

Background

- Export controls have existed since the late 1700s
- In recent times, Universities have been exempted from export controls by specific language and consistent interpretation
- Very recent (1998) changes by Congress have caused problems and created confusion

Recent changes

- Congress changed responsibility for export administration from the Commerce Dept to the State Department
- The governing rules changed from the EAR to ITAR
- The subject has become extremely politically charged, therefore difficult

What's the problem?

- NASA began emphasizing ITAR compliance early this year. (Discovery AO, GIFTS contract)
- NASA employees directed to comply with ITAR and told they were on their own if they committed any violations
- Penalties: Up to \$1M and 10 yrs in the joint

Deja Vu all over again

- The export control issue seems to come up every decade or so.
- Most recently in mid 80s. Resolved by NSDD 189 (Reagan)
 - If it's sensitive, classify it
 - INS and State Dept handle immigration
 - Universities do research, not export admin.

ITAR Definitions

- **§ 120.17 Export.**

Export means:

(1) Sending or taking a defense article out of the United States in any manner, except by mere travel outside of the United States by a person whose personal knowledge includes technical data; or

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(4) Disclosing (including oral or visual disclosure) or transferring technical data to a foreign person whether in the United States or abroad; or

ITAR Definitions

- **§ 120.15 U.S. person.**

U.S. person means a person (as defined in § 120.14 of this part) who is lawful permanent resident as defined by 8 U.S.C. 1101(a)(20) or who is a protected individual as defined by 8 U.S.C. 1324b(a)(3). It also means any corporation, business association, partnership, society, trust, or any other entity, organization or group that is incorporated to do business in the United States. It also includes any governmental (federal, state or local) entity. It does not include any foreign person as defined in § 120.16 of this part.

- **§ 120.16 Foreign person.**

Foreign person means 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 organization, foreign governments and any agency or subdivision of foreign governments (e.g. diplomatic missions).

ITAR Definitions

Category XV – Spacecraft Systems and Associated Equipment

*(a) Spacecraft, including communications satellites, remote sensing satellites, scientific satellites, research satellites, navigation satellites, experimental and multi-mission satellites.

***Note to paragraph (a):** Commercial communications satellites, scientific satellites, research satellites and experimental satellites are designated as SME only when the equipment is intended for use by the armed forces of any foreign country.

(b) Ground control stations for telemetry, tracking and control of spacecraft or satellites, or employing any of the cryptographic items controlled under category XIII of this subchapter.

ITAR Definitions

(e) All specifically designed or modified systems, components, parts, accessories, attachments, and associated equipment for the articles in this category, including the articles identified in § 1516 of Public Law 105 – 261: satellite fuel, ground support equipment, test equipment, payload adapter or interface hardware, replacement parts, and non-embedded solid propellant orbit transfer engines (see also categories IV and V).

ITAR Definitions

§ 120.10 Technical data.

Technical data means, for purposes of this subchapter

(1) Information, other than software as defined in § 120.10(4), which is required for the design, development, production, manufacture, assembly, operation, repair, testing, maintenance or modification of defense articles. This includes information in the form of blueprints, drawings, photographs, plans, instructions and documentation.

ITAR Definitions

(f) **Technical data** (as defined in, § 120.10 of this subchapter) and defense services (as defined in § 120.9 of this subchapter) directly related to the articles enumerated in paragraphs (a) through (e) of this category, as well as detailed design, development, manufacturing or production data for all spacecraft, and specifically designed or modified components for all spacecraft systems. This paragraph includes all technical data, without exception, for all launch support activities (e.g., technical data provided to the launch provider on form, fit, function, mass, electrical, mechanical, dynamic, environmental, telemetry, safety, facility, launch pad access, and launch parameters, as well as interfaces for mating and parameters for launch.) (See § 124.1 for the requirements for technical assistance agreements before defense services may be furnished even when all the information relied upon by the U.S. person in performing the defense service is in the public domain or is otherwise exempt from the licensing requirements of this subchapter.) Technical data directly related to the manufacture or production of any article enumerated elsewhere in this category that is designated as Significant Military Equipment (SME) shall itself be designated SME. Further, technical data directly related to the manufacture or production of all spacecraft, notwithstanding the nature of the intended end use (e.g., even where the hardware is not SME), is designated SME.

ITAR Definitions

§ 120.11 Public domain.

