

Compliance with Export Controls and Technology Control Plans

SAO
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Export Compliance Officer

Agenda

- ▶ Why Compliance Matters – Risks and Responsibilities
- ▶ Export Controls are Complex
 - Understanding the Regimes and Agencies we must comply with
- ▶ What processes we are putting in place at SI to comply
 - Identifying export controlled activities
 - Obtain licenses
 - Technology Control Plan

Export Control Regulations

- ▶ Have been around since the end of WWII
- ▶ The Deemed Export rule has affected research institutes since the late 1990s
- ▶ We must be educated as an institution about the rules, export compliance program recommendations and how to apply them

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There Are Many US Export Rules We Need to Comply with

- ▶ TECHNOLOGY CONTROLS on hardware, software and technical data
- ▶ DENIED PARTIES- We may not deal with listed terrorists, nationals of embargoed countries, or entities involved in Weapons of Mass Destruction (WMD)
- ▶ COUNTRY EMBARGOES
- ▶ REFUSAL TO PARTICIPATE in Arab League Boycott of Israel
- ▶ CUSTOMS - valuation, classification, taxes

SI's Compliance Program Prevents Export Violations

A violation can result in

- ▶ Fines
 - (\$10,000 to \$1,000,000) or 2 x the value of the exported item
- ▶ Jail terms
 - 10 years
- ▶ Debarment
 - 3 to 20 years
- ▶ Loss of government contracts
 - rescinding of all export licenses
- ▶ Negative publicity
 - on government websites and in the press
- ▶ Administrative actions and penalties can be imposed on management or the individual



Examples

- ▶ In 2013, University of Massachusetts Lowell was fined \$100,000 for exporting to a party on the Entity List in 2007.
- ▶ On July 1, 2009, Dr. Roth, a Professor Emeritus at the University of Tennessee, was sentenced to 48 months in prison and two years of supervised release. He engaged in a conspiracy to transmit export controlled technical data to foreign nationals from the People's Republic of China and Iran.

Database is Shut Down by NASA for a Review

NY Times March 22 2013

WASHINGTON — NASA has shut down a large public database and is limiting access to agency facilities by foreign citizens as part of a broader investigation into efforts by China and other countries to get information about important technology.

Export Compliance Program

- ▶ **We must comply with several regulations and guidelines**
 - International Traffic in Arms Regulations (ITAR) (State)
 - Export Administration Regulations (EAR) (Commerce)
 - Foreign Trade Regulations (FTR) (Commerce)
 - US Customs requirements (Treasury)
 - Foreign Assets Control Regulations (FACR) (Treasury)
 - National Industrial Security Program Operating Manual (NISPOM)

- ▶ Our program is based on “best practice” guidelines issued by the US Departments of **State**, **Commerce** and **Treasury** published on their websites for several years. **Fines are mitigated by 50% if you have a compliance program.**

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(Note: Many of these were put in place **before** 9/11.)

YEAR	GUIDELINE
1973	National Industrial Security Manual (NISPOM) for classified projects dealing with foreign persons
1985	Internal Control Program guidelines mandatory for high-volume exporters under Distribution License of EAR
Mid 1990s	Export Management and Compliance Program for EAR and Export Compliance Program Guidelines for ITAR
2000	Nunn Wolfowitz Export Compliance Manual – for both ITAR and EAR – Satellites move from EAR to ITAR
2011	Export Management and Compliance Program - Updated
2014	Satellites and ITAR components move to a new category of EAR as part of Export Control Reform

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Elements of an Export Compliance Program

- ▶ Institutional Commitment
- ▶ Assignment of Responsibility to Qualified Persons
- ▶ Development of SOPS to Ensure Export Licenses Are Obtained and Managed
- ▶ Technology Control Plan to Control Deemed Exports
- ▶ Provide Training and Keep Updated about Regulations

Compliance by Accident

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ECO is a Resource for SAO Researchers

- ▶ Identify what is controlled:
 - Review **proposals, awards, and projects** for export compliance issues
 - Vet **presentations** of export-controlled projects so they do not contain export-controlled information when presented at scientific conferences or meetings
- ▶ Work with projects to arrange the **export** of tangible goods
- ▶ Obtain export licenses (for foreign parties and related equipment)
- ▶ **Work with CF – to secure your data** - clean laptops and secure devices for mobile devices when traveling overseas – iron key, encrypted hard drive, secure network, lab space, etc.

