military Equipment (SME) shall itself be designated as SME.
How do I know if I have something that is export controlled?

Step 2: Check EAR’s Commerce Control List (CCL)
### Index of the CCL

http://www.bis.doc.gov/index.php/regulations/commerce-control-list-ccl

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category 0</td>
<td>Nuclear Materials, Facilities, and Equipment</td>
</tr>
<tr>
<td>Category 1</td>
<td>Materials, Chemicals, Microorganisms, and Toxins</td>
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<tr>
<td>Category 2</td>
<td>Materials Processing</td>
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<tr>
<td>Category 3</td>
<td>Electronics Design, Development, and Production</td>
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<td>Category 4</td>
<td>Computers</td>
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<td>Category 5</td>
<td>Telecommunications, Information Security</td>
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<tr>
<td>Category 6</td>
<td>Sensors and Lasers</td>
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<tr>
<td>Category 7</td>
<td>Navigation and Avionics</td>
</tr>
<tr>
<td>Category 8</td>
<td>Marine</td>
</tr>
<tr>
<td>Category 9</td>
<td>Aerospace and Propulsion</td>
</tr>
</tbody>
</table>

Note: Current as of the date of this presentation. This list changes frequently.
## Examples

<table>
<thead>
<tr>
<th>CCL Category</th>
<th>ECCNs</th>
<th>Descriptions</th>
</tr>
</thead>
</table>
| 6: Lasers and Sensors | 6A002  | Optical sensors and equipment, and "components" therefor
Solid State Detectors, Focal Plane Arrays, CCDs, Cryocoolers, Optical sensing fibers, etc.* |
| 6: Lasers and Sensors | 6A003  | Cameras, systems or equipment, and "components" therefor
Instrumentation and Imaging Cameras, etc.* |
| 6: Lasers and Sensors | 6A004  | Optical equipment and "components"
Mirrors, Optical Control Equipment, etc.* |
| 6: Lasers and Sensors | 6A992  | Optical Sensors, not controlled by 6A002.
Imaging equipment operating in the visible or infrared spectrum, incorporating image intensifier tubes, etc.* |

Note: Software and Technology associated with the above listed items may also be controlled under 6DXXX and 6EXXX ECCNs.

* Lists on this slide are not exhaustive.
How do I know if I have something that is export controlled?

Step 3: If it’s not a commodity or technology enumerated on the USML or CCL, it is designated with an ECCN called “EAR99”
What do I do if I have something that is export controlled?

Important:

**Execute a Project-Specific Technology Control Plan (PSTCP) that describes what protection measures you and your research personnel will take to comply with export controls. Contact OEC for guidance.**
III) How to Identify Export Controls Scenarios

What do I do if I have something that is export controlled?

✔ If practical, restrict use to US citizens and US green card holders (i.e., permanent residents) only.

✔ If an export/deemed export must take place, contact OEC to find out if a government license is required.
  ◦ Not all EAR exports to all international destinations will require a license, however all ITAR exports will!
  ◦ If a license is required, work with OEC to complete a license application.
III) How to Identify Export Controls Scenarios

Do any of these apply to you?
Most likely, yes, they do!
III) How to Identify Export Controls Scenarios

Key Definitions:

A) Export
B) Technical Data & Technology
C) Deemed Export
D) Foreign National
Key Definition:

A) Export:
Transfer of controlled technology, information, equipment, software, or the provision of services to a foreign person in the U.S. or abroad by any means.
Key Definition:

B) **Technical Data & Technology**

Technical information beyond basic marketing materials or general system descriptions about a controlled commodity. The terms do not refer to the controlled equipment or commodity itself, or to the type of information contained in publicly available user manuals.

