Export Control and Sponsored Research

Export Controls

Federal laws and regulations that control:

- The export of sensitive equipment, software, and technology
- Trade and financial transactions

Promote national security interests and foreign policy objectives.



Partners in Export Control



Export Control Roles

SPO:

 Notify export control based on proposal review guidelines we will discuss in this training

Export Control Officer:

- Designated by executive leadership at each UC Location
- Responsible for the monitoring and oversight of the local Export Control Compliance program
- Primary point of contact and subject matter experts at that location
- Responsible for reviewing the applicability of export control regulations and filing export licenses

Why Comply?

Violations may result in potential criminal or civil liability

- Penalties of up to \$1M per violation AND up to twenty 20 years in prison
- Enforcement actions are often made public and result in reputation damage
- Loss of research funding
- Loss of export privileges; debarment; seizures





What is an Export?

A transfer of items or services outside the U.S.

- Items commodities, data, information and software source code
- Services anything of value, services related to defense articles or for a foreign military
- Outside the U.S. to foreign nations, companies not incorporated in the U.S. and foreign persons

Transfers inside the U.S.

- Deemed Export transfer of information to foreign nationals in the U.S.
 - ✓ Lab tours that expose export controlled technology
 - ✓ Participation in research or meetings discussing export controlled technology

Fundamental Research Exclusion

- Basic or applied research at an accredited institution of higher learning (in the U.S).
- No publication restrictions
- If federally funded, no access or dissemination restrictions on results



University Strategy

Protect the fundamental research exclusion by negotiating the elimination of all contractual clauses that restrict university control of publications or limit access to or participation in research.

Identify transactions that require further export control review.

Implement technology control plans and file for licenses when needed.

Agreements Lifecycle- Export Considerations



Export Control Review Outcomes



Proposal Review

Escalate to export control for review and assistance

- Sanctioned countries: Cuba, Iran, Sudan, Syria, North Korea and Crimea region of Ukraine
- Restricted party screening
- Export control red flags:
 - Sensitive technology (*military, space, nuclear, bio agent, encryption, UAV or weapons technology*)
 - Sensitive sponsor (*military, space agency, nuclear agency, defense contractor*)
 - Export control language issues (*potential receipt of controlled items, information or software, publication or foreign national restriction issues*)
 - International shipping or hand carrying
 - Country of concern

Restricted Destinations and Parties





OFAC Sanctions

Administered by the U.S. Department of Treasury, Office of Foreign Assets Control (OFAC), and impact our university activities.

The most restrictive sanctions programs (Cuba, Iran, North Korea, Sudan, Syria and the Crimea region of Ukraine) prohibit:

- A broad range of services and transactions that benefit or provide value.
- Export of products, software, and transfer of technology.
- Providing educational services and technical services, even where no monetary compensation occurs.



Restricted Party Lists

The US Government issues various lists of individuals & entities both in the U.S. & abroad that have committed export violations or other serious offenses.

- Terms & conditions require no debarred, disqualified or ineligible persons
- Part of funding awards, procurement and service agreements

Financial dealings or export transactions with Restricted or Prohibited parties is prohibited.

- Terrorists
- Weapons Proliferators
- Export Violators
- Drug Traffickers

Restricted Party Screening: Software

DESC RTES [™] Visual Compliance	Compliance Solutions	About Us	Newsletter Blog	Contact Us		ada: <u>1-877-328-7866</u> nal: (<u>716) 881-2590</u>	Setup your free demo
Achievi financi doesn' compli	al tra t have	de co e to k	ompli			Login to Descartes V Username * <u>Forgot username?</u> Password	'isual Compliance [™]
Solutions for restricted and denied party screening, classification, automation—and more						Login Regis	ster

A Reason to Screen

The University of Massachusetts at Lowell (UML) failed to screen an international entity, Pakistan's Space and Upper Atmosphere Research Commission (SUPARCO), prior to a collaboration analyzing electron density in Karachi and Islamabad.

UML was unaware that the U.S. government had placed SUPARCO on the Department of Commerce's Entity List, which establishes additional export requirements. UML exported atmospheric testing equipment, not typically controlled by export regulations, to SUPARCO.