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Everyone Plays a Role

- ▶ Sponsored programs
 - proposals, awards, negotiations
- ▶ PI's who are involved in the program
 - using, designing, carrying out, etc. items
 - NASA
- ▶ Person administering the program and IT
- ▶ Central Engineering
- ▶ Persons involved with the program
- ▶ Shipping

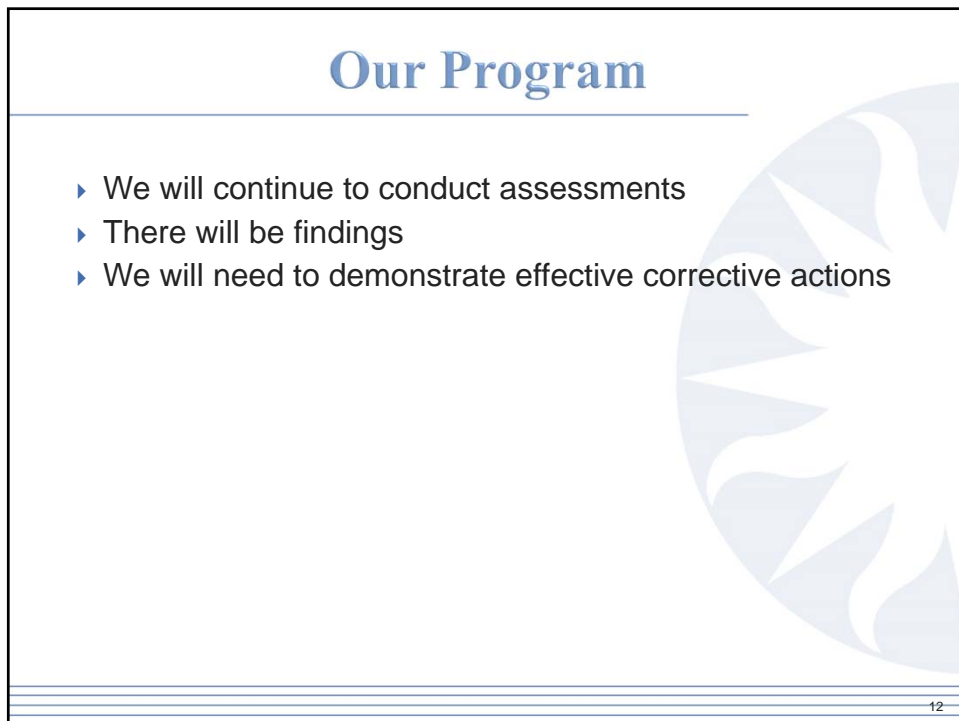
No White Knights



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Our Program

- ▶ We will continue to conduct assessments
- ▶ There will be findings
- ▶ We will need to demonstrate effective corrective actions



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Export Compliance Overview

1. **Introduction to Export Laws**
2. Agencies that regulate controlled items or data
3. Typical tangible items that may need an export license

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Definition of Terms

- ▶ **Export** – transfer of items or information **in any form** – shipment, electronic transmission, oral, visual
- ▶ **U.S. Person** – a person who is a citizen or green card holder
- ▶ **Export controlled** – an item or activity controlled by appearing on an export control list, an item that has been modified to be specially designed for an item on an export control list, an activity that is subject to export restrictions
- ▶ **Technical data** – information for the design, manufacture, use, operation, repair of a controlled item.