Rather, the terms technology and technical data mean specific information necessary for the development, production, manufacture, assembly, operation, repair, testing, maintenance, modification or use of a commodity.
III) How to Identify Export Controls Scenarios

Key Definition:

**B) Technical Data & Technology**

This information usually takes the form of blueprints, drawings, photographs, plans, diagrams, models, formulae, tables, engineering specifications, and documentation. Additionally, the deemed export rules apply to the transfer of such technical information to foreign nationals inside the US.
Key Definition:

C) **Deemed Export:**

The release of technology or technical data about controlled commodities or software to a foreign national in the US is known as a *deemed export*, since a transfer of technology or technical data to the foreign person is deemed to be an export to the home country of the foreign national.
Key Definition:

D) **Foreign National:**
Someone who is not a US citizen, green card holder (i.e., permanent resident), or political asylee/refugee.
III) How to Identify Export Controls Scenarios

Proper Management of an Export Control Scenario

1. Classify commodities or technology
2. Identify licensing requirement
3. Apply for license (2–6 mos.)
4. Execute a PSTCP
5. Read license provisions
6. Obtain license (good 2–4 yrs.)
7. Keep records
8. Communicate potential changes
9. Closeout the license before expiry

Read license provisos
A Few Special Considerations:

A) Encryption Technology
B) Services
D) Hand carrying
E) Unsolicited Requests
F) Visitors
A Few Special Considerations:

A) **Encryption Technology:**

Encryption software and source code is controlled both by ITAR and EAR. Strong encryption frequently requires licenses to export and is special export exemptions (e.g. fundamental research) are not available for encryption.
A Few Special Considerations:

B) **Services:**

The furnishing of assistance (including training) to foreign persons, whether in the US or abroad in the design, development, engineering, manufacture, production, assembly, testing, repair, maintenance, modification, operation, demilitarization, destruction, processing or use of defense articles; or the furnishing to foreign persons of any technical data, whether in the US or abroad.
A Few Special Considerations:

C) Hand carrying:

**Tips**–

1) Avoid it. Shipping is much wiser.
2) If you must, hand carry only what you need. Scrub your laptop, smart phone, and other devices of things you don’t need to take.
3) Prepare an international “No Cost” invoice before you go. See template on our website, under Forms.
4) If you need to take EAR controlled items, contact OEC regarding using a “TMP” exemption.
5) Obey all US and foreign export and customs requirements. Make necessary declarations.
D) Unsolicited Requests

Principal Investigators who hold a US security clearance must contact OEC if they receive unsolicited contact or requests from individuals they do not know.

Unsolicited requests are a serious red flag.
E) Visitors

If you have ITAR/EAR items in your facility, OEC can conduct a screening of visitors for you. It’s recommended that you have them sign a Visitor Export Controls Agreement.

If you having visiting scholars/faculty, we have a Visiting Scholar/Faculty Export Compliance agreement.
Examples of Export Controls Scenarios – #1

UH Professor

UC Professor (citizen of Iran)

Camera manufacturer in Belgium

UH Grad Student (citizen of Brazil)

Emails new design for infrared camera (ITAR)
Examples of Export Controls Scenarios – #2

UH Professor

Travels with laptop containing design for infrared camera (ITAR)

Camera manufacturer in Belgium
Examples of Export Controls Scenarios – #3

Meeting to discuss development of optical instrumentation (EAR)

UH Professor → Subaru Telescope, Big Island
Examples of Export Controls Scenarios – #4

UH Professor

Professor at a Chinese University

Wants to discard old sensors; gives them to colleague during visit in US (EAR)
Examples of Export Controls Scenarios – #5

International collaboration with university in China. Visiting scholars from China will work at UH in laboratories doing research with ITAR materials.

UH Professor

Visiting Professor from China

Provides a key to the lab door
Exclusions and Exemptions in Export Control Regulations:

A) Fundamental Research
B) Educational Information
C) Public Domain
D) Bona Fide Full-Time University Employee

Must read the fine print, and confirm with OEC before using.
Exclusions and Exemptions:

A) **Fundamental Research:**

The US export control regulations (15 CFR § 734.8(a) and (b), and 22 CFR § 120.11) provide for a Fundamental Research Exclusion (FRE) from the licensing requirements for information arising during or resulting from fundamental research conducted at an accredited institution of higher learning located in the US. If research or other activity controlled for export is eligible for the FRE, foreign nationals located in the US may participate in the research.

