

CASE STUDIES

See Handout

Scenarios and Hypotheticals

(from the “Universities and Export Controls” Brochure prepared by the Council on Governmental Relations of the Association of American Universities, online at www.cogr.edu Reprinted with Permission for the ECCO Spring Seminar 2004)

In analyzing the scenarios in the following cases, the following questions should guide the analysis:

Q1. Does the award contain any terms or conditions that would restrict the disclosure of dissemination of the research results?

Q2. Are there any restrictions on access to or dissemination of information the sponsor or others will furnish for this project?

Q3. If the answer to 1 or 2 is yes, does the research project fall under one of the export controlled technologies?

Q4. Does this project involve training specific personnel for a special purpose? If so, could it be considered a defense service? If yes, how can you proceed?

Q5. Will the university need to apply for an export license?

While the analysis and comments that follow the scenarios below do not specifically follow this format, these questions have been considered in analyzing each case.

Case #1 (Publication)

Scenario

Your Principal Investigator (PI) is doing basic research in the field of remote sensing. Your institution receives a research contract from DOD as well as a subcontract from another university in support of this work. Both agreements incorporate the following clause:

DFARS 252.204-7000 Disclosure of Information.

As prescribed in 204.404-70(a), use the following clause:

DISCLOSURE OF INFORMATION (DEC 1991)

(a) The Contractor shall not release to anyone outside the Contractor's organization any unclassified information, regardless of medium (e.g., film, tape, document), pertaining to any part of this contract or any program related to this contract, unless--

(1) The Contracting Officer has given prior written approval; or

(2) The information is otherwise in the public domain before the date of release.

(b) Requests for approval shall identify the specific information to be released, the medium to be used, and the purpose for the release. The Contractor shall submit its request to the Contracting Officer at least 45 days before the proposed date for release.

(c) The Contractor agrees to include a similar requirement in each subcontract under this contract. Subcontractors shall submit requests for authorization to release through the prime contractor to the Contracting Officer.

(End of clause)

[DAC 91-2, 57 FR 14996, 4/23/92, effective 4/16/92]

Analysis and Comments:

This clause could restrict publications. There is no reference to receiving restricted information. The research to be performed falls under ITAR Category XV. The project does not involve providing a defense service. If the restrictive publication clause is not modified, a license from the State Department would be required to export the technical data.

The publication clause seeks to control any and all **unclassified information, regardless of medium**, that the government believes may be sensitive and inappropriate for release to the public. If accepted without substantive changes, the research your PI is conducting would no longer qualify as fundamental research and would therefore not fall under the exemption afforded under export control laws. If this clause is accepted as is, any transmission of the data (oral, written or visual representation) generated by the project or the final results to any foreign national will be a deemed export and may very well require a license from the State Department before making a disclosure. If this clause is accepted as is, the PI will have to get prior approval to publish an article. Although a license would not then be required to publish that particular article in open publication, all other disclosures of technical data would still be restricted. In short, this clause should not be accepted.

In negotiating modifications to the clause you may point out that the clause does not comply with National Security Decision Directive (NSDD) 189 or the FAR data rights clauses for universities and colleges. NSDD 189 states, as a matter of federal policy, that papers or other publications resulting from unclassified contracted fundamental research

are exempt from the prepublication controls. NSDD further states that when national security requires controls on publication, the mechanism that must be used to restrict the dissemination of information generated during federally-funded fundamental research in science, technology and engineering at colleges, universities and laboratories is classification. In other words, NSDD 189 stands for the proposition that **no restrictions may be placed upon the conduct or reporting of federally-funded fundamental research that has not received national security classification, except as provided in applicable U.S. Statutes. (NSDD189).**

In negotiating the change, you should also note that NSDD 189 has been codified in the FAR 27.404, Basic Rights in Data Clause. The first sentence of 27.404(g)(2) states:

(2) In contracts for basic or applied research with universities or colleges, no restrictions may be placed upon the conduct of or reporting on the results of unclassified basic or applied research, except as provided in applicable U.S. Statutes.