Public domain means information which is published and which is generally accessible or available to the public:

- (1) Through sales at newsstands and bookstores.
- (2) Through subscriptions which are available without restriction to any individual who desires to obtain or purchase the published information.
- (3) Through second class mailing privileges granted by the U.S. Government.
- (4) At libraries open to the public or from which the public can obtain documents.
- (5) Through patents available at any patent office.
- (6) Through unlimited distribution at a conference, meeting, seminar, trade show or exhibition, generally accessible to the public, in the United States.
- (7) Through public release (i.e., unlimited distribution) in any form (e.g., not necessarily in published form) after approval by the cognizant U.S. Government department or agency (see also § 125.4(b)(13) of this subchapter);
- (8) Through fundamental research in science and engineering at accredited institutions of higher learning in the U.S. where the resulting information is ordinarily published and shared broadly in the scientific community. Fundamental research is defined to mean basic and applied research in science and engineering where the resulting information is ordinarily published and shared broadly within the scientific community, as distinguished from research the results of which are restricted for proprietary reasons or specific U.S. Government access and dissemination controls. University research will not be considered fundamental research if:
 - (i) The University or its researchers accept other restrictions on publication of scientific and technical information resulting from the project or activity, or
 - (ii) The research is funded by the U.S. Government and specific access and dissemination controls protecting information resulting from the research are applicable.

ITAR Definitions

§ 125.4 Exemptions of general applicability.

(a) The following exemptions apply to exports of unclassified technical data for which approval is not needed from the Office of Defense Trade Controls.

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(10) Disclosures of unclassified technical data in the U.S. by U.S. institutions of higher learning to foreign persons who are their bona fide and full time regular employees. This exemption is available only if:

(i) The employee's permanent abode throughout the period of employment is in the United States;

(ii) The employee is not a national of a country to which exports are prohibited pursuant to § 126.1 of this subchapter; and

(iii) The institution informs the individual in writing that the technical data may not be transferred to other foreign persons without the prior written approval of the Office of Defense Trade Controls;

ITAR impact on Universities

- Widely variable because:
 - NASA started “enforcing” about Feb 2000
 - Affects primarily spacecraft related information
 - Some have classified facilities (Hopkins APL, MIT Radiation Lab)
 - Some have purged non US persons (Utah SDL)
 - Some (Stanford) have lost or declined work

We are now gathering information

Activity to Date

- Gotten to know Ben Griffiths
- Included plan in OPUS proposal
- Telecon 8/28/2000 with NASA & other universities: response to congress
- Responded to IFR
- Drafted export control plan outline
- Sent letters to SSEC staff

SSEC Web

- Follow links to library and ITAR from SSEC
- ITAR web page contains almost everything we have collected so far.
- Start: the articles from the Stanford site on the history, background, and impact to Stanford.

Outline of our plan

- Requirements
 - Prevent illegal export & help assure compliance
 - Comply with ISO 9000 standard & SSEC QMS
 - Minimize impact on University environment
 - Facilitate getting our work done

Outline of our plan

- Identify what needs to be controlled
 - How determined and by whom
 - paper documents: stamp
 - Electronic information: limited access server
 - Identified by others (NASA, contractors)
- Who has access
 - US Persons per ITAR regulations
 - SSEC employees exempted by letter

Outline of our plan

- Store, record, identify paper information
- Establish and administer server for electronic information
- Establish rules for e-mail, telephone calls, meetings, etc.
- Establish and maintain training program
- Maintain appropriate records

What's Next?

- Complete definition of our system plan
- Continue research on what others are doing
- Consult with Export Control experts about our system plan
- Integrate the Export Control system into our SSEC QMS (ISO 9000)
 - Written, audited, verifiable, continuously improved

Language in current appropriations bill

Public Law 105-261 transferred responsibility for satellite technology export licensing from the Department of Commerce to the Department of State as part of the International Traffic in Arms Regulations (ITAR). An unfortunate and unintended consequence of that move has been that university-based fundamental science and engineering research, widely disseminated and unclassified, has become subject to overly restrictive and inconsistent ITAR direction. The result has been critical delays in NASA-funded research projects and has forced some universities to forgo participation in such projects. Such research traditionally has been excluded from export controls under the fundamental research exemption. The conferees find the current situation to be unacceptable and direct the Office of Science and Technology Policy to work jointly with the National Security Council, in consultation with the NASA Administrator and the Secretary of State, to expeditiously issue clarification of ITAR that ensures that university collaborations and personnel exchanges, which are vital to the continued success of federally-funded research, are allowed to continue as they had under the long-standing fundamental research exception in the Export Administration Regulations, which had governed export controls over this technology when the Department of Commerce had jurisdiction over it. The conferees expect this review to be completed within 120 days of enactment of this act. Upon the issuance of guidance, NASA shall ensure that university principal investigators are fully aware of their responsibilities.

The agreement was approved by both the House and the Senate on October 19, 2000. The President is expected to sign the final bill.

Summary

- ITAR is painful and does not fit in a University environment
- We hope it will go away, at least in part, but it won't for awhile
- In the meantime, we have to deal with it if we wish to continue participating in space based research