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Agencies that Regulate Controlled Items, Software or Data



Department of State, Directorate of Defense Trade Controls

- Regulates defense articles, subassemblies, parts and technology, including satellite-related activities and certain detectors (ITAR)



Department of Commerce

Bureau of Industry and Security

- Regulates "dual use" commercial items, production equipment, software and technology. These are items that have a strategic purpose with respect to national security, foreign policy, missile technology, proliferation, regional stability and crime control (EAR)

Bureau of Census

- Collects trade statistics and manages export clearance for other agencies (FTR)



Department of the Treasury, Office of Foreign Assets Controls

- Issues general and specific licenses for all exchanges and financial transactions with sanctioned countries (FACR)

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Typical Tangible Items that May Need an Export License

- ▶ The items that are regulated are on the ITAR's **US Munitions List** or EAR's **Commerce Control List (CCL)**:
 - Space or ground-based instrumentation mounted on or used in spacecraft, satellites, and data or software related to their propulsion and control systems
 - Focal plane arrays and infrared detectors
 - Deformable mirrors larger than 1 m, space-qualified adaptive optics
 - Radiation hardened electronics, digital signal processors, A-D converters, and atomic clocks
 - Rockets that travel 300 km with a payload of 500 kg

Items on US Munitions List and future transfer of satellites to CCL not eligible to China!

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Fundamental Research

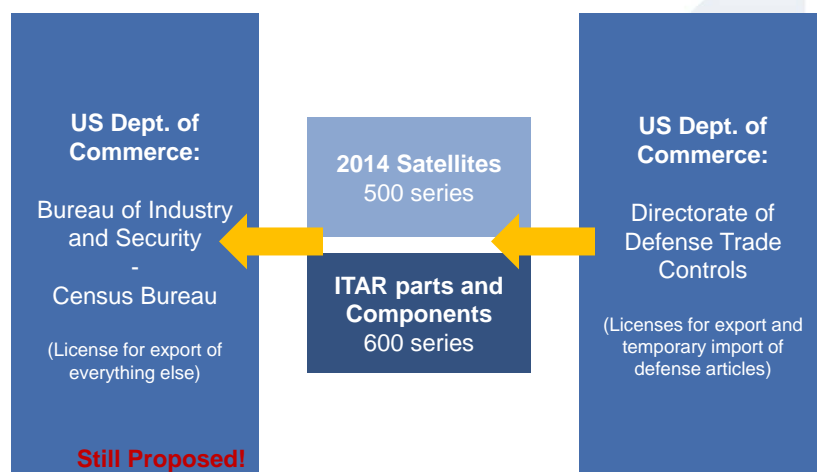
is Exempt

§120.11 of ITAR

- ▶ Determine what is **fundamental research**: basic and applied research that is ordinarily published and shared within the scientific community
- ▶ **Public domain** –available in libraries, academic classes, newstands, through unlimited distribution at a conference, meeting, seminar, trade show
- ▶ **NOTE**: Information or technology **related to an item on the control lists** is controlled

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Export Control Reform



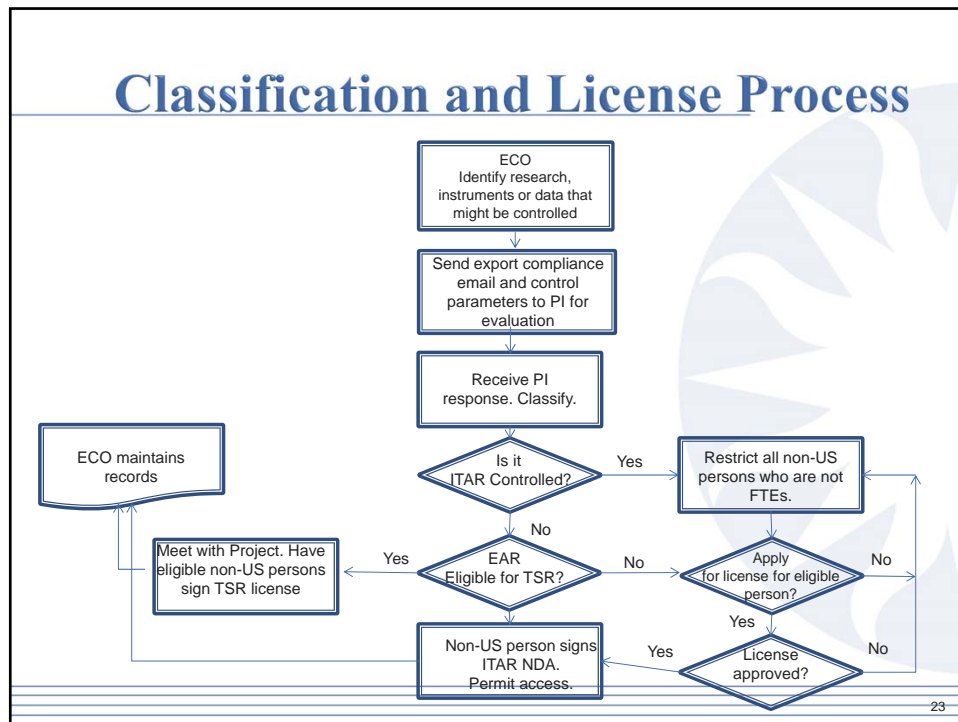
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Results