And in the first sentence of 27.404 (g) (3):

(3) Except for the results of basic or applied research under contracts with universities or colleges, agencies may, to the extent provided in their FAR supplements, place limitations or restrictions on the contractor's right to use, release to others, reproduce, distribute, or publish any data first produced in the performance of the contract, including a requirement to assign copyright to the Government or another party, either by adding a subparagraph (d)(3) to the Rights in Data--General clause at 52.227-14, or by express limitations or restrictions in the contract.

At least one university negotiated the following modification:

242-204-7000 Release of Information (Dec 1991) Deviation

The contractor shall be free to publish, permit to be published, or distribute for public consumption, any information, oral or written, concerning the results of conclusions made pursuant to performance of this contract; provided, however, that it shall provide copies of any such publication or release of information to the government's contracting officer for review and comment at least thirty (30) days prior to any such release.

There are two important elements of any pre-publication review clause: (1) establish a precise time limit for the government review and, (2) limit the scope of the review to a review for the inclusion of (a) classified information, in the case of the government, and (b) to the information that could jeopardize patent rights and clearly identified proprietary or confidential information of the sponsor's, in the case of private industry (provided none of the proprietary information is marked by industry as export controlled).

Case #2 (Publication)

Scenario

You are reviewing a contract from a federal agency to conduct research on new tools for material processing that includes the following clause:

The Government recognizes that the result of a university research project may be publishable. The Government agrees that the institution's employees engaged in the project shall be permitted to present at symposia and national or regional professional meetings, and to publish in journals, theses, dissertations, or otherwise of their own choosing, the methods and results of the project(s).

However, the methods and results of this project, including any designs, equipment or concepts first produced through this research project, shall be considered as "Administratively Confidential", prior to Government review. Any publication or presentation of any designs, equipment or concepts based on information resulting from the tasks covered by this contract will be subject to advance review and comment by the Government's Contracting Officer, in consultation with the designated COTR, before publication or dissemination, to determine accuracy of factual data and interpretation, and fair access to results for the program participants.

Analysis and Comment

There are no restrictions on information to be received from the sponsor or others for use on this project, nor does it involve training of specific personnel for a special purpose.

This technology is covered by export controls – it falls under EAR Category 2.

In deciding if the award contains any terms or conditions that restrict the disclosure of dissemination of the research results, institutions may reach different conclusions.

Some institutions may conclude that the clause does not remove the information from the public domain because the label "administratively confidential" does not constitute a publication restriction once the COTR completes the review and does not give the COTR approval rights. As a result, the fundamental research exclusion is still available and no license would be required.

Other (perhaps more cautious) institutions may conclude the clause does operate as a restriction on the dissemination of or access to information because the COTR has a right to review a proposed publication "to determine accuracy of factual data and interpretation" and "fair access to results". With all work produced (even concepts) categorized as "administratively confidential" and comments addressing even the

interpretation of the results, the cautious person would read this as crossing the line. In this case a license would be sought if the clause was accepted.

In any event, this is an ill-conceived second paragraph. Regardless of export control issues, most institutions would see this as imposing possibly unacceptable restrictions on the researcher's ability to disseminate research results and would seek to have the language modified whether or not export regulations were invoked. The sentence referring to data and results being "administratively confidential" should be deleted, the review should be limited to review for inclusion of classified or proprietary information and, a time limit for the review should be established (normally 30-60 days).

Case #3 (Publication)

Background

A significant source of export control problems for universities working within the fundamental research exclusion arises when contractors, suppliers, and vendors are needed to build or fabricate an experimental or scientific apparatus. These companies may develop or generate data and technology that belongs to them, that is implicated in the research, and which is indeed export controlled. These companies may have to obtain a license from State or Commerce before disclosing their data or technology to university researchers because foreign nationals may be involved. Moreover, they may wish to impose restrictions on publication that are so broad they include even university-generated information, undermining the university's ability to use the "fundamental research" exclusion from deemed export controls. Two scenarios deriving from this situation are treated below:

Case Study 3a

Scenario

Your institution has received a subcontract agreement from a small company, which has gotten SBIR funding from the Army. The Principal Investigator, from in your mechanical and aerospace engineering department, will be helping the company develop and fabricate components for ground effect machines (GEMS). The company will need to provide its export controlled data (called "technical data" in the ITAR) in order for your institution to be able to assist with the effort, even though neither party expects that the university team will be involved in the manufacturing of the final product to be delivered to the Army by the company. Several of the students and post docs who will be working on the project are foreign nationals, as is the Principal Investigator, who is British. The agreement contains the following clause:

H-6 Dissemination of Information

a. There shall be no dissemination or publication, except within and between the Contractor and any subcontractors, of information developed under this contract

or contained in the reports to be furnished pursuant to this contract without prior written approval of the COR.

