**Export Controls**

I. Introduction

Following the terrorist attacks of September 11, 2001, the United States Government increased emphasis and expanded controls on exported goods and technologies that had been in place since the 1940s. These export controls, intended to protect the United States both economically and militarily, are implemented and monitored by three agencies: 1) the U.S. Department of Commerce through the Export Administration Regulations (EAR); 2) the U.S. Department of State through the International Traffic in Arms Regulations (ITAR); and 3) the U.S. Department of Treasury through the Office of Foreign Assets Control (OFAC). As the OFAC regulations have little application to university-based research, they will not be addressed in this document.

For colleges and universities, export controls create unique challenges. While there is a recognized need to guard U.S. interests and comply with federal government regulations, academic freedom, publication, and dissemination of research findings are concepts that most higher education institutions also seek to protect. Fortunately, the federal government has built exemptions for academic research into the regulations; however, researchers must be familiar with export controls in order to protect themselves and their institutions from stiff penalties.

II. Exports

As related to universities, exports can primarily be defined as follows:

1. Shipment of controlled physical items such as scientific equipment to foreign countries;
2. Travel to sanctioned or embargoed countries for purposes of teaching or performing research (currently);
3. Transfer of information related to export controlled items to individuals or entities outside the U.S.; and,
4. Disclosure of information related to export controlled items to a foreign national, even if it occurs within the U.S.

For a university researcher, the foreign national clause can be particularly troublesome. While disclosure of information to a foreign national on U.S. soil may not specifically meet the definition of “export” in common language, under federal regulations the disclosure is considered a “deemed export” to the home

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country of the individual. Export controls prohibit the inclusion of foreign nationals in research involving covered technology unless a license is first obtained. As many U.S. universities have large populations of foreign students, restrictions on their involvement in research can limit the institutions’ ability to protect academic freedom and avoid discrimination on the basis of citizenship.

III. Export Controls

While regulations related to export controls are lengthy and difficult to interpret, they essentially are intended to regulate:

1. Transfer of controlled information, including technical data, to persons or entities outside the U.S.
2. Shipment of controlled physical items such as scientific equipment that require export licenses from the U.S. to a foreign country.
3. Verbal, written, electronic, and/or visual disclosure of controlled scientific or technical information to foreign nationals in the U.S.

The various agencies regulating exports are concerned with different threats and protections from goods and technologies released to foreign countries or nationals. The EAR covers “dual use items,” or those that are designed for commercial purposes but may have military value. The lengthy list of EAR-controlled items can be accessed via http://www.bis.doc.gov/policiesandregulations/ear/ccl_index.pdf. The EAR controls exports of commodities to and from the U.S. and the transfer of technical data to foreign nationals whether they are on U.S. soil or not. Technical data covered by the EAR cannot be exported without a license or exemption from the Department of Commerce. Export of technical data is defined as follows. Oral exchanges of information are included.

1. Shipment or transmission of data outside the U.S.
2. Release of data with the knowledge or intent that the data will be transmitted to a foreign country.

The ITAR deals with items, information, or technology which the Department of State has deemed to be inherently military in nature. These items are included on the United States Munitions List. Any such items require a license from the State Department to export unless they fall under exemptions. See http://www.pmddtc.state.gov/regulations_laws/documents/official_itar/ITAR_Part_121.pdf for additional information.

IV. Complications for Universities

Academic freedom and dissemination of research results is vital to the integrity of an institution of higher education. Furthermore, most universities are open
academic environments available to all people without regard to citizenship or nationality. In some cases, however, these freedoms conflict with federal law which restricts disclosure of certain information to foreign countries or foreign nationals. It is important that university researchers are aware of export control regulations and ensure that their actions are in compliance with federal law. At the same time, researchers can take precautions to protect academic freedom by tailoring their research design to exemptions provided within the various regulations.

V. Exemptions

As noted, although the U.S. Government seeks to control exports of goods or information it considers harmful in the hands of foreign governments, it also recognizes the need for academic freedom and exchange of information. As a result, it has developed exemptions to the EAR and ITAR, primarily as related to “fundamental research.”

Under the EAR, “fundamental research” is that research carried out by scientists, engineers, or students that is released in the public domain. Information released at conferences or through publication, patent, or instruction in catalogue courses or laboratory exercises at academic institutions all fall under the fundamental research exemption. If data meets the definition of fundamental research, no export license is required. However, if researchers accept restrictions on the publication or dissemination of data related to the project, the research is no longer considered fundamental and is subject to EAR restrictions. In regard to federally-sponsored research, EAR restrictions generally do not apply provided the institution meets all requirements of the contract or agreement.

As it deals with matters of military defense, the ITAR is more restrictive than the EAR in the area of fundamental research. The ITAR has authority to place restrictions on certain research for proprietary reasons, considers federally-sponsored research subject to review to determine if export controls are required, and may even restrict the free flow of public domain information if it is considered defense-related. As there are ambiguities and conflicts between ITAR and other federal regulations, many universities have erred on the side of caution and applying for licenses when dealing with exports of information that may be defense-related.

