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

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**.

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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.
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.

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

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

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.
Everyone Plays a Role

- Sponsored programs
  - proposals, awards, modifications
- PI's who are involved with strategic items
  - using, designing, calibrating, characterizing, acting as PI for NASA, and advisors of non-US students
- Project Managers/Division Administrators
- Facility Managers
- Procurement
- PeopleSoft administrators and IT
- Central Engineering
- Persons involved with travel
- Shipping

No White Knights

Our Program

- We will continue to conduct assessments
- There will be findings
- We will need to demonstrate effective corrective actions
1. Introduction to Export Laws

2. Agencies that regulate controlled items or data

3. Typical tangible items that may need an export license

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

Typical Tangible Items that May Need an Export License

- The items that are regulated are on the ITAR’s [US Munitions List](https://www.pmsoverseas.us国防部) or EAR’s [Commerce Control List (CCL)](https://www.pmsoverseas.us国防部):
  - 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!*
**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**

- **US Dept. of Commerce**:
  - Bureau of Industry and Security
  - Census Bureau

- **ITAR parts and Components**
  - 600 series

- **US Dept. of Commerce**:
  - Directorate of Defense Trade Controls

- **2014 Satellites**
  - 500 series

Still Proposed!
**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
Classification and License Process

ECO identify research, instruments or data that might be controlled

Send export compliance email and control parameters to PI for evaluation


Is it ITAR Controlled?

Yes

Restrict all non-US persons who are not FTEs.

No

Non-US person signs ITAR NDA. Permit access.

Meet with Project. Have eligible non-US persons sign TSR license

Process for Government Approval when Research is NOT Export Controlled

- **ITAR**
  - We can submit a Commodity Jurisdiction to DDTC for a ruling in writing (NASA)
  - Takes 60 days

- **EAR**
  - We can submit a classification
  - We receive a letter back in 30 – 60 days

- **Release into public domain**
  - Submit to the Office of Security Review
  - Takes 2 – 4 weeks
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

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
Drafting Checklists and Flow Charts for:

- Sponsored Programs – awards and modifications
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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.
### HARDWARE EXPORTS AND DESCRIPTION

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

*(sample export checklist)*
Next Steps:

TECHNOLOGY CONTROL PLAN
Non-US Person Controls

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

Movie
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)

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
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

SAO EXPORT COMPLIANCE PROGRAM

- Non-Disclosure Agreement – Letter of Assurance

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).
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
Visits by Non-U.S. Personnel

- Project checks the name against Denial list in advance
  - [www.mkdenial.com](http://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
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

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
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

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
What if we think there is a violation?

- 5-year statute of limitations
- Contact the ECO

617-496-7557