Analysis and Comments

There is a publication approval requirement as an award condition. Because the restriction on publication pertains to “information developed under this contract,” it will capture university-generated data that otherwise would be (presumably) in the public domain, in addition to information provided to the university by the company (which has every right to restrict disclosure of its own information, which is not in the public domain to begin with). The sponsor is providing “technical data,” a term of art used in the ITAR to indicate information that is subject to ITAR control, to the university research team.

Nominally this is a fundamental research project (limited information, but it appears to be of intellectual interest to the university, which is in the business of expanding knowledge rather in the manufacturing business). However, even if it is fundamental research in terms of being “basic and applied research in science and engineering,” it falters on the ground of being subject to disclosure restrictions. Because of the publication restrictions that will apply to university-generated as well as to company-provided information, the subcontracted work to be undertaken by the university is not eligible for treatment as “fundamental research.” GEMS falls under ITAR Category VIII. It does not appear that this project is a defense service, as it does not call for training on the final product the company is delivering to the Army.

While it is possible that your faculty may not be directly performing any ITAR related work, the project team will have to be given access to ITAR data and this then requires that the project be controlled. If the university decides to accept the award, licenses will be needed or all foreign members of the university team. However, the university should work through the industry partner to have the prime sponsor provide the appropriate publication language that spells out the review process, and the maximum delays that could be imposed. See Case Study 3b. Ideally your industry collaborator should concur with your institution’s request for improved publication language. In cases where the industry sponsor will not support the case, it may be necessary to deal with the federal sponsor directly.

Case Study 3b

Scenario

Assume the same set of facts just described above. However, the clause that is to be used in the subcontract reads as follows:

H-6 Dissemination of Information

a. There shall be no dissemination or publication, except within and between the Contractor and any subcontractors, of information furnished by the Company pursuant to this contract without prior written approval of the COR. Information

that is subject to this clause shall be clearly marked as either proprietary or export controlled information.

Analysis and Comment

In this situation, the information generated by the university will not be subject to disclosure restrictions; that is, the university may treat its information as being in the public domain and may disseminate to and among the researchers and others. Because the research involves basic and applied research in science and engineering in the public domain, the project constitutes "fundamental research" and will not be subject to deemed export restrictions.

However, some protection will have to be provided for the company-furnished information that is to be used in development and fabrication of the devices. Assuming that the information that the company wishes to keep restricted does not go to the intellectually significant portions of the research, but rather is related to ancillary matters such as widget size and bolt hole placement, it should be possible to enter into nondisclosure agreements about the export-controlled information just as it is possible to enter into such agreements with regard to proprietary information. The difference will be that only "eligible" individuals may receive the information. That is, they must either be citizens or permanent resident aliens (green card holders). Such status is necessary to be employed within the United States, so it is likely that many of the eligible individuals will be employees of the university. Given the nature of the information subject to the restrictions, none of the excluded researchers will be disadvantaged in their academic endeavor by not having access to this information - which means that any Openness in Research policy of the university will not be violated.

Unfortunately, that is not the end of it. There may be an issue with regard to contractor furnished-information or technology that might be visually accessible to ineligible persons during actual fabrication. It is at this interface stage that the company may determine that it should get a license to disclose the information or technology to foreign researchers. It is the company that has to obtain the export license because it is the company's export controlled information or technology that will be disclosed.

It is important to negotiate with the company language that will ensure that university-generated information is not made subject to the export regulations by language that is too inclusive. This will protect the university's ability to invoke the fundamental research exclusion. Additionally, it is imperative to get language in the clause placing the burden on the company to clearly mark all export controlled (and proprietary) information and technology that it intends to provide to you. The university should not have to guess whether company-provided items or data are export controlled.