In general, if information is published and readily available to the public, arises from research intended for the public domain, or is educational in nature and taught in institutions and laboratories, it is considered exempt from export control regulations. It is in the best interest of researchers to ensure their projects meet these requirements.

VI. Questions to Ask

When considering acceptance of a research award and when reviewing agreements or contracts, researchers should keep several questions in mind to determine if the project will be subject to export controls that may hinder their ability to disseminate the results of their research.
1. *Does the award contain terms or conditions that would restrict the disclosure or dissemination of research results?*
2. *Are there restrictions on access to or dissemination of information the sponsor or other will furnish for use on the project?*
3. *If the answer to 1 or 2 is yes, does the research project fall under one of the export-controlled technologies?*
4. *Does the project involve training specific personnel for a specific purpose? If so, could it be considered a defense service?*
5. *Will the university need to apply for an export license?*

Many federal and private sponsors of research have placed export control clauses in agreements. As a result, it is imperative that researchers thoroughly review agreements or contracts to insure that the public domain aspect of the research is protected and the project fits the definition of fundamental research. If not, it must be understood that export licenses may be necessary, and there may be restrictions on who may be involved in the research.

**VII. Impact of Export Controls on Research**

If a researcher agrees to complete a project subject to export controls and the institution's administration approves, the following potential impacts are accepted:

1. Publication of results may be severely restricted.
2. Student participation will be limited to U.S. citizens.
3. Secure facilities with restricted access may be required.
4. Special rules regarding research materials may be imposed.
5. An export license may be required resulting in costly delays and only limited permissions.

**VIII. Penalties**

Consequences for violating regulations related to export control can be severe for both the institution and researcher. Loss of future funding, fines, and prison time are all possible. While the institution may be able to assist researchers in complying with regulations, primary responsibility for compliance lies with the researcher.

**IX. Best Practices**

The Council on Governmental Relations has developed a list of Best Practices for Export Control Compliance in a Research Institution. While all may not be applicable to a specific research project, researchers should become familiar with these recommendations and review them prior to submitting a project proposal.
A. During the proposal submission process, add questions to internal proposal routing forms inquiring of the researcher or the departmental or laboratory administrators whether:

• Any restrictions are placed on publication, disclosure, dissemination, or participation by the sponsor in Requests for Proposals (RFPs) or program announcements;

• The receipt of export-controlled information is expected to be furnished by others for use in the performance of this project;

• Any issues regarding export control have been mentioned by the sponsor; and/or

• The export of controlled technology or items is expected.

On the part of the research administrator staff, when reviewing a proposal submitted by a researcher, the statement of work and any draft agreement or other materials provided by the sponsor should be reviewed to see if they contain any language or terms that:

• Reference U.S. export regulations;

• Restrict non-U.S. entity participation based on country of origin;

• Prohibit access by non-U.S. citizens to project information;

• Prohibit the hiring of non-U.S. persons;

• Address the use of proprietary information;

• Address security concerns;

• Grant the sponsor pre-approval right on publications;

• Grant the sponsor a right to prepublication review for matters other than the inclusion of patent and/or proprietary sponsor information; or

• Allow the sponsor to claim resulting research information as proprietary or trade secret.

The research administrative staff should be trained to look for these kinds of provisions and contact research administrators immediately so that these issues can be addressed as early as possible and there will be minimal delay in securing the funding.

B. Encourage researchers to include a standard statement such as the following in the executive summary or abstract of their proposals:
This is a fundamental research project and, as such, the University shall be free to publish or disseminate the results of this research or otherwise treat such results as in the public domain, and it will conduct the research in accord with National Security Decision Directive 189 and the applicable export control implementing regulations.

This language should preferably be in the proposal itself, as cover letters are often separated or may not be done at all, as with electronic proposal submissions. If the researcher does not wish to include this statement, a discussion regarding the project should be triggered. Including such a statement should make sponsors aware of the institution’s position on publication and further support the exercise of the fundamental research exemption by the institution.

C. Designate an individual in research administration and/or your legal office to assist researchers and university administration in the identification and management assessment of export control matters. This “empowered official” should be the official contact person for both the governmental agencies as well as the researchers with respect to the treatment of all the issues raised above, and should also be closely supported by the outside counsel engaged for export control matters.

The institution should form a relationship with an outside counsel firm that is skilled at dealing with export control issues of the type that arise in a university setting, preferably in advance of a serious situation. While the use of such counsel is necessarily a function of budgetary constraints, an institution must, for its own protection, be willing to use outside counsel when necessary, as the penalties for non-compliance with the export control laws can be very severe and could include substantial monetary as well as criminal penalties. When export control questions do arise, they are generally complex as well as sporadic, and it is unrealistic to assume that any institution will have trained legal counsel on staff to handle these complex issues; however, they can be very helpful in supporting and managing the use of outside counsel. When interviewing for outside expertise, it is critical to ask if the attorney is familiar with the fundamental research exclusion for university “deemed exports” and if they know of National Security Decision Directive 189.

