

Thomas Jefferson National Accelerator Facility
(Jefferson Lab)
Newport News, Virginia

EXPORT CONTROL PROCEDURES
Revision 2

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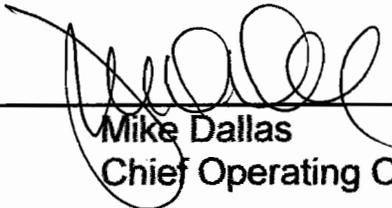
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GUIDELINES ON EXPORT CONTROL

Revision History		
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0	June 2001	Export Control Procedures
1	August 2004	Revised to change the update Bureau of Export Administration (BXA) to the Bureau of Industry & Security (BIS)
2	February 2007	General revision updating procedures to include eCustoms web-based tools and the contract change from SURA to JSA

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PART 1: EXPORT CONTROL

1.1 General. The Jefferson Science Associates, LLC are contractually responsible for establishing and maintaining an effective and efficient export control system for the Thomas Jefferson National Accelerator Facility (Jefferson Lab) to ensure compliance with all U.S. export control laws and regulations. Although a predominant portion of Jefferson Lab's mission is related to fundamental research and the communication of announced and developed technologies, which, in general, is exempted from export control regulations, Jefferson Lab has an obligation to assure that particular technologies, equipment, and information subject to export control regulations are exported in compliance with regulations.

1.2 What Are Export Controls? Export controls are designed to protect items and information important to the United States. They refer to government rules and regulations that govern the transfer of commodities, technologies, and software to non-U.S. entities or individuals, regardless of where or how the transfer takes place. Export controls serve multiple purposes from guarding our national security, to protecting our national economy, to supporting our national foreign policy. As a result, different government agencies have different rules and lists specifying who or what is considered export sensitive, or even where export controls apply. Export controls apply to activities ranging from discussions with foreign nationals to the transfer of equipment.

1.3 What Is An Export? Any item that is sent from the United States to a foreign destination is an export. "Items" include commodities, software or technology, such as clothing, building materials, circuit boards, automotive parts, blueprints, design plans, retail software packages and technical information.

How an item is transported outside of the United States does not matter in determining export license requirements. For example, an item can be sent by regular mail or hand carried on an airplane. A set of schematics can be sent via fax to a foreign destination, software can be uploaded to or downloaded from an Internet site, or technology can be transmitted via-mail or during a telephone conversation. Regardless of the method used for the transfer, the transaction is considered an export for export control purposes. An item is also considered an export even if it is leaving the United States temporarily, it is leaving the United States but is not for sale (e.g., a gift), or if it is going to a wholly-owned U.S. subsidiary in a foreign country. Even a foreign-origin item exported from the United States, transmitted or transshipped through the United States, or being returned from the United States to its foreign country of origin is considered an export. Finally, release of technology or source code subject to the EAR to a foreign national in the United States is "deemed" to be an export to the home country of the national under the EAR. Only exports determined to be "sensitive" are actually impacted by export controls.

1.4 Responsibilities. All Jefferson Lab employees and subcontractors are responsible for being aware of the export-control implications of their work and for ensuring that their Jefferson Lab activities are in compliance with U.S. export rules and

regulations. This means making sure that any required licenses or approvals are in place prior to exporting anything that is export controlled.

1.4.1 Export Control Officer. Is responsible for assessing and communicating to staff and users the requirements of U.S. export controls on Jefferson Lab activities, conducting Export Control Reviews on exports, obtaining proper licenses for exports, authorizing foreign shipments, and coordinating the annual export control awareness training. While the Export Control Officer manages the export control services, overall responsibility for Jefferson Lab's export control program remains that of line management. The Facilities & Logistics Manager administers Jefferson Lab's export control services in the Export Control Officer's absence.

1.4.2 Program and Project Line Managers. Have responsibility for Jefferson Lab's Export Control Program. They must consider the need for export licenses or other authorizations in their program/project planning and, if needed, make sure any export-control requirements are addressed well in advance of prospective shipping or transfer dates.