Case #4 (Publication)

Scenario

A research proposal was submitted to a government agency for a study related to a new method of baggage screening at airports for detection of explosives. The proposed agreement provided by the agency contained a requirement that the final report have a legend on the cover restricting dissemination to agencies of the U.S. government. Other publications of the research were not subject to this requirement; the contract specifically stated that the university had no restrictions on technical publications or any restriction on the use of foreign nationals in the research program.

Analysis and Comment

This clause imposes a restriction on the dissemination of the final report. However, it does not restrict the disclosure of the research results.

There are no restrictions on the information to be received by the sponsor.

A determination was made initially by the institution that the technology did not fall under covered technologies in either list. However, on further investigation with the assistance of outside counsel requested to confirm this finding, it was discovered that there is a current disagreement between the Department of State and Department of Commerce regarding responsibility of jurisdiction over explosive detection equipment and related technology. The State Department reads Categories IV(a) and IV(c) to extend their jurisdiction over ALL explosive detection equipment and technology. Despite this position, the Commerce Department issued regulations on April 3, 2003 that it controlled certain explosive detection devices and technology. Outside counsel advised the university to conduct itself as if it were subject to export controls.

This project does not involve training of specific personnel for a special purpose, therefore, no defense service is being provided.

Will the university need to apply for an export license? In this case, the determination was made that, even under the new regulations, a license was not needed under the EAR. A license would be required under the ITAR, but no license was required at this time because there were no foreign nationals that were involved in the project; all researchers were either U.S. citizens or held green cards. In the event that a researcher is brought into the project for which an export license would be required, the university will do so.

Because no foreign nationals are involved, no license is needed. Depending upon the resolution of the conflict between Commerce and State, a license may be required in the future which would, among other things, require segregation of the laboratory, computers, etc.

This is a difficult case because there is not universal agreement that the dissemination restriction on the final report document destroys the fundamental research exemption. Some take the position that it crosses the line and others that it does not since the restriction applies only to that document, and not on the data itself or other publications.

Case #5 (Foreign Nationals)

Scenario

Your university receives an Army research contract for work on software designed for military applications. The project team includes several foreign national graduate students, including one from Belarus. The contract contains the following clause:

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 274a.2 shall be submitted to the Contracting Officer at least two weeks prior to the foreign national's performance for review and approval. Awardees not employing foreign nationals in performance of any resultant contract may disregard this clause.

Analysis and Comments

The award contains a restriction to the project by foreign nationals. There is restricted information received from the sponsor. The work involves ITAR controlled technology. No training is involved.

Take 1:

The award clearly contains an access control. If the university decides to accept the award with the clause as stated, the fundamental research exclusion will not apply. Most institutions do not have formal written policies covering the participation of foreign nationals in university activities. Often they may have operational policies that forbid or

strongly discourage restrictions based on nationality. A further difficulty is that disclosure of employment eligibility documentation to government contracting officers may violate institutional privacy policies. The U.S. code provision cited in the clause only requires employers to make the employment verification form available for inspection by the Immigration and Nationalization Service, and the Department of Labor.

For these reasons many universities may try to negotiate or refuse to accept the language of the clause as written. Often universities may agree to accept language requiring notification of any foreign nationals performing under a government contract. Arguably a notification requirement does not rise to the level of a specific access control. However, recently the Army has been insisting on the version of the clause as shown above.

Take 2:

This clause does not restrict access to information or publication. However, even if an institution does not have a policy regarding acceptance of agreements with restrictions on participation by foreign nationals, this clause should be negotiated out for the following reasons; (1) the university should not discriminate based on nationality, (2) it conflicts with other U.S. regulations regarding disclosure of eligibility documents, and (3) the PI should be able to employ whomever they deem as competent for the project. Since the review is limited to employment eligibility documentation, it may not, in itself, move the project out from out under the fundamental research exemption. One could argue that the even though the sponsor may be able to deny a foreign national from **working** on this particular project, there are **no restrictions** on the access to or dissemination of the **research results** and, therefore, the project does remain under the fundamental research exemption.

Case #6 (Publications)

Scenario

Your PI's project is being funded by a subcontract from another university who is in turn a subcontractor to a private company being funded by DoD. The research at both institutions involves rotorcraft. The following (lengthy) publication clause is contained in your agreement received from the other university:

Release of Information

The following provision applies for universities under this Contract.