It is important to note that even though the research results ("output data") may be eligible for the FRE and accessible to foreign nationals; information received from the sponsor ("input data") may still be restricted to US persons only, depending on its export classification.

**TIP:** Include a statement that the SOW is fundamental research in your proposal.
Exclusions and Exemptions:

A) Fundamental Research:

In general, the FRE is destroyed if UH accepts any contract clause that:

- forbids the participation of foreign nationals
- gives the sponsor the right to approve publications resulting from the research; or
- otherwise operates to restrict participation in research and/or access to and disclosure of research results

“Side deals” between a principal investigator (PI) and sponsor to comply with such requirements, even though it may not be stated in the research contract, may also destroy the FRE and expose both the PI and the UH to penalties for export control violations. Such side deals may also violate other UH policies.

Under EAR, the FRE is not available for certain types of encryption, as detailed in 15 CFR § 734.8(a).
Exclusions and Exemptions:

B) Educational Information:

The ITAR exempts from export controls information concerning general scientific, mathematical, or engineering principles commonly taught in schools, colleges and universities, per 22 CFR § 120.11(a)(5).

The EAR also contains an exemption from export controls, per 15 CFR § 734.9, for information that is “educational”–i.e., information released by instruction in catalog–listed courses at the university, including through lectures, instruction in teaching laboratories, and inclusion in course materials. The EAR’s “educational information” exemption also extends to software, with the exception of certain encryption software.
Exclusions and Exemptions:

C) Public Domain:

This exemption represents the broadest exclusion under the EAR and ITAR. Specifically, it allows both deemed exports as well as exports from the US of information and software that is already published, with the exception of certain encryption software.
Exclusions and Exemptions:

C) Public Domain:

While the EAR and the ITAR define “publish” somewhat differently, essentially under both regulatory regimes information becomes published when it is generally accessible to the interested public in any form such as:

- readily available at libraries open to the public or at university libraries;
- in patents and published patent applications available at any patent office;
- released at an open conference, meeting, seminar, trade show, other open gathering; or
- published in periodicals, books, print, electronic, or other media available for general distribution (including websites that provide free uncontrolled access) or for distribution to a community of persons interested in the subject matter, such as those in a scientific or engineering discipline, either free or at a price that does not exceed the cost of reproduction and distribution.
Exclusions and Exemptions:

D) Bona Fide Full-Time University Employee:

The US export regulations (22 CFR § 125.4(b)(10)(i–iii) and 15 CFR § 140.13(f), for releases of ITAR–controlled technical data or EAR–controlled technology or source code to bona fide full-time regular employees of UH.
Exclusions and Exemptions:

D) Bona Fide Full–Time University Employee:

Under this exemption, UH is authorized to release technical data, technology or source code to foreign nationals who are employees of the university within the United States, provided that:

- the employees’ permanent abode is in the US throughout the period of employment;
- the employees are full–time, regular employees of the UH (including RCUH);
- the employees are not nationals of a sanctioned country; and
- UH complies with certain additional legal requirements set forth in the ITAR/EAR; and
- the transfer does not involve encryption or source code controlled by EAR for Missile Technology reasons.
Exclusions and Exemptions:

D) Bona Fide Full–Time University Employee:

Important Notes:

- It is important to note that this exclusion/exemption generally is not available to graduate and undergraduate students. Also, this exclusion does not authorize exports of items, software, or technical data outside the US.
- OEC must be contacted when this exemption is utilized so the necessary documentation may be completed.
Exclusions and Exemptions

One final thought...

When in doubt, don’t rely on an exclusion or exemption.