1.4.3 Everyone at Jefferson Lab. Is responsible for being aware of export control requirements and acting in accordance with established procedures as it relates to their Jefferson Lab activities.

1.4.4 Exporter. Is responsible for having the proper license or the license exception for item(s) before the export takes place and to initiate the process by contacting the Export Control Officer in Facility Management.

1.4.5 JLab Property Officer. Oversees Jefferson Lab Shipping & Receiving and ensures procedures are in place to ensure foreign shipments are properly reviewed, and documented before released for shipment. Also, ensures appropriate property procedures are followed such as property loan agreements.

1.4.6 Supervisors. Of new employees are required to ensure that new employees are aware that Jefferson Lab activities are subject to export control regulations.

1.5 Regulations that Govern. The Export Administration Act of 1979 was established to assure that, while encouraging and allowing international commerce, the well-being and national security of the U.S. are maintained. A number of different government agencies have export-control responsibilities, each agency having jurisdiction over specific types of technology or restricted trade. Those relevant to Jefferson Lab are the Department of Commerce, the Department of Energy, the Nuclear Regulatory Commission, and the Department of State.

1.5.1 Department of Commerce. Controls the export of all commodities, technologies, and software not regulated by another government agency. This is done through the Department's Bureau of Industry & Security (BIS), which maintains the Export Administration Regulations (EAR). An important component of the EAR is the

Commerce Control List (CCL), a section of the regulations that lists specific technologies and the countries to which those technologies may or may not be exported, along with any special restrictions or exceptions that may apply. Since Jefferson Lab is not a DOE National Nuclear Security Administration (NNSA) laboratory, BIS has primary jurisdiction over our exports. The Bureau regulates by the following criteria: the identity of the goods or technology to be exported; the country to which it is bound; the use to be made of the export; and the identity of the organization or individual that will receive the export.

1.5.2 Department of Energy. Controls the export of Special Nuclear Material production technologies and specific nuclear reactor and nuclear weapons technologies under the Atomic Energy Act of 1954 and various nonproliferation mandates.

1.5.3 Nuclear Regulatory Commission. Controls the export of certain nuclear technologies, equipment, and material under the Atomic Energy Act and the Non-Proliferation Act.

1.5.4 Department of State. Controls the export of “defense articles and defense services” under the International Traffic in Arms Regulations (ITAR). Items in this category to be export controlled are placed on the U.S. Munitions List and require specific authorizations from the State Department. The U.S. Munitions List includes items such as firearms, ammunition, explosives, military vehicles, spacecraft, military and space electronics, protective personnel equipment, guidance and control equipment; and other components related to military equipment.

1.6 Consequences of Violating Export Regulations. Jefferson Lab and/or the individual employee may be liable if violations occur. Personal consequences of significant violations can include paying duties, equipment seizure, questioning and searches, and delays if the appropriate documentation is provided or available.

1.7 Definitions and Nomenclature:

BIS – Bureau of Industry & Security, an agency within the Department of Commerce which has jurisdiction over the export and reexport of “dual-use” items and is responsible for advancing the national security, foreign policy, non-proliferation and economic interests of the United States.

CCL – Commerce Control List. A list of items under the export control jurisdiction of the Bureau of Industry and Security, U.S. Department of Commerce.

Commodity – Any article, material, or supply except technology and software. (i.e., computers, photomultiplier tubes, tools).

CRADA – Cooperative Research and Development Agreement. A written agreement between one or more non-federal parties under which the

government, through its laboratories, provides personnel, facilities, equipment, or other resources with or without reimbursement (but not funds to non-federal parties)

Customs Broker – Person who clears imports through U.S. Customs.

Deemed Export – Any communication of technical data to a foreign national, whether it takes place in the United States or abroad. Technical information (data) provided to a foreign national verbally, by mail, by telephone or facsimile, through visits or workshops, or through computer networking is an export. If a foreign national observes equipment or a process, it may constitute an export of technical data, if significant details are revealed.