The Company's review prior to public release is required for the following, whether unclassified contracts/instruments or classified:

(1) Procurement instruments and solicitations (including grants, cooperative agreements, etc.), abstracts, papers, technical reports, articles, point papers, news releases, short items to be included in other publications, academic papers on workload subject matter, speeches, briefings, media presentations, training materials, munitions cases, environmental impact statements, and other forms of information, including film, audio tapes and video cassettes which could divulge non-releasable, unclassified information.

(2) Information posted on electronic bulletin boards, passed over unsecured electronic mail systems, or posted in a manner to the World Wide Web.

Each party agrees to confer and consult with each other prior to publication or any other disclosure of information relating to efforts under the contract/instrument. Prior to any publication or disclosure, each will offer the other party ample opportunity to review the proposed publication or disclosure, to submit objections and to file application letters for patents in a timely manner. The contractor shall allow a minimum of sixty (60) days for completion of this process.

Your organization will provide the Company with any public release of information on this contract/instrument by forwarding the material to be released and a transmittal letter identifying the contract/instrument number and the specific information to be released, the medium to be used, the purpose of the release, the cognizant Science Officer, Technical Monitor or Subcontracting Officer's Representative to the address below.....

Analysis and Comments

The award does contain a potential publication restriction. No restriction on information received from the sponsor. The research is falls under ITAR Category VIII, Aircraft and Associated Equipment. Training is not involved.

Will the institutions (s) need to apply for an export control license? Probably not. This case demonstrates the awkward situation where several layered entities are flowing down a publication clause that is far less than ideal. This clause does not require an out and out approval for publication, but it covers so much territory that there is room for the interpretation that accepting this clause could jeopardize exercising a fundamental research exemption.

Two of the key problem points of this clause are that the sponsor may "submit objections" and that no time frame is stated by which the agency is to have provided comments, if any. What control does "submit objections" give the sponsor and can publications be held up indefinitely if nothing is heard back?

The argument can be made that even though the term "objections" gives rise to pressure, the clause does not say that the author must revise the publication if an objection is made and therefore, leaves the final say to the author. The "shall allow a minimum of 60 day

for the completion of the process” implies that the 60 day period is the time one must wait until they publish.

It is always good practice and, in the case of clauses effecting export controls even more important, that the first tier university share the flow down clauses with any other universities to be subcontracted to as soon as possible to avoid negotiation delays and problems. In this case, the second tier subcontracting institution, felt they could not accept the clause as written as it jeopardized the fundamental research exemption, and did get the following clarification added to this clause:

“University X will be free to publish the results of the research after providing the sponsor with a sixty (60) day period in which to review each publication identity patentable subject matter and to identify any inadvertent disclosure of the sponsor’s proprietary information.”

All would have been better off if the first tier negotiations had achieved this modification in the prime award since it would have clarified that an export license is not necessary.

Case #7 (Export of “things”)

Scenario

The University is developing a space science instrument, known as the Far-ultraviolet Imaging Spectrograph (FIMS), that will trace the balance and flow of energy through plasma, with support from NASA and the Republic of Korea. In cooperation with the Korea Astronomy Observatory, supported by the Korea Ministry of Science, the University will fabricate two FIMS instrument, one engineering model and one flight model, for export to the Republic of Korea, where the FIMS will be integrated into a Korean satellite. The Korean satellite will then be launched into earth orbit on a launch vehicle from Russia.

The University will produce the opto-mechanical and detector accessories, import the electronic accessories fabricated in Korea, and complete the fabrication of the FIMS. Two different FIMS will be fabricated and exported to Korea: a non-functional, laboratory-use FIMS for development and testing (the “Qualification Model”) that is not space qualified, and a space-qualified (the “Flight Model”) that will be used for science research on an orbital satellite. The design of the FIMS will be openly shared, including posting of schematic drawings, blue-prints, and other fabrication methods on an open web-site contributed to by members of the University and Korean teams; the results of the research into the spectroscopy of plasma evolution from astrophysical radiation will also be shared openly and published. The contracts from the government of Korea and NASA for support of the project simply state that the University will comply with all export regulations.

Analysis and Comment

This award contains no terms or conditions which restrict the disclosure or dissemination of the research results and no restricted information will be received from the sponsor or others for use on this project.