- ▶ Keep only most strategic items on the US Munitions List
 - make it a positive list
 - Each ITAR category is being reviewed from its broad definitions to being more specific of what will remain
 - Rolling Rollout
- ▶ Move satellites back to Commerce Control List
 - But maintains ITAR list of proscribed countries
 - Satellites, Detectors, Electronics - still pending
- ▶ Move less strategic military items and parts and components to Commerce Control List
 - But maintains ITAR list of proscribed countries

Classification Process

- ▶ Develop expertise ITAR and EAR classification in IR, focal plane arrays, satellites, ground and space-based instrumentation
- ▶ Create a Classification Committee
- ▶ Educate PIs to know what items are controlled
- ▶ Involve Projects and Purchasing
- ▶ Request sponsors to classify their data



Drafting Checklists and Flow Charts for

- ▶ Sponsored Programs – awards and modifications
- ▶ Procurement – Import and Export
- ▶ Conferences and Scientific Meetings
- ▶ Export Licenses for Non-US Nationals
- ▶ Export Clearance – Export
- ▶ Mobile Device Policy

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We Have Checklists and Flow Charts for

- ▶ Sponsored Programs – awards and modifications
- ▶ Procurement – Import and Export
- ▶ Conferences and Scientific Meetings
- ▶ Export Licenses for Non-US Nationals
- ▶ Export Clearance - Export
- ▶ Mobile Device Policy
- ▶ Identification of ITAR and EAR controlled items
- ▶ General Prohibitions

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Drafting Checklists and

Flow Charts for

- ▶ Sponsored
- ▶ Procurement
- ▶ Conference
- ▶ Export License
- ▶ Export Clearance
- ▶ Mobile Dev

SAO NON-US COLLABORATOR WORKING ON EXPORT CONTROLLED PROJECT INFORMATION FORM

If your research is export controlled and you wish to work with a non-U.S. person who is not a full-time employee, then this is a "deemed export." If your project is export-controlled or if your equipment that they will be using is export controlled, then we will need to obtain an export license. Please assist by providing the information below. Email to export@cfa.harvard.edu

SUBMITTED BY: _____

PROJECT: _____

CONTRACT NO /DESIGNATED CODE: _____

SPONSOR: _____

TECHNICAL CONTACT NAME AND EMAIL _____
PHONE NO _____

Information needed for license	Response
1. Name	
2. Address in US	
3. Address in home country	
4. Nationality	
5. Passport -check date that it is	Provide pdf photo of passport as pdf

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Export License Decisions

Who is receiving it?

- We need to check the name against the government denial lists

Where is it going?

- Is the item going internationally or to a US possession like Puerto Rico?
- Make sure the country is not subject to trade restrictions (e.g., Cuba, Iran, North Korea, Sudan and Syria)

Make sure all activities comply with the license conditions

- Equipment, dollar value, parties involved, return, and reporting to USG.