DOC – U.S. Department of Commerce

DOE – U.S. Department of Energy

Dual Use – Commodities, technology and software that have both commercial and military or proliferation applications. While this term is used informally to describe items that are subject to the EAR, purely commercial items are also subject to the EAR.

EAR – Export Administration Regulations, Regulations set forth in parts 730-774, inclusive, of Title 15 of the Code of Federal Regulations.

ECCN – The Export Control Classification Number categorizes items based on the type of commodity, technology or software and their technical parameters. It is an alphanumeric designation (i.e., 1A984 or 4A001) used in the Commerce Control List (CCL) to identify items for export control purposes.

End-Use – A detailed description of how the ultimate consignee intends to use the commodities being exported.

End-User – The person abroad that receives and ultimately uses the exported or reexported items. The end-user is not a forwarding agent or intermediary, but may be the purchaser or ultimate consignee.

Export Control Review – Refers to the process of determining if a license is required for an export, to include “Deemed Export.” Facts are researched and taken into account to determine what is being exported, where the export is going, who will receive the item, and what is it being used for.

Exporter – The Jefferson Lab employee who has the authority to obligate JLab funds and signs the Pro Forma Invoice as the principal party accepting all responsibilities that the shipment is for official JLab business.

Fundamental Research – Basic and applied research in science and engineering, the information resulting from which is ordinarily published and shared broadly within the scientific community, as distinguished from proprietary research and from industrial development, design, production, and product utilization, the results of which ordinarily are restricted for proprietary or national security reasons. (NSDD-189, section II, Policy)

High Risk Property – Property that, because of its potential impact on public health and safety, the environment, national security interest, or proliferation concerns must be controlled and disposed of in other than the routine manner. Categories of high risk property are automatic data processing equipment, especially designed or prepared property, export controlled information, export controlled property, hazardous property, nuclear weapon components or weapon-like components, proliferation sensitive property, radioactive property, special nuclear material, and unclassified controlled nuclear information.

License Exception – If a license is required for a transaction, a License Exception may be available. License Exceptions, and the conditions on their use, are set forth in Part 740 of the EAR. See Part 2.3.2 for examples.

MTOPS – Maximum Theoretical Operations per Second

MOU – Memorandum of Understanding (MOU) Personal Property Agreement. See the Personal Property Procedures Manual for more information.

Reexport – The shipment or transmission of an item subject to the EAR from one foreign country (i.e., a country other than the United States) to another foreign country. A reexport also occurs when there is “release” of technology or software (source code) subject to the EAR in one foreign country to a national of another foreign country.

SED – Shipper’s Export Declaration. A document used for compiling the official U.S. export statistics for the United States and for export control purposes. The regulatory provisions for preparing, signing, and filing the SED are contained in the Foreign Trade Statistics Regulations (FTSR), Title 15 Code of Federal Regulations (CFR) Part 30.

SOTR - Subcontracting Officer’s Technical Representative - A Jefferson Lab representative who is authorized by the Subcontracting Officer to monitor, inspect, accept, or reject materials or services furnished under a subcontract. The SOTR does not have the authority to modify, change, or deviate from the terms of the subcontract.

Visual Compliance – eCustoms systems and services are export control web based on-line tools to assist in export control compliance using Denied Persons Screening, Goods Classification, and Export License Determination.

PART 2: EXPORT CONTROLLED ACTIVITIES AND CATEGORIES

2.1 Potential Export Control Concerns. The following materials and range of activities might pose potential export-control concerns. As you can see, exporting is not limited to transferring a document or a piece of equipment.