Even though the answer to our basic Questions 1 and 2 is 'No', it is still necessary to question whether the research project falls under one of the export controlled technologies because in this instance there will be shipment of a "thing" outside the United States. Because the project entails fabrication of an instrument that will fly in space, ITAR, Category XV Spacecraft Systems and Associated Equipment cover export of the fabricated instrument.

There is no contractual duty to provide a defense service (training of personnel) to the Korean colleagues. The Korean colleagues are contributing technology to the project in the form of the electronics assembly for the FIMS. Both parties are contributing expertise to the objective of fabricating a scientific instrument.

Even though the project qualifies as fundamental research, and the technical information about the design of the FIMS instrument will be publicly available and the scientific results will be published and shared openly, the university will need to apply for a number of licenses from the Department of State. A license for the temporary import of the electronic assembly from Korea will be necessary, using the Department of State Form DSP-61, Application/License for Temporary Import of Unclassified Defense Articles. It is a temporary import because the electronic assembly will be integrated into the FIMS and then exported back to Korea. Further, licenses for export of both the Qualification/test version and the Flight Model of the FIMS must be secured, using the DSP-5, Application/License for Permanent Export of Unclassified Defense Articles and Related Unclassified Technical Data. In this case, one DSP-5 was submitted, covering both the test version and the final, flight-ready FIMS. Because the technical information about the FIMS is publicly available on the project website, no technical data about the FIMS is being exported, so the DSP-5 license application covered merely the shipment of the hardware.

The University submitted both the DSP-61 (temporary import) and the DSP-5 (covering the permanent export of the test version, and the final flight instrument) as attachments to a cover letter in mid-April. The DSP-61 was 3 pages long (the completed form with a 2-page description) and was approved by mid-May. The DSP-5 was 5 pages long (the completed form and a 4-page description, including a drawing), and was approved by mid-June. Some conclusions to be drawn are: the process can be relatively straightforward; one need not hire outside legal counsel to prepare an export license application; a simple description of the item to be exported is sufficient in cases where the project is truly fundamental research; listing a contact person who knows the science aspect of the project (such as the NASA Project Officer) helps get the application processed and approved in a timely manner. It is important to note that the University received approval for the temporary import and permanent exports, even though the application made no

mention of NASA support for the project (at the time of the initial applications, it was not known that NASA would eventually decide to fund the project). While the name of a knowledgeable NASA official was listed in the license in Block 6 (Name of U.S. Government personnel familiar with the commodity), it seems that such exports are approved even without official government funding of the project.

It should also be noted that at the time of submission and approval of the export licenses, it was not known where the Korean satellite containing the FIMS would be launched. Subsequently, Korea decided to use the launch services of the Russian Plesetsk Space Launch Complex. This meant that the FIMS, approved for export to South Korea, would be shipped by South Korea to Russia for launch. Even though Russia would not be considered an 'end user', the fact was that the FIMS, as part of the satellite, would be on Russian soil for a brief period of time. Rather than securing another export license, or a modification to the already approved license, the University simply sent a letter to the Department of State, seeking permission to transport the FIMS instrument, contained within the South Korean satellite, from South Korea to Russia for the sole purpose of being launched into space. The letter was submitted at the end of March, and approval from the Department of State was received in mid-August.

Case #8 (GPS technology)

Scenario

Your institution has a federal grant that involves placing low technology GPS equipment along a fault line in the Middle East. You and a collaborating institution are providing the research support, the training, the software programs to run the equipment, and the equipment itself. One of the countries involved in the research is on the "T-7" list. You researchers visit the site every few months to check the equipment. The software program you use has been shipped for several years to institutions of higher education, not for profits, and foreign governments and is available on a restricted web site. The restricted web site is to ensure that commercial entities don't access and use the equipment for commercial gain.

Analysis and Comment

The disclosure of and dissemination of the research results are restricted because the software ("technical data") is available only on a restricted website. Use of this software is essential for this project.

The project does not involve receipt of restricted information from others.

This project does involve training of specific personnel for a special purpose and so a defense service is being provided, requiring a Technical Assistance Agreement.

