





Project Shield America (PSA)

Academia



Homeland Security Investigations

- HSI is the investigative arm of Immigration and Customs Enforcement
- HSI is responsible for investigating the illegal movement of people, goods and finances into, within and out of the United States
- HSI is the largest investigative arm in DHS and second largest federal investigative agency in the U.S.



DHS Organizational Chart





Department of

Security

D L

Homela









Customs and Border Protection

ICE / Homeland Security Investigations

U.S. Coast Guard

U.S. Citizenship and Immigration Services

U.S. Secret Service

Federal Emergency Management Agency



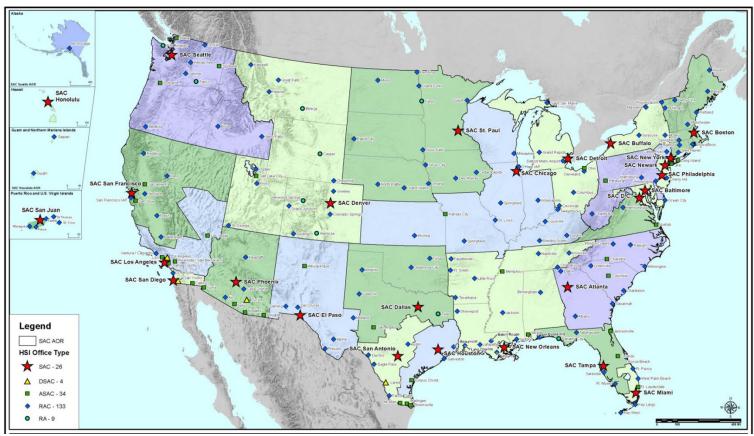






7000 Homeland Security Investigations Special Agents assigned to 26 domestic Special Agent in Charge Offices







Counter-Proliferation Investigations (CPI)

- CPI works with all of its federal partners in the enforcement of U.S. Export Control Laws
- HSI's statutory customs border search authority allows for the search, detention and seizure of illegal exports
- HSI has the authority to investigate criminal violations of the ITAR (22 CFR § 127.4)





Export Enforcement Coordination Center (E2C2)

- Housed at HSI Headquarters with representation from each agency involved in the enforcement of export control laws
- Serves as the primary forum for enforcement and intelligence agencies to de-conflict and coordinate export enforcement actions
- Primary point of contact between enforcement and licensing agencies
- Coordinates public outreach to trade community





Project Shield America

Outreach Program to Academia to:

- Seek greater compliance and awareness of export control laws
- Prevent the inadvertent violation of export control laws in academia
- Seek cooperation from academic institutions in protecting controlled technology from illegal export and reverse engineering
- Establish more formal and informal dialogue through stronger government/academic partnerships
- Enhance U.S. National Security





Export Controls: The Basics

How Does Something Become Export Controlled?

Controlled Technology

Controlled items, services and technologies that are subject to regulations and found on a control list (CCL or USML)

Destination

Is destined for an embargoed location especially Cuba, Iran, N. Korea, Sudan and Syria

End Use

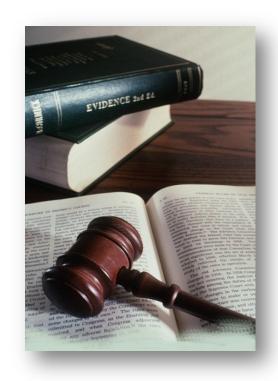
The end use includes weapons proliferation or involves knowledge of a violation

End User

The end user is a
Specially
Designated
National or
foreign military
force

U.S. Export Control Laws

- Arms Export Control Act (AECA)
 - Title 22 U.S.C. § 2778
 - Title 22 C.F.R. § 120-130
 - Military Items, Services and Brokering
- Export Administration Regulations (EAR)
 - Title 15 C.F.R. § 730-774
 - Dual Use Technology (Commercial & Military)





U.S. Export Control Laws

- International Emergency
 Economic Powers Act (IEEPA)
 - Title 50 U.S.C. § 1701
 - "FACR" 31 C.F.R. § 500-599
 - Economic and Trade Sanctions
 - Goods and Services
- Outbound Smuggling
 - Title 18 U.S.C. § 554
 - Any merchandise

- Trading With the Enemy Act (TWEA)
 - Title 50 U.S.C § App 1-44





Primary Export Licensing Agencies

U.S. Dept. of State

Directorate of Defense Trade
Controls (DDTC)

- Regulates Export & Licensing of *Single-Use* Defense Articles (military and space applications)
- Controlled Items List:
 - U.S. Munitions List (USML)
- Regulations Defined By:
 - ITAR
- Violations Enforced Under:
 - AECA

U.S. Dept. of Commerce

Bureau of Industry and Security (BIS)

- Regulates Export & Licensing of *Dual-Use* Commodities (Commercial & Military Applications)
- Controlled Items List:
 - Commerce Control List (CCL)
- Regulations Defined By:
 - •EAR
- Violations Enforced Under:
 •EAA/IEEPA

U.S. Dept. of Treasury

Office of Foreign Assets Control (OFAC)

- Regulates Licensing of *Transactions* involving sanctions & embargos
- Comprehensive & Selective Regulations may apply to:
 - Countries
 - Companies
 - Individuals
- Regulations Defined By:
 - Sanctions/Embargos
- Violations Enforced Under:
 - IEEPA

Definitions

Technical Data - Required for the development of defense articles, including information in the form of blueprints, drawings, photographs, plans, instructions, and documentation. Also includes classified information relating to defense articles and defense services, information covered by an invention secrecy order and certain software directly related to defense articles.