A license is required on nearly all shipments to an entity listed under the Department of Commerce's list. The U.S. government assessed UML a \$100,000 civil penalty which would be waived after two years if there were no other violations.

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What type of items (not exhaustive) are Export Controlled?

- Biological agents
- Fiber optic cables or filaments
- Gas monitoring devices
- Gravimeters
- High-frequency radios
- Infrared cameras/detectors
- Lasers

- Military/naval equipment
- Navigation or avionics items
- Nuclear/radioactive items
- Night vision equipment
- Optical lenses
- Oscilloscopes
- Photonics instruments

- Radar equipment
- Semiconductors
- Ruggedized electronics
- Sensors or scanners
- Space-related items
- Spectrometers
- Unmanned aerial vehicles

Consequences for Researchers Are Real

Dr. Thomas Campbell Butler

Infectious disease professor at Texas Tech University

Convicted on 3 counts of improper shipping of <u>plague samples</u> to collaborators in Tanzania

Served 2 year sentence in Federal prison

Dr. John Reece Roth

Professor of engineering at University of Tennessee

Shared ITAR controlled technical data from contract on a trip to China

Served 4 year sentence in Federal prison

ITAR Munitions List "Military Items"









EAR Commerce Control List (CCL) "Dual Use"















Department of Energy 10 CFR Part 810 Regulations

- Software
- Research or other activities involving <u>nuclear reactor design</u>, component design



Radiation Safety Information Computational Center

Nuclear Regulatory Commission 10 CFR Part 110

Imports and exports of major and minor nuclear reactor equipment



Containment Walls made of **Cooling System** concrete and 3-5 feet thick (1-1.5 meters) Generator Control Condenser Condensate Coolant Loop Demineralizer Reactor ressurizer Coolant Emergency Water umps

Typical Pressurized-Water Reactor

Restricted End Uses



Nuclear both civil & weapons, chemical & biological weapons, rockets & UAVs

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Why This Matters...

Penalties (civil and criminal) and sanctions can be enforced at both the institutional and individual (PI) levels.

How do institutions get in trouble?

Ignore export control clauses



- Failure to implement Technology Control Plan (before you implement a TCP, you must identify that you are receiving something controlled)
- Failure to obtain a license for a licensable activity (before you apply for a license, you
 must identify that you need one)

Agreement Language: Frequent Categories Having EC Issues

Publication

- Requirements for prepublication review and <u>approval</u>
- Right to <u>withhold permission</u> for publication

Foreign National Participation

- <u>Restrictions on prepublication dissemination of information to non-U.S. citizens or other categories of persons</u>
- <u>Restrictions on participation of non-U.S. citizens or other categories of persons in the research</u>

Export Control or Global Trade Sections

- Anti-terrorism, trade compliance, Specially Designated Nationals, defense services, technical data, any references to embargoed or sanctioned countries
- RFP marked "Export Controlled" or "ITAR"

Restriction on further transfer

Data Ownership

Confidential Information

Export Controls and Agreements

No matter what type of agreement you are working on - each step of the way, seek to understand the situation.

The activity covered by the agreement and export control clause <u>are not</u> independent of each other. <u>Must review the language</u> and the activity.



Export Control Flags

Correspondence with sponsors, vendors or customers with markings:

"export controlled" do not distribute no export no foreign national access

Any activities that involve defense contractors

Boeing, Lockheed Martin, Northrop Grumman, etc.



Best Practices

Research agreement includes language that indicates no exchange of export controlled items/information other than EAR99.

What are the risks with only this language in an agreement?

The Recipient must comply with all applicable United States and foreign export laws and regulations.

Review more closely items/information going into certain departments. Get to know the portfolio of your researchers.

Which ones are doing research in red flag areas?

Agreement Negotiation



What we hear from sponsors.....

"We don't know the export control classification of what we are providing you."

Engage the scientists to better understand what will be shared. Once you and the sponsor agree on what will be discussed and shared, ask the sponsor to provide the export classification for that information. Include a description of what will be shared and the export classification in the agreement. Indicate in the agreement that nothing other than what is described will be shared. If needed set-up an internal technology control plan for the information.

Ask to set-up a conference call: legal/export control, contract officers and PIs. Discuss the same as above. Once the contract officer and legal team understand what will be transferred they can consider language options. Remember – the situation and the language **are not** independent.