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MK Data's Denial List Web - List
Welcome back, cindy

www.MKDenial.com

Use for screening - Due diligence

id	party	city	country	code
4				
22278	ABDELKARIM HUSSEIN MOHAMED AL-NASSER		XX	uns
22057	ABDULLAH HUSSEIN KAHIE	MOGADISCHU	SO	uns
10663	ABDULLKADIR HUSSEIN MAHAMUD	FLORENCE	IT	sdgt
24955	AL-SA'IDI FARAJ FARAJ HUSSEIN	MILAN	IT	sdgt
14117	AL-AWADI QAID HUSSEIN		XX	cdni
37279	ALI HUSSEIN MAZEN		XX	eus
1166	AL-KHODAIR AHMAD HUSSEIN		IQ	sdai
4473	AL-MAJID HUSSEIN KAMEL HASSAN	BAGHDAD	IQ	sdni
10350	AL-NASSER ABDELKARIM HUSSEIN MOHAMED		XX	cdmo
23846	AL-NASSER ABDELKARIM HUSSEIN MOHAMED		XX	EUS
12950	AL-NASSER ABDELKARIM HUSSEIN MOHAMMED		XX	uns
21763	AL-NASSER ABDELKARIM HUSSEIN MOHAMMED		XX	uns
35878	AL-SA'IDI FARAJ FARAJ HUSSEIN	MILAN	IT	eus
35879	AL-SA'IDI FARAJ FARAJ HUSSEIN	MILANO	IT	eus

Just the right amount, vs. too many

MK Data's Denial List Web - List
Welcome back, cindy

cindy searched for (name any 2 words match "faraj hussein")
at 5:18 PM on 21-Jul-2009
Matches 1 - 3 out of 3 matches
[Share this with another subscriber](#) · [Export to Excel](#) · [Print Version](#)

id	party	city	country	code
24955	AL-SA'IDI FARAJ FARAJ HUSSEIN	MILAN	IT	sdgt
35878	AL-SA'IDI FARAJ FARAJ HUSSEIN	MILAN	IT	eus

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HARDWARE EXPORTS AND DESCRIPTION	RESPONSE	COMMENTS
1. Name of Program		
2. PI/PM PI/PM email and phone		
3. Date of Planned Export		
4. Date it needs to be there		
5. Type of equipment		
6. Location of equipment now		
7. Permanent or Temporary export		
8. If temporary, when is it coming back?		
9. Has property transfer form been completed?		
10. Controlled under ITAR or EAR?		
11. What is ECCN/ITAR Category?		
12. Does it need a license? (ECO)		
13. If yes, has license been obtained? (ECO)		
14. Check Denied Persons List and country (ECO)		

(sample export checklist)

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Next Steps:

TECHNOLOGY CONTROL PLAN

Non-US Person Controls

- *Identifying Controlled data*
- *Project personnel requirements*
- *Physical security*
- *Information security*
- *Purchasing controls*

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Movie

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Deemed Export

Work with non-US persons in US

- ▶ We can use an ITAR exemption if:
 - The person is a full-time employee of an institute of higher learning
 - He or she is a US person (they are permanent resident)
 - By request, if the program is multi country where NASA is the sponsor (Europe, Canada, Japan, Australia, New Zealand, sometimes South Korea)

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Next Steps:

Non-US Person Controls

- ▶ Have records that ECO has screened all names against denial lists
 - *Make it an on-going process – facility officers, Fellowship Coordinator, HR*
- ▶ Obtain from those who are eligible (from eligible country):
 - *Letter of Assurance for Technology and Software Restricted that covers EAR technology*
- ▶ Those not eligible - Verify that those persons are isolated from
 - *export-controlled activities and lab areas/offices*
 - *IT Networks that are not approved*
 - *Be able to prove it*

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If SI Research Center Needs a Foreign-national License

ECO needs to include their:

- Resume
- Passport
- Visa
- Description of technical data that they require access to.

Records

- When the license is approved, they need to sign an NDA

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SAO EXPORT COMPLIANCE PROGRAM

▶ **Non-Disclosure Agreement – Letter of Assurance**
 ▶ **for**
Non-US “SAO-Affiliated Person”*
To Permit Access to EAR-Controlled
“Technology and Software Under Restriction” (TSR)
 or for
Specific International Traffic in Arms Regulations Export License

I, [name of non-US person], acknowledge and understand that certain research or technical data related to a controlled technology or software per the Commerce Control List of the Export Administration Regulations (15 CFR Parts 730 – 774) to which I may have access and or is disclosed to me in my affiliation with Smithsonian Astrophysical Observatory is subject to export controls and is permitted by **license exception TSR “Technology and Software Under Restriction.”**

The controlled research technology, data or software may not be disclosed to others without permission by my advisor/supervisor. Such data or software will be marked **“export controlled – TSR.”** These controls are related primarily to **CCDs, adaptive optics, deformable mirrors, high speed processors, rad hardened electronics, infrared technology, instrumentation or encryption** controlled by the U.S. Department Commerce, Bureau of Industry and Security.