[ITAR § 120.10]

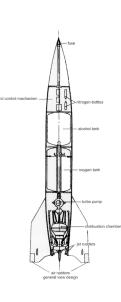


Definitions

Deemed Export

- Used to describe the transfer of technology or technical data to foreign persons usually while inside of the U.S.
- Concept applies to both the EAR and the ITAR
- Deemed export can include controlled tangible items, software/software code or information
- Unless an exception or exemption applies, an export license is required when the following conditions are met:
 - Intent to transfer controlled information to foreign nationals while in the United States; and
 - Transfer of the same technology to the foreign national's home country would require an export license





Definitions

Foreign Person: any natural person who is not a lawful permanent resident as defined by 8 U.S.C. 1101(a)(20) or who is not a protected individual as defined by 8 U.S.C. 1324b(a)(3). It also means any foreign corporation, business association, partnership, trust, society or any other entity or group that is not incorporated or organized to do business in the United States, as well as international organizations, foreign governments and any agency or subdivision of foreign governments (e.g., diplomatic missions). [ITAR § 120.16]



Definitions

Defense Article: Any item or technical data on the USML. [ITAR § 120.6]

Defense Service: 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, etc. of defense articles. Also, the furnishing to foreign persons of any controlled technical data. [ITAR § 120.9]



Definitions

Form I-129:

- U.S. Citizenship and Immigration Services (USCIS) petition form for non-immigrant workers
- Part six of this form is known as the "Deemed Export Acknowledgment" section and is a certification warning against the release of controlled technology to foreign persons in the U.S.
- Only applied to certain petitions (H-1B, H-1B1 Chile/Singapore, L-1, and O-1A petitions)
- Implemented to address illegal technology transfers and the threats of WMD proliferation, illicit weapon production, and industrial espionage

Academic Exemptions

Fundamental Research Exclusion:

• Basic and Applied Research in science and engineering at accredited institutions of higher learning where the resulting information is ordinarily published and shared broadly in the scientific community, as distinguished from research results which are restricted for proprietary reasons or specific U.S. Government access and dissemination controls [ITAR § 120.11(8)].

Academic Exemptions

Public Domain Exclusion: ITAR Provisions

• Includes information published in magazines, journals, etc. OR not published, but released with unlimited distribution after approval by the cognizant US Government, Department, or Agency [ITAR § 120.11(7)]





Academic Exemptions

Public Domain Exclusion: EAR Provisions

- Published information in print, film, recordings, etc.
- Certain publicly available technology and software
- Patents and published patent applications
- Fundamental research
- See the EAR sections [§ 734.3(b)3, 734.7 and 734.10]



Academic Exemptions

Educational Instruction Exclusion:

- Information released in catalog listed courses
- Faculty may discuss certain technologies in labs or classrooms even in the presence of foreign nationals
- Information must be general scientific, mathematical, or engineering principles commonly taught in schools, colleges, and universities, and information in accordance with the public domain exclusion



Academic Exemptions

Bona Fide Full-time Employees Exemption:

Applies to unclassified technical data in the U.S. by U.S. universities to foreign nationals where:

- Foreign national is university's bona fide full-time employee, and
- Foreign employee permanently resides in U.S. during employment, and
- Foreign employee is not a national of an embargoed country, and
- University informs the employee in writing that information disclosed may not be disclosed to other foreign nationals without governmental approval [ITAR § 125.4(b)(10)]

Academic Exemptions

- Fundamental Research Exclusion does NOT apply to:
- 1. Most physical goods
- 2. Software
- 3. Encryption
- 4. Certain non-publishable research

- 5. Research conducted outside of the U.S.
- 6. Research with publication restrictions on results (Exemptions under 15 CFR § 734.11)
- 7. Federally funded research with certain access and dissemination controls on project results (Also, see 15 CFR § 734.11)
- In addition to determining the applicable exclusion, always check updated list of ITAR prohibited countries, embargoed countries, sanctioned countries, denied persons, specifically designated nationals, etc.