- Direct exports; CRADA's; Work for Others; certain contracts; and donations, sales, or transfers of surplus equipment.
- International and domestic collaborations and technical exchange programs, including lab-to-lab programs.
- Publications, such as conference papers, abstracts, and journal articles.
- Written materials in general, ranging from memos and letters to trip reports and work notes.
- Presentations at conferences and other public meetings, both domestic and foreign.
- Visits and assignments by foreign nationals to Jefferson Lab.
- Foreign travel by Jefferson Lab employees and subcontractor personnel.
- Conversations outside of Jefferson Lab; conversations with non-U.S. citizens anywhere.
- Specifications included in proposals or requests for quotations.
- Other types of communication – such as telephone calls, faxes, emails, and the placement of Jefferson Lab materials on the World Wide Web.

2.2 Exports Not Subject to Export Controls. Many exports to non-embargoed, non-sensitive countries qualify for license exceptions, meaning that the export can occur without a validated license. Work performed at Jefferson Lab that is subject to the EAR falls into these categories. The following paragraphs provide examples of areas generally excepted from export control.

2.2.1 Fundamental Research. The EAR has certain exemptions that apply to fundamental research that is ordinarily published in open literature and to technology and software arising from fundamental research. Fundamental research can be distinguished from proprietary research and from industrial development, design, production, and product utilization in that the results of the latter are ordinarily restricted for proprietary or national security reasons. Research conducted at a university is usually considered to be fundamental research. Certain corporate-sponsored research may not qualify. In a CRADA or Work For Others agreement, the sponsor may have rights to the results of the research. This in some instances could make the research propriety, and thus not within the definition of fundamental research.

2.2.2 Published Information and Software (Publicly Available) Information is “published” when it becomes generally accessible to the interested public in any form, including the following. Some U.S. origin encryption software remains subject to the EAR, even when publicly available in the U.S.

- Publications in periodicals, books, and print, electronic, or any other media available for general distribution, either free or at a price that does not exceed the cost of reproduction and distribution.
- Ready availability at public and university libraries.
- Patents and open patent applications available at any patent office.
- Release at an open conference, meeting, seminar, trade show, or other open gathering.

2.2.3 Education Information. released by instruction in catalog courses and associated teaching laboratories of academic institutions.

2.3 Export Categories. BIS has classified commodities and technologies into essentially two groups: (1) those controlled under the EAR and (2) those not controlled under EAR. BIS estimated 95% of the commodities leaving the U.S. are not controlled. The controlled items can be shipped under one of the following three different categories. Many Jefferson Lab commodities can be exported under a license exception or are classified no license required.

2.3.1 No License Required (NLR). For items subject to the EAR, many of the commodities are identified under a miscellaneous commodity classification known as EAR-99 and are classified as no license required. These commodities range from medicines and medical supplies to automobiles and trucks.

2.3.2 License Exception. Although the commodity is controlled, a limited dollar value or amount, or other special circumstances, may permit it to be exported with a license. No written authorization is required for using a license exception. Common exceptions are as follows:

- LVS - Limited Value Shipment
- GBS - Shipments to Country Group B countries
- CIV - Civil end-users
- TSR - Technology and software under restriction
- CTP - Computer
- KMI - Key management infrastructure
- TMP - Temporary imports, exports, and reexports
- RPL - Serving and replacement of parts and equipment
- GOV - Governments, international organizations, and international inspections under the Chemical Weapons Convention
- GVT - Gift parcels and humanitarian donations
- TSU - Technology and software – unrestricted
- BAG - Baggage
- AVS - Aircraft and vessels
- APR - Additional commodities and software
- ENC - Encryption commodities and software
- AGR - Agricultural commodities

2.3.3 Validated License (VL). If no exemption applies, no exception is available, or a general prohibition applies, a license application is required.

2.4 Denied Persons. JLab may not participate in an export or reexport transaction subject to the EAR with a person whose export privileges have been denied by the BIS. A list of those firms and individuals whose export privileges have been denied is reviewed using eCustoms Systems & Services.