I also acknowledge and understand that should I inadvertently receive controlled data or software for which I have not been granted access authorization by the U.S. Department Commerce, Bureau of Industry and Security, I will report such unauthorized receipt and acknowledge the transfer to be a violation of U.S. Government regulations. (Similar items and technology as above that are “space qualified” may controlled as a ‘defense article’ by the U.S. Department of State, Directorate of Defense Trade Controls requires a specific export license and to obtain such a license, I will be requested to provide information, such as a passport and CV prior to any data release).

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Group B Countries

License Exemptions Supplement No. 1 to Part 740 page 3
Export Administration Regulations Bureau of Industry and Security February 28, 2013
Country Group B

Albania	Egypt	Malta	Island of Saint Martin)
Algeria	El Salvador	Marshall Islands	Slovakia
Andorra	Equatorial Guinea	Mauritania	Slovenia
Angola	Eritrea	Mauritius	Solomon Islands
Antigua and Barbuda	Estonia	Mexico	Somalia
Argentina	Ethiopia	Micronesia, Federated States of	South Africa
Aruba	Fiji	Monaco	South Sudan, (Republic of)
Australia	Finland	Montenegro	Spain
Austria	France	Morocco	Sri Lanka
The Bahamas	Gabon	Mozambique	Surinam
Bahrain	Gambia, The	Namibia	Swaziland
Bangladesh	Germany	Nauru	Sweden
Barbados	Ghana	Nepal	Switzerland
Belgium	Greece	Netherlands	Taiwan
Belize	Grenada	New Zealand	Tanzania
Benin	Guatemala	Nicaragua	Thailand
Bhutan	Guinea	Niger	Timor-Leste
Bolivia	Guinea-Bissau	Nigeria	Togo
Bosnia & Herzegovina	Guyana	Norway	Tonga
Botswana	Haiti	Oman	Trinidad & Tobago
Brazil	Honduras	Pakistan	Tunisia
Brunei	Hong Kong	Palau	Turkey
Bulgaria	Hungary	Panama	Tuvalu
Burkina Faso	India	Papua New Guinea	Uganda
Burundi	Indonesia	Paraguay	United Arab Emirates
Cameroon	Ireland	Peru	United Kingdom
Canada	Israel	Philippines	United States
Cape Verde	Italy	Poland	Uruguay
Central African Republic	Jamaica	Portugal	Vanuatu
Chad	Japan	Qatar	Vatican City
Chile	Jordan	Romania	Venezuela
Colombia	Kenya	Rwanda	Western Sahara
Comoros	Kiribati	Saint Kitts & Nevis	Yemen
Congo (Democratic Republic of the)	Korea, South	Saint Lucia	Zambia
Congo (Republic of the)	Kosovo	Saint Vincent and the Grenadines	Zimbabwe
Costa Rica	Kuwait	San Marino	
Cote d'Ivoire	Latvia	Sao Tome & Principe	
Croatia	Lebanon	Saudi Arabia	
Curaçao	Lesotho	Senegal	
Cyprus	Liberia	Serbia	
Czech Republic	Lithuania	Seychelles	
Denmark	Luxembourg	Sierra Leone	
Djibouti	Macedonia, The Former Yugoslav Republic of	Singapore	
Dominica	Madagascar	Sierra Leone	
Dominican Republic	Malawi	Sri Maarten (the Dutch two-fifths of the	
Ecuador	Malaysia		
	Maldives		
	Mali		