Do not simply indicate the University is doing fundamental research. If the sponsor is transferring controlled information, they want to know you will safeguard it. In order for you to safeguard it, you need to know what it is.

"I can't change that clause without approval from legal. That will probably take a long time."

Request changes and ask them to run it by legal. In many cases it will not take as long as they indicate.

Federal Agreement Clauses

FEDERAL ACQUISITION REGULATION



Issued Fiscal Year 2019 by the:

GENERAL SERVICES ADMINISTRATION

DEPARTMENT OF DEFENSE

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION



Problematic Export Control Clauses (not exhaustive)

Export Control

DFAR 252.204-7008, DFAR 252.225-7048

Foreign National Restrictions

AFMC 5352.227-9000, ARL 52.004-4400, FAR 52.204-2

Publication Restrictions

ARL 52.005-4401, DFAR 252.204-7000, DFAR 252.227-7025, FAR 52.227-14, FAR 52.227-17

Security, Access, and Dissemination Control

DEAR 952.204-2, DFAR 252.204-7012, DFAR 252.239-710, FAR 52.204-21, FAR 52.239-1, NIST 800-171

Publication Clause

Acceptable

UC publications resulting from this Agreement shall be provided to 412 TW in advance, subject to a thirty (30) day comment period. Given that 412 TW will not be disclosing export controlled, confidential or sensitive information under this agreement, the 30-day prepublication review period will be limited to a ensuring that any Air Force patent rights are not compromised. UC retains the right to publish the results of its research without restriction.

Unacceptable

UC publications resulting from this Agreement shall be provided to 412 TW in advance, subject to a thirty (30) day review and approval period. Given that 412 TW will not be disclosing export controlled, confidential or sensitive information under this agreement, the 30-day prepublication review period will be limited to a ensuring that any Air Force patent rights are not compromised. UC retains the right to publish the results of its research without restriction.

Publication Clause

DFAR 252.204-7000 (abridged)

(a) The Contractor shall not release to anyone outside the Contractor's organization any unclassified information, regardless of medium unless:

- 1) The Contracting Officer has given prior written approval;
- 2) The information is otherwise in the public domain before the date of release; or
- 3) The information results from or arises during the performance of a project that has been <u>scoped and negotiated</u> by the contracting activity with the contractor and research performer and <u>determined in writing by the contracting officer</u> to be fundamental research in accordance with NSDD189... and the USD memoranda on Fundamental Research, dated May 24, 2010, and on Contracted Fundamental Research, dated June 26, 2008....
Foreign National Clause

ARL 52.004-4400 FOREIGN NATIONALS PERFORMING UNDER CONTRACT (Feb 2002)

In accordance with Title 8 U.S.C. 1324a, local Foreign Disclosure Officers (FDOs) may approve access by foreign nationals working on unclassified public domain contracts for the duration of the contract, provided the foreign nationals have appropriate work authorization documentation.

In those instances where **foreign nationals** are required to perform under any resultant contract and employment eligibility documentation was not submitted with an awardee's proposal, the employment eligibility documentation specified at 8 CFR 24a.2 shall be submitted to the Contracting Officer at least two weeks prior to the foreign national's performance **for review and approval**. <u>Awardees not employing foreign nationals in performance of any resultant contract may</u> <u>disregard this clause</u>.

Foreign National Clause

AFMC 5352.227-9000 EXPORT CONTROLLED DATA RESTRICTIONS (JUL 1997) Export Controlled Data Restrictions in selected contract awards, requiring an export license prior to assigning any foreign national to work on the project or allowing foreign persons access to the work, equipment or technical data generated by the project..



RPAC guidance on the NASA China restriction

https://researchmemos.ucop.edu/index.php/site/memoDetail/memo_id/RPAC-13-06

From the guidance, this is the sample questionnaire that researchers complete:

https://researchmemos.ucop.edu/php-app/index.php/site/document?memo=UIBBQy0xMy0wNg==&doc=3735

NASA Grant Information Circular

BACKGROUND: NASA is restricted by specific applications of Section 1340(a) of The Department of Defense and Full-Year Appropriations Act, Public Law 112-10 (NASA's 2011 continuing resolution), and Section 539 of the Consolidated and Further Continuing Appropriation Act of 2012, Public Law 112-55(NASA's FY 2012 appropriation) from using funding appropriated in the Acts to enter into or fund any grant or cooperative agreement of any kind <u>to participate</u>, collaborate, or coordinate bilaterally in any <u>way with China or any Chinese-owned company</u>, at the prime recipient level or at any subrecipient level, whether the bilateral involvement is funded or performed under a no-exchange of funds arrangement.