PART 3: JEFFERSON LAB EXPORT CONTROL PROCESS

3.1 Exporter. If you are planning to ship or hand carry commodities, software, and/or technology, out of the U.S. you must present appropriate documentation to the JLab Export Control Officer 30-days before the estimated shipping date. This will allow sufficient time to conduct an export control review of the export item(s), prepare all necessary shipping documents, and coordinate transportation arrangements if necessary. If an export requires a Department of Commerce license, it may take up to 90 days to obtain a Department of Commerce license.

3.2 Export Control Review. Provide a properly filled in *Proforma Invoice*, *Memorandum of Understanding* (if required by JLab legal counsel), and a properly filled in *International Property Agreement* to begin the Export Control review process. The review may be performed by the Export Control staff or be referred by the staff to a subcontractor to document the review. The following JLab staff identified at Attachment "B" can assist in preparing various elements of a shipment out of the U.S.:

- Export Control Officer/Security Administrator – Advisory assistance on the review process and how the shipment will be released.
- Property Officer/Property Coordinator – Guidance on what is required for an International Property Agreement in order to receive favorable consideration and approval by the DOE TJSO official.
- JSA Legal Counsel – Guidance on what is needed in the *Memorandum of Understanding* explaining who, what, when, and why the commodity, technology, or property is being sent out of the U.S.
- Shipping & Receiving – Guidance on shipping methods, packaging, and *Proforma Invoice* information.
- Chief Technology Officer – Advisory assistance in the reason for shipping controlled property and technology out of the U.S.

3.2.1 Is the Export Subject to EAR? To help determine if the commodity or technology is subject to the EAR, bring identifying data and technical specifications to the Export Control staff. They will run the specification in Visual Compliance web utility to assist.

3.2.2 Is the Export Classified under an ECCN on the CCL? The Export Control staff will assist to determine ECCN or CCL identification. Invoices, technical specifications, and other documents that describe in detail the noun nomenclature, manufacturer, model number, part number and/or other technical data will assist in identification of the ECCN. There are 10 categories under which commodities and technologies are classified in the CCL:

- 0 – Nuclear materials, facilities, and equipment
- 1 – Materials, chemicals, microorganisms, and toxins
- 2 – Materials processing

- 3 – Electronics
- 4 – Computers
- 5 – Telecommunications and information security
- 6 – Lasers and sensors
- 7 – Navigation and avionics
- 8 – Marine Equipment
- 9 – Propulsion systems, space vehicles, and related equipment

3.2.3 Does a General Prohibition Apply? If yes, no export is permitted without a license. There are 10 general prohibitions. They include prohibitions of export controlled items (items with an ECCN) to listed countries with restrictions; export to Denied Persons; Prohibited End Uses or End Users; and Embargoed Destinations. Denied Persons and Prohibited End Uses and Users can be checked with the Export Control Officer using Visual Compliance web based utility.

3.2.4 Is there a License Exception Available? The Export Control staff help determine if there is an ECCN and no general prohibition, by looking at the CCL and Country Chart. If there is no “X”, no license is required. If there is a “X”, is there a license exception available? If no license exception is available, a license application will be submitted.

3.2.5 Outside Support. If the Export Control Officer can not make a determination of the licensing requirements, the case will be referred to the JLab subcontractor for classification assistance or potentially to submit for a DOC/BIS advisory opinion by filling out request forms from DOC/BIS or via electronic submission, Simplified Network Application Process (SNAP).

3.2.6 License Application. The Export Control Officer will prepare the required application request for all the governmental agencies involved.

3.3 Documentation. The Export Control Officer will have the supporting documentation prepared that describes the decision process used to classify a commodity and the necessary shipping documents including a Shipper’s Export Declaration (SED). A SED is required when any one of the following conditions apply to the export:

- The export item requires a license in accordance with the EAR,
- The export item cost/value is greater than or equal to \$2,500 per item, or
- The value of like export items (as categorized per U.S. Census Bureau’s Schedule B) for a single shipment is greater than or equal to \$2,500.
Schedule B can be found at
www.census.gov/foreign-trade/schedules/b/index.html.