Contact the OEC to apply for a license.
III) How to Identify Export Controls Scenarios

Other key requirements:

A) Denied Parties
B) Sanctioned Countries
C) Anti-Boycott Regulations
Other key requirements:

A) Denied parties:

Multiple federal lists of individuals and entities that we’re prohibited to export to. Note: lists include US persons and entities as well.
Other key requirements:

**A) Denied parties:**

<table>
<thead>
<tr>
<th>U.S. Agencies</th>
<th>Denied Parties Lists</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commerce Dept.</td>
<td>Denied Persons List, Entity List, Unverified Lists</td>
</tr>
<tr>
<td>State Dept.</td>
<td>Debarred Parties List</td>
</tr>
<tr>
<td>Treasury Dept.</td>
<td>Specially Designated Nationals List, Nonproliferation Sanctions List</td>
</tr>
</tbody>
</table>

OEC can conduct a screening of all of the federal lists for you. Please contact us.
Other key requirements:

B) Sanctioned countries*

Cuba
Iran
North Korea
Sudan
Syria

* This list is current as of the date of this presentation, but may change from time-to-time depending on global politics.
Other key requirements:

B) Sanctioned countries:

Special concerns for dealing with the sanctioned countries

- Travel
- Theses & Dissertations
- Shipments
- Financial transactions (e.g. scholarships)
- Communication
- Services (e.g. massive online courses)
Other Key Requirements:

C) **Anti-Boycott Regulations:**

Anti-boycott provisions of EAR prohibit any US person or entity from participating in any non-US sanctioned foreign boycott.

Regulations require that we report instances where we’ve been asked to participate in a foreign boycott.
Other Key Requirements:

C) Anti–Boycott Regulations:

Examples of the types of restrictive trade practices that are considered “participation” in a boycott include being asked to:

- refuse to engage in a business transaction with the boycotted country;
- agree to not use certain “black–listed” suppliers; or
- certify that an item or shipment contains no items from a boycotted country.
What to Avoid

BAD DECISIONS MAKE GREAT STORIES
Lessons We’ve Learned
Please...Don’t Let This Happen to You!

Dr. Thomas Butler, Texas Tech.

Dr. John Reece Roth, Univ. of Tennessee
http://www.businessweek.com/articles/2012-11-01/why-the-professor-went-to-prison
IV) What To Avoid

Iowa State University Graduate Student Accused of Trying to Sell Military Secrets to China


Hawaii, a Hotbed for Espionage

Foreign Service Officer Unknowingly Exports Defense Articles

US Company pays fines for deemed exports, disclosing tech. data to their Chinese subsidiary and a Russian national employee in the US
http://www.hawaii.edu/offices/export/bis-deemed-export-violation-settlement.pdf
Consequences
V) Consequences

What are the Consequences?

Failure to comply with export control laws and regulations may lead to significant civil and/or criminal penalties including, but not limited to, monetary penalties up to $1,000,000.00 per violation; prison term up to 20 years; denial of export privileges; and debarment from U.S. government contracts.

Liability for any export violation is personal and/or institutional.
UH Resources

Have questions? Need help?
No problem. We're here for you.
If You Need Help:

- OEC provides training, advice, classification assistance, prepares and submits license applications to Federal agencies, conducts assessments, and administers UH export controls policies and procedures

- UH Executive Policy E5.218: Compliance with Export Control Laws and Regulations
VI) UH Resources

Questions? Concerns? Please contact OEC.

Lauren Murai  Export Control Assistant  lmurai@hawaii.edu  808-956-9036

Jennifer Halaszyn  Export Control Officer  jhalaszy@hawaii.edu  808-956-2495

Leonard R. Gouveia, Jr.  Director, Office of Export Controls  lgouveia@hawaii.edu  808-956-4740

Location: UH Mānoa, Sinclair Library, Room 10
VI) UH Resources

Don’t forget to check out our website!
http://www.hawaii.edu/offices/export/

• Export Control Program Guidelines
• Links to important federal websites, including USML and CCL
• Export controls decision tool
• Details on exemptions and exclusions
• Forms: recommended international shipping invoice, PSTCP, Bona Fide Full-Time Employee Certification Form, Visitor Screening Form, Visitor Agreement, etc.
Questions?