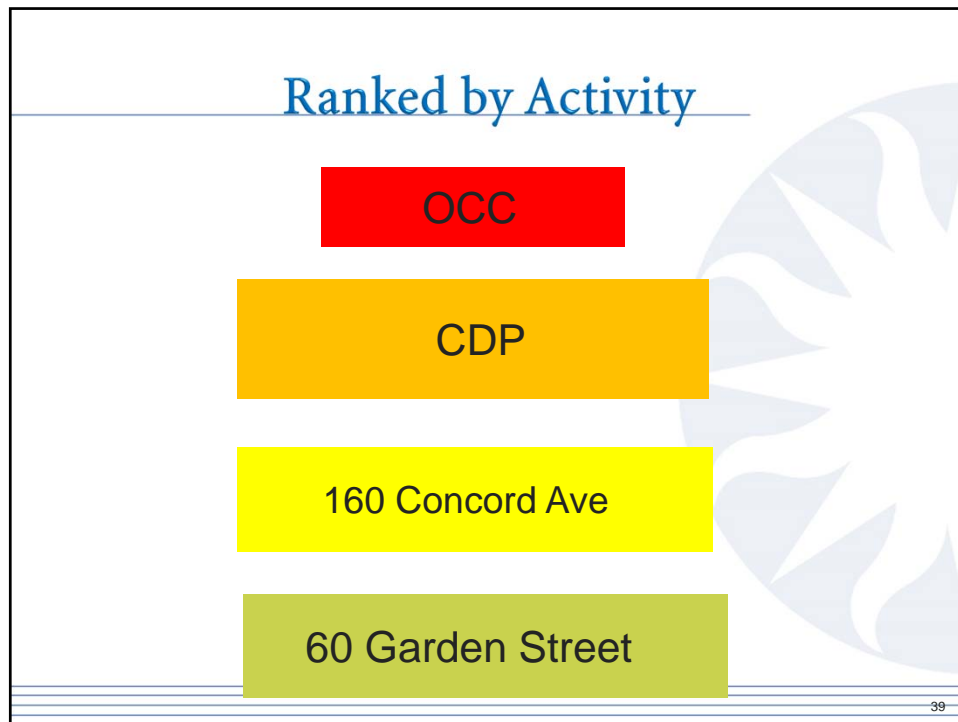
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Facility Controls for Export-Controlled Areas

- ▶ Control access to ITAR/EAR computer and storage areas - escorted
- ▶ Procedures – clean desk, locked offices
- ▶ Badges and Sign In
- ▶ Labs and server rooms– dual controls that change regularly



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Visits by Non-U.S. Personnel

- ▶ Project checks the name against Denial list in advance
 - www.mkdenial.com
- ▶ Ensure they are escorted at all times
- ▶ Watch for inappropriate visitor behavior
 - Wandering visitors
 - Questions about topics that are not the scope of their visit, particularly if the research is cutting edge or export-controlled
 - Using photographic or recording equipment
 - Adding unannounced persons at the last minute to a pre-planned visit

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Data Controls: Best Practices

- ▶ Separate domain for ITAR/EAR data
- ▶ Encrypted emails/FTP transmissions
- ▶ Disclaimer not to have ITAR/EAR data in emails
- ▶ Track ITAR/EAR data distribution and destruction
- ▶ iCloud hosting and Backups – in US
- ▶ Mobile Device Policy for Laptops and portable drives



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ITAR/EAR Marking

- ▶ Schematics, presentations, documents, etc. must be marked “ITAR or EAR controlled – not for release to Non- US persons” if they contain technical information which could be used to replicate, design, or build similar hardware / software.
- ▶ For example, the following might need export-control markings:
 - Mechanical or electronic schematics
 - Detailed proposals or statement of work
 - Design guides / specs for controlled equipment
 - Functional diagrams showing a detailed process
 - Algorithm descriptions or characterization work for controlled equipment
 - Written descriptions of how a change is being implemented, and/or, why we decided to make a change

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License Management (ECO)

- ▶ Ensure that the scope and parties are the same
- ▶ Stay within the license time-frame – 4 years to 10 years
- ▶ Amend the license when facts change

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Records and Reporting (ECO)

- ▶ Check license conditions called “Provisos”
- ▶ Make sure we comply – sign NDAs, keep on file
- ▶ Maintain records for 5 years
- ▶ Who has access to item/data?
- ▶ How is it secured?
- ▶ Technology Control Plan- must be signed and audited

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What if we think there is a violation?

- ▶ 5-year statute of limitations
- ▶ Contact the ECO

617-496-7557