D. Establish a resource within the institution to assist the researcher and administrators in determining whether a project constitutes fundamental research (for deemed export purposes) or would fall under technologies covered by the
export control laws. In some cases, committee review may be helpful, as often administrators are not technical experts and the export control lists are lengthy and not user-friendly. A committee made up of a few faculty members “on-call” in the fields most often supported at your institution can be helpful when research is discussed and a determination is made whether the technology is covered under export control laws. Once this initial determination has been made, however, it is wise to consider confirming this finding with outside counsel, as the laws and lists are constantly being revised.

E. Establish a training/awareness program for researchers and research administrators, paying special attention to those departments or laboratories that are most likely to have projects in covered technologies, such as engineering, computer sciences, and space science. At the minimum, a website providing information both on the export control laws in general and the institutional policies and procedures should be developed and made available institution-wide. To the extent possible, information should be presented that is tailored to the needs of a department or laboratory and provide an opportunity for specific questions to be answered. Periodic reiteration and updates should also be part of your procedures.

F. Be prepared for the eventuality of dealing with an outside contractor/vendor (on a fundamental research project) that may possess information or technology relevant to the project that is subject to nondisclosure restrictions under the export control regulations. Unlike university-generated information or technology, which normally will be in the public domain and exempt from deemed export controls, a vendor’s data or material may be legitimately subject to controls. This is actually analogous to the situation where an outside contractor or vendor has to share proprietary information with a researcher. In such instances, where the restricted information or technology is substantially remote from the intellectually significant portions of the research, it may be possible to enter into nondisclosure agreements with eligible individuals (U. S. citizens or green cardholders) and thus protect the vendor’s material. This does not affect your ability to invoke the fundamental research exclusion, because the restriction is not on university-generated information but is placed on information or technology belonging to a third party.

G. In the ideal world, the fundamental research exemption would relieve institutions of any further concern regarding deemed
export controls and no sponsor would ever attempt to restrict publication. However, it is realistic to assume that specific projects may reach a level where they are reported to the designated official or office for handling export control matters and it is determined that some affirmative action should be taken at the institutional level to ensure that the institution and the researchers are in compliance with the export control laws:

- A laboratory space (as minimal as possible to accomplish the aspect of the research that is export-controlled) should be designated as an area in which special procedures must be followed. To that end, the research project as a whole should be reviewed to isolate those individual tasks within the research project that need to be subject to control.

- Logs should be maintained for managing access into and movement out of this designated laboratory space.

- Locks on any entry into this designated laboratory space should be installed or changed so that only personnel permitted on a project can gain access. [Note: if it is determined that the above measures are required, it is imperative to assure that janitorial, maintenance, locksmiths, police, and delivery/courier individuals with access to the space are included in this process. Most likely, institutional processes will need to be adjusted.]

- Computers must be secured and/or monitored so that export-controlled information is not inadvertently made available to individuals not permitted to receive it. The information systems staff should be engaged to identify the least burdensome but most effective use of passwords, certificates, or other means of securing computers used in a project that may contain export-controlled material, particularly when they are networked into the institution.

- Where students are engaged in a project, their identity, nationality, and level of access must be continually monitored during the course of the project, as the needs for these management measures may change when individuals they are intended to cover for compliance with the export control laws either leave or join the project.

- In addition to the training mentioned above in E, for each project there should be a training session in the
export control laws and why they apply to this project. Ideally, all participants involved in the project will sign a statement acknowledging that they have been briefed about these requirements and agree to comply with them.

Please note that these procedures are case-specific and should only be considered and/or implemented if it has been determined that such precautions are required for an institution’s compliance with the export control laws. Also, be aware that adopting any of these processes or procedures that affect university-generated information or technology (affecting “the conduct” of fundamental research) may taint the university’s overall research activities and preclude reliance on the fundamental research exclusion with regard to any such information or technology.

X. Recommendations for University of Arkansas Cooperative Extension Researchers

In order to protect the researcher and institution from sanction and to insure that research meets the fundamental research exemption, the following recommendations are made:

1. Publicly publish research results in a timely manner.
2. Identify projects with deliverables to foreign countries to your department and the Office of Sponsored Programs.
3. Do not accept publication controls or restrictions on research.
4. Do not provide citizenship, nationality, or visa status for project staff to sponsors (a violation of INS regulations and the federal Privacy Act).
5. Do not agree to background checks by sponsoring agencies.
6. Do not accept confidential information at international meetings or participate in presentations that have attendance restrictions.
7. Do not attend U.S.-based presentations that restrict foreign national participation.
8. Do not sign the Department of Defense “Military Critical Technical Data Agreement” as a condition of attending a conference.
9. Do not enter into side agreements that require withholding of research results.
10. Do not enter into confidentiality agreements that restrict dissemination of information.
11. Do not accept proprietary information from a commercial contractor that is marked “Export Controlled.”
12. Do not travel to conduct research or educational activities in the embargoed countries of Cuba, Iran, Libya, North Korea, Sudan, or Syria.
XI. References
1. Northwestern University: *Foreign Nationals in Research: U.S. Export Control Regulations in the University Setting.*