Fundamental Research - National Policy

- <u>National Security Decision Directive (NSDD) 189</u> Issued by the President and formally defined fundamental research.
- Set the national policy expectation that the flow of ideas and information resulting from fundamental research should not be restricted
- NSDD 189 supports the principal of limiting the restrictions to federally funded fundamental research



Export Controls: The Basics

• Export controls may apply in the university setting regardless of whether or not the university project is funded by a grant (public or private) or some other contractual agreement

• Export controls may also apply to a project even if the sponsor's award documentation does not specifically mention export controls



Compliance Challenges in Academia

- 1. Multiple regulatory authorities
 - Immigration laws (DHS)
 - Evolving sanctions (Treasury)
 - Licensing agencies (DOS, DOC, Treasury and others)
 - Evolving definitions in export control
- 2. Informal/unauthorized research partnerships
- 3. Information exchanges email, FTP, cloud computing, international conferences, lab tours, foreign academic partnerships and exchanges
- 4. Foreign students, scientists and scholars
- 5. De-centralized structure of universities





Potential Pitfalls

- Foreign students (visa issues, deemed exports, etc.)
- Student assignment w/out review or little oversight
- No physical access controls of research facilities
- Foreign travel / delegations / transporting digital media
- Foreign university partnerships
- Lack of export control training
- Faculty working on outside contracts (private agreements)
- Data exchanges
- Project staffing changes



Red Flag Indicators

- Multiple requests for identical product or research
- Uneducated, unfamiliar and/or uninformed end user
- Vague or non-existent end-user information
- Refusal to provide end-user certificate
- Suspect end-user located in a transshipment location
- Hand-carry of data or equipment
- Request for replacement parts to wrong customer location
- Troubleshooting inquiries by e-mail from different enduser or in the wrong language





Targeted Technologies

- Information Systems
- Lasers, Optics, and Sensors
- Aeronautics Systems
- Electronics
- Marine Systems

- Positioning, Navigation, and Time Technology
- Information Security
- Armaments and Energetic Materials
- Space Systems
- Materials and Processes

2011 Defense Security Service Report: Targeting U.S. Technologies: A Trend Analysis of Reporting from Defense Industry



Methods Used to Target Technology

- Unsolicited emails
- Front companies
- Liaisons with universities that have ties to defense contractors
- Recruitment by foreign intelligence services
- National laboratories
- Compromise of laptop while traveling overseas

- Attending/Hosting conferences
- Relocating R&D facilities overseas
- Circumventing export control laws
- Visiting scientific and research delegations
- Hacking
- Downloading information from your network



Source: Department of Commerce, Bureau of Industry and Security

Avoiding Mistakes / Due Diligence

- Know what controls apply to your research, and if an exemption applies
- If your research is controlled, know who has access and if the facility is capable of isolating this controlled technology
- See that transactions/orders for production parts or technology are handled by export specialists
- Ensure that your export compliance specialists are knowledgeable about your research/product and current export controls and licensing procedures
- Screen for debarred parties, denied persons, designated nationals



Recommendations

- Create a university export control matrix or decision tree
- Create protocols for international mailing
- Maintain a list of sanctioned, proliferating and transshipment countries
- Work closely with the university designated school official (DSO)
- Create a policy on foreign travel and transport of digital media



Recommendations

- Establish a collection of "clean" computers, USB flash drives, phones, and other digital media for the purpose of foreign travel
- Incorporate an export control training course
- Conduct annual review of university international shipments based on your university's freight forwarding account
- Avoid desktop sharing software
- Avoid "cracked" or pirated software
- When in doubt, seek legal advice



Consequences of Non-Compliance

Criminal and civil penalties potentially resulting in:

- Millions of dollars in fines
- Jail sentences
- Damage to national security
- Loss of federal funding
- Loss of exporting privileges
- Loss of technological advantage through IP theft
- Damage to individual and institutional reputation







Relevant Points of Contact

Issue

- 1. ITAR military application
- 2. EAR dual use commodity
- 3. Embargos / Sanctions
- 4. Student visas
- 5. All potential export control violations

Agency

- Department of State DDTC
- Department of Commerce - BIS
- 3. Department of Treasury OFAC
- 4. Citizenship and Immigration Services (CIS) and HSI
- 5. HSI

Contact

- 1. (202) 663-1282 www.pmddtc.state.gov
- 2. (202) 482-4811 www.bis.doc.gov
- 3. 1-800-540-6322 www.treasury.gov/ofac
- 4. 1-800-375-5283 www.uscis.gov
- 5. 1-866-347-2423 www.ice.gov

CASE STUDY

Deemed and Actual Exports of Tech. Data to China

September 2008, Professor J. Reece Roth was convicted of conspiracy to violate the Arms Export Control Act. He was sentenced to 48 months of confinement. Roth and others conspired to illegally export military technical information related to plasma technology, which was designed to be deployed on the wings of drones operating as a weapon or surveillance system. Roth also illegally transported controlled data with him during his travels to China and e-mailed technical data to China.

CASE STUDY

Stealth Missile Designs and Classified Information to China – On August 9, 2010, Noshir S. Gowadia was found guilty of 14 criminal violations following a 40-day federal trial in Hawaii. He was found guilty of illegally communicating classified information, unlawfully exporting technical information, illegally retaining defense information and filing false tax returns. Evidence at trial revealed that from July 2003 to June 2005, Gowadia took six trips to China to provide defense services in the form of design, test support and test data analysis of certain technologies to develop a stealthy exhaust nozzle for one of China's cruise missile systems.



How to Respond to a Suspicious Contact

- Don't slam the door
- Save all correspondence and make note of phone calls
- Obtain contact numbers and e- mail with full headers
- Keep it neutral
- Contact HSI Special Agents for a controlled and monitored response







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