In this case, GPS equipment is listed both in the EAR and in the ITAR of covered technology. However, the EAR refers this category to the State Department licensing authority under Category XV of the ITAR. Thus a license from the State Department clearly is needed for the equipment as well as a technical assistance agreement for training of the foreign nationals.

There are two significant issues here. In all probability the fundamental research exemption is destroyed because of the limitation on access to that software and a license under the ITAR will be required. The other is the involvement of a T-7 country and whether a separate license may be required under OFAC. In this situation advice from legal counsel must be sought.

Case # 9 (Deemed Export and Defense Services issues)

Scenario

A member of your faculty, a member of the Project Management & Management Systems Department in your School of Aeronautics and Astronautics, is going to be visited by colleagues from the University of Ottawa, New Zealand. Your faculty member has done ground-breaking studies on and developed techniques, equipment, and processes for facilitating on-time, on-budget satellite-related and space-based research. In town for a conference on these and other developments, the New Zealanders want to see the actual layout. Among those visiting are UO faculty who were born in North Korea, China (Taiwan), and Syria. Would this collegial visit constitute an export (or be a deemed export) as defined by the ITAR?

Analysis and Comments

There is no award involved with this scenario and therefore no restrictions on information received. The project falls under ITAR Category XV.

Would the informal exchange of ideas and information normally generated by such a visit constitute the provision of a defense service requiring the university to obtain a license before it could proceed?

To be considered either an "export" or a "deemed export" for purposes of ITAR controls, the technology or data involved has to be subject to the ITAR in the first place.¹

¹ 22 CFR 120.17: Export means sending or taking a "defense article" or "technical data" out of the United States, transferring a "defense article" or "technical data" to a foreign person in the United States, or disclosing "technical data" to a foreign person in the United States. The definition of "technical data" excludes public domain information. Similarly, Fundamental Research, by definition, is in the public domain. The State Department recently confirmed that it does not restrict or control fundamental research; see 67 Federal Register 15099, 29 March 2002.

There are two exemptions and one exclusion, all related, that may operate to remove your Department's research and activities from ITAR jurisdiction. If any of these apply, that is the end of the inquiry and the visit will not be subject to ITAR deemed export controls:

1. EXEMPTION - If the information generated in and by the School of Aeronautics and Astronautics to which the visitors will be exposed constitutes general scientific, mathematical or engineering principles commonly taught in colleges and universities, it is outside the definition of "technical data" that would be subject to the ITAR. (22 CFR 120.10(5))
2. EXEMPTION - Similarly, if the information that would be disclosed to the visitors is in the public domain, for example by being included in textbooks or published papers or magazine articles, it is not within the jurisdiction of the ITAR (22 CFR 120.10(5)).
3. EXCLUSION - Finally, if all the research done by that Department is openly conducted (nothing secret, no participation restrictions based on citizenship) basic and applied science and engineering, the results of which will be shared broadly within the interested scientific community (no disclosure restrictions), then the ITAR does not apply to the data and processes and equipment involved in that research (22 CFR 120.11(8)).

On the defense service issue (and ignoring the prior discussion, which places the activities and research of this particular department outside the reach of the ITAR), a "defense service" is defined as the furnishing of assistance and/or training in the use, manufacture, handling, assembly, repair, operation, destruction, etc., of "defense articles" to foreign persons, providing "technical data" to foreign persons, or engaging in military training of foreign units and forces (22 CFR 120.9). This definition then points to another segment, 22 CFR 124.1 ("Manufacturing license agreements and technical assistance agreements"). That lengthy, convoluted, confusing section states that approval of the Directorate of Defense Trade Controls must be obtained before even public domain information regarding a "defense service" may be provided to a foreign national, notwithstanding the exemptions provided for in 22 CFR 125.4. Even public domain data could be caught up in this definition.

Although not applicable to this scenario, the only germane exemption provided by 125.4 is that for the disclosure of unclassified "technical data" (by definition, not public) in the U.S. by U.S. "institutions of higher learning" to foreign persons who are their bona fide full time employees (which means they are either citizens or have a green card and would thus be eligible to receive the data anyway).

Universities rely, not on 125.4, but on the protections afforded by the Fundamental Research Exclusion found at 22 CFR 120.11(8). They also invoke the exemption provided for "general scientific, mathematical or engineering principles commonly taught in colleges and universities" and the exemption for public domain information that both reside at 22 CFR 120.10(5).