Department of Defense



U.S. DEPARTMENT OF DEFENSE



Example of a Topic Subject to the ITAR



Example of a BAA Intended as Fundamental Research





Broad Agency Announcement Arrays at Commercial Timescales (ACT) Microsystems Technology Office DARPA-BAA-13-26 May 1, 2013 As of the date of publication of this BAA, the Government expects that program goals as described herein may be met by proposers intending to perform fundamental research. The Government does not enticipate applying publication restrictions of any kind to individual awards for fundamental research that may result from this BAA. Notwithstanding this statement of expectation, the Government is not prohibited from considering and selecting research proposals that, while perhaps not qualifying as fundamental research under the foregoing definition, still meet the BAA criteria for submissions. If proposals are selected for award that offer other than a fundamental research solution, the Government will either work with the proposer to modify the proposed statement of work to bring the research back into line with fundamental research or else the proposer will agree to restrictions in order to receive an award.

Proposers should indicate in their proposal whether they believe the scope of the research included in their proposal is fundamental or not. While proposers should clearly explain the intended results of their research, the Government shall have sole discretion to select award instrument type and to negotiate all instrument terms and conditions with selectees. Appropriate

Department of Defense Forms and Markings

DD2345 - Militarily Critical Technical Data Agreement

- Required to handle/access Department of Defense unclassified export controlled technical data
- Export Control Officer data custodian

DD254 – Contract Security Classification Specification

- Utilized for contracts that require security clearance
- Contact UCOP facility security officer (FSO)

Distribution Statements

- DISTRIBUTION STATEMENT A: Approved for public release: distribution unlimited.
- DISTRIBUTION STATEMENT B: Distribution authorized to U.S. Government agencies only (reason for restriction) (date of determination). Other requests for this document shall be referred to (insert controlling DoD office).
- DISTRIBUTION STATEMENT C: Distribution authorized to U.S. Government agencies and their contractors (reason for restriction) (date of determination). Other requests for this document shall be referred to (insert controlling DoD office).
- DISTRIBUTION STATEMENT D: Distribution authorized to the Department of Defense and DoD contractors only (reason for restriction) (date of determination). Other requests shall be referred to (insert controlling DoD office).

DoD Research Funding

Research, Development, Test & Evaluation, (RDT&E) is divided into 7 Budget Activities (BA):

- BA 1: Basic Research (6.1)
- BA 2: Applied Research (6.2)
- BA 3: Advanced Technology Development (6.3)
- BA 4: Advanced Component **Development** and Prototypes (6.4)
- BA 5: System **Development** and Demonstration (6.5)
- BA 6: RDT&E Management Support (6.6)
- BA 7: Operational Systems **Development** (6.7)

In some cases, "developmental" items funded by DoD may become export controlled under International Traffic in Arms Regulations (ITAR)

Department of Defense Proposal Language

Include this language in DOD proposal scope of work.

It is understood that any developmental items and specially designed parts, components, accessories and attachments fabricated under any Department of Defense award resulting from this proposal are being developed for both civil and military applications.

Please direct any questions to Export Control

Award Review

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International Shipping/Hand-Carrying

Fabrication of equipment for a foreign sponsor Donations of items to foreign destinations Foreign collaboration

Country of Concern

Military End Use/User Controls under the EAR: China (inclusive of Hong Kong), Russia and Venezuela

Proscribed countries under ITAR (policy of denial for licensing): Belarus, Burma, China, Cuba, Iran, North Korea, Syria, Venezuela

Comprehensively embargoed country under OFAC and BIS: Cuba, Iran, North Korea, Sudan, Syria, *Crimea Region of Ukraine*







Summary

Contact export control for review and assistance based on the guidelines presented here.

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