Do We Have an ITAR Problem? A Review of ITAR and Title VI/VII on Small Satellite Programs

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"This presentation serves to foster discussion within the community regarding policy issues related to technology transfer and student inclusion. Please consult primary references and/or do your own analysis. Some conclusions presented are not universally agreed. The authors disclaim any responsibility for actions taken in reliance on the materials contained herein."

Overview

- Brief overview of ITAR
- ITAR Exemptions
- Brief overview of Titles VI and VII of the Civil Rights Act of 1964
- Brief overview of the EAR
- What does this all mean for small spacecraft developers?
- Between a ‘rock and a hard place’
- Recent changes
- Moving forward

Brief Overview of ITAR

- ITAR is a set of federal regulations designed to prevent the unauthorized transfer of US military hardware (and hardware with a military use) to other nations
- The basic concept of ITAR is sound and important: it aims to prevent the transfer of US-designed or manufactured weapons to those who would use them against us
- Two key components of this are:
  - The US Munitions List
  - Enumerated Exemptions

ITAR (cont.)

- The “deemed export” concept
  - A transfer to a non-US (or otherwise authorized) person while within the United States qualifies as an export
  - This applies to both physical transfer of hardware and transfer of information

THE US Munitions List

- Contains two types of identification approaches to regulated materials:
  - Some items are specifically enumerated (e.g., materials and chemicals)
  - Some items are enumerated by function (e.g., a lighter-than-air craft with a military purpose such as cargo carrying)
- The later creates broad definitions that are subject to interpretation
- This creates a situation where it is difficult to determine whether an item is regulated without asking for specific guidance

ITAR Exemptions (examples)

- "Public Domain"
  - Items commonly available at bookstores, open conferences, etc.
- Fundamental Research
  - Fundamental research and its products – some of this interpretation comes from a 'sense of the senate' document, not statute or judicial interpretation
- Cleared by Authority
  - Several federal authorities have the ability to review materials and clear them for 'unlimited release' placing them outside the scope of regulation
- University to Full Time Employee

Title VI and VII of the Civil Rights Act of 1964

- Requires that covered entities not discriminate against individuals based on protected characteristics
- Covered entities include employers and universities receiving federal funding
- One protected characteristic is national origin

Brief Overview of EAR

- EAR regulates items that are not as sensitive as ITAR
- Overlap in ITAR and EAR regulation exists, with some items being regulated by both

What does this all mean for small spacecraft developers?

- Several ‘typical solutions’ exist:
  - Ban foreign nationals (or severely limit their areas of participation)
  - Argue that all work falls under an exemption (e.g., basic research)
  - Argue that no inputs are ITAR regulated and thus there is no ‘ITAR attachment’ to the project
- Some have gone as far as to argue that foreign national students should not be allowed in classes related to these topics

What does this all mean for small spacecraft developers? (cont.)

- This is all problematic:
  - Wrongful exclusion may violate Title VI/VII
  - Wrongful inclusion may violate ITAR (or, in some cases EAR and not ITAR)

- Even who is responsible is unclear:
  - The university / employer
  - The PI (or supervising faculty/staff member)
  - The person that makes the inadvertent disclosure
  - All of the above?

Between a ‘rock and a hard place’

- Responsibility to safeguard ITAR restricted inputs (e.g., items that are not products of fundamental research)
- Responsibility to do this in a granular way
- Recognition that some items ‘ITAR scope’ may contain technical data (implementation specifics, etc.) used for interface or other purposes
- A need to keep records to show that this has all been done properly

Recent Changes

- Refinements have been underway for some time
- Particular interest has existed in industry related to removing communications satellites from ITAR
- It is unclear as to whether the most recent sent of changes have actually effected much at all as component technologies required for function-performance may still be regulated

Moving Forward

- Indiscriminately excluding foreign nationals from small spacecraft development programs is not a viable solution
- To some extent, regulatory uncertainty threatens the development of future technologies of the very type that ITAR seeks to protect
- A clear understanding of what can and cannot be exported / provided to foreign nationals is required
- An understanding of where Title VI/VII may necessitate applying for export licenses to allow foreign national involvement is required

Moving Forward (cont.)

- A set of “safe harbor” best practices are needed that, when followed, create a reasonable assurance of compliance
- These need to be developed through collaboration of all stakeholders and approved (explicitly or, at least implicitly) by the DDTC
- This helps us (the developer community) with compliance – but also to convey what is acceptable (and not) to those that regulate us (e.g., technology transfer / legal departments).
- This could be an undertaking of an ‘industry’ association

Thanks for your time …