Universities and college gain additional support for the argument that their involvement with foreign nationals in the performance of fundamental research and

higher education does not constitute a “defense service” based on 22 CFR 122.1(b). That clause provides that registration with the Directorate of Defense Trade Controls prior to furnishing “defense services” is not required for persons who engage only in the fabrication of articles for experimental or scientific purpose, including research and development.

Case #10 (Satellite Project)

Scenario

NASA has funded a very large multi-university project involving international collaborators with a university PI as head of the overall science team. There are four (4) US universities, one (1) US company and five (5) foreign institutions. The primary goal of this NASA mission to advance the understanding of the structure of the Sun’s corona, especially regarding the origin of the coronal mass ejections (CMEs), their evolution in the interplanetary medium, and the dynamic coupling between the CMEs and the Earth environment. Two spacecraft would be launched into orbits that circle the sun. As there are ambitious scientific goals for this spacecraft mission, all the selected investigations included significant foreign participation in the design, development, and analysis phases. Items will be shipped to and from the foreign collaborators. Instructions on use and operation of equipment will need to be provided during certain phases of this project.

The NASA contract has no special clauses limiting publications or research results– it even has requirements for education and outreach programs.

Analysis and Comment

Although there are no specific clauses pertaining to publication or disclosure of the research results or any restrictions on information received from the sponsor. All satellite related instruments and technical data are subject to ITAR. This project involves both the shipping of items as well as providing specific instructions on defense articles which falls within the definition of defense services. Therefore export control licenses must be secured from the State Department. Your institution holds the prime contract with NASA and must now not only decide what licenses need to be applied for in order to work with the foreign collaborators, but how this may subcontracts let to other universities.

It is critical seek legal counsel immediately. The institution should develop a plan for each element of the project and for each collaborator and how, in each case, how ITAR will apply. This would include a strategy for the disclosure of required technical data and spacecraft simulators to foreign principal and co-investigators. The strategy would also include the applicability of exemptions. The institution must now register with the Department of State Directorate of Defense Trade Controls in order to obtain the licenses.

ITAR requires a Letter of Agreement (LoA) or MOU between NASA and each foreign partner providing hardware on a no exchange of funds basis. The LoA is processed by NASA Headquarters (Code S and Code I) before being passed to the State Department for approval. In some cases, consolidated LoAs have been arranged for all the foreign partners in a single country in order to streamline the approval process. All project instruments include foreign hardware partners, thus all science teams are affected by ITAR. Until the LoA is approved (which can take many months) the foreign Co-Investigators and science team members may be shut out of meetings and teleconferences and denied access to significant portions of instrument web sites used by managers to share design and schedule information. This may not only result in friction among normally collegial teams, but has a real cost impact, since the security for ITAR controlled data requires additional software design and implementation efforts. Restrictions extend to denying access to any foreign nationals – graduate students, post docs. All this information relating to the mission orbit design is important to the foreign experimenters before launch, in order to properly design one's instrument (e.g., size of occulting disk, thermal design - the science objectives).

Securing a Technical Assistance Agreement (TAA) including the US university subcontractors will also be necessary and those agreements, if not in place quickly, can delay for months the design and development. These will be required to the extent that instrument technical data instructions and details of design (as covered by the LoA) must be shared with foreign persons for the proper design, fabrication, assemble and test of flight instruments.

This does not mean that the entire NASA project is restricted. Projects can be compartmentalized and even with a complex project as this, there are still portions that are appropriate for the application of the fundamental research exclusion. One can receive and protect export controlled information on portion of a contract (satellite instrument design instructions) and not need to use it in another part of the work (design and development of an experiment and/or the analysis of any resulting data from that experiment).

It is important to note that although the LoA's were necessary for the hardware, and the TAA's were necessary for the training, it was determined that no license was necessary for the scientific technical data falling outside those categories as that data could fall under the fundamental research exemption. Remember, there were no publication restrictions.

This case study illustrates how the application of export control regulations can affect large international collaborative scientific programs, particularly in the areas of schedule and costs, and perhaps in the ability to design and develop instrumentation jointly.