For example: A shipment of a computer with a cost of \$2,500 requires a SED. A shipment of 3 software package (with the same Schedule B number) valued at \$1,000 each for a total of \$3,000 requires a SED.

3.3.1 Inventory. The Export Control Officer will maintain an inventory of items that an Export Review has been conducted.

3.4 Shipped Exports. The exporter completes the *Authorization For Shipment of Property Shipping Order* and *Proforma Invoice* (itemizes the shipment). If property is being loaned to international collaborators a properly executed *Memorandum of Understanding* and supporting *International Property Agreement* must accompany the shipping documents. If the Export Control Review is not complete prior to delivery of the shipment to Shipping and Receiving, the shipment processing time will include the Export Control Review. The Shipping Authorization is reviewed by the Material Services Coordinator and approved by the Export Control Officer after all necessary Export Control documentation including SED's and Licenses is complete.

3.5 Hand-Carried Exports. The exporter should treat hand-carried items as if they are to be shipped. Complete the *Authorization For Shipment of Property Shipping Order (SURA Form 29)*, *Proforma Invoice* (itemizes the shipment), and, if required, a *MOU* and *International Property Agreement* and provide to the Export Control Officer. The Export Control Officer will complete the Export Control Review and provide the required documentation that should be hand-carried with the export item(s). Hand-carried exports should be marked Jefferson Lab property and have the original SED, if required, for presentation to customs to prevent delays.

3.6 Dual Use Items. Facility Management maintains a list of Jefferson Lab property that is designated as High Risk for property inventory purposes, and is identified by JLab Property Tag in the official property system. In addition, the Export Control Officer in collaboration with the Chief Technology Officer maintains a list of commercial commodities for Deemed Export purposes. Many of the items are not tagged because they are components embedded in larger systems, but are tracked to determine the extent of controlled commodities and technologies at the laboratory.

3.7 Records. On the basis of Commerce and Energy Department requirements, the supporting documentation records must be kept for five (5) years from the date of export. If the export is to be returned under a MOU agreement, the records must be kept for five (5) years from the date the item(s) is returned to Jefferson Lab. Jefferson Lab Shipping and Receiving keeps the records along with the SED and the shipping manifest.

3.8 Training. The JLab Security Awareness Briefing integrates key topics involving people, property, and information and is administered initially at employment and annually thereafter. The Export Control and Unclassified Foreign Visits and Assignments modules cover current issues and remind staff of the legal consequences of not following U.S. Export Control laws.

APPENDIX A

Useful Web Sites for Export Control

- Department of Commerce Export Administration Regulations -
http://www.access.gpo.gov/nara/cfr/waisidx_03/15cfrv2_03.html#700
- Department of Energy Regulations 10 CFR Part 810 -
http://www.access.gpo.gov/nara/cfr/waisidx_03/10cfr810_03.html
- Department of State International Traffic in Arms Regulations – 22 CFR 120-130 -
http://www.access.gpo.gov/nara/cfr/waisidx_03/22cfrv1_03.html
- Militarily Critical Technologies List -
<http://www.dtic.mil/mctl>
- Missile Technology Control Regime Guidelines -
<http://www.armscontrol.org/documents/mtrc.asp>
- Nuclear Regulatory Commission 10 CFR 110 -
<http://www.nrc.gov/NRC/CFR/index.html>
- Nuclear Suppliers Group Guidelines – INFCIRC 254 Parts I and II -
<http://www.iaea.org/worldatom/Documents/Infciircs/bynumber.shtml>
- Nonproliferation Treaty Exporters Committee (Zangger) INFCIRC 209 -
<http://www.iaea.org/worldatom/Documents/Infciircs/bynumber.shtml>
- Wassenaar Arrangement Control Lists -
<http://www.wassenaar.org>
- Australia Group Control List -
<http://www.australiagroup.net/en/agcomcon.htm>

APPENDIX B

Contacts for property being shipped out of the U.S.

