

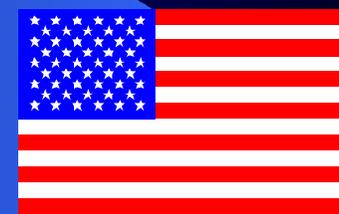


***Non-U.S. Proposals or U.S.
Proposals w/Non-U.S.
Participation Submitted to
NASA under Explorer
Program AOs***

Explorer Workshop

Washington, DC

March 12, 2002



OFFICE OF EXTERNAL RELATIONS

Code I

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- *Biological and Physical Research Enterprise Support*
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- *Russia and other Eurasian States*

- *Space Science Enterprise Support*
- *Aerospace Technology Enterprise Support*
- *Europe, Canada*

- *Earth Science Enterprise Support*
- *Asia and the Pacific, Latin America, Africa and the Middle East*

- *Export & Technology Transfer Control*
- *Foreign Visitor Control Policy*
- *NASA Overseas Travel Policy*

- *Interagency Coordination*
- *NASA Advisory Council*
- *National Academies Liaison*



International Participation

In principle, NASA welcomes non-U.S. proposals or U.S. proposals w/non-U.S. participation... *however, don't plan on proposing using taxpayer money to purchase a foreign rocket ride or to pay for foreign research.*



International Participation

- *And, if you're an entity from one of the following, or you are considering cooperation with one of the following, don't bother:*

– IRAN 

– IRAQ 

– CUBA 

– NORTH KOREA 

– LIBYA 

– And a few others on the [ITAR 126.1 List](#).

International Participation

- And be careful about proposing to involve organizations or individuals on the Entities List, Special Designated Nationals List, Debarred Parties List or Denied Persons List
 - Since we probably won't like it....
- And also, be cognizant of.....

International Participation

- *PDD-13 – U.S. Non-Pro and Export Control Policy*

- We will maintain our strong support for the Missile Technology Control Regime. We will promote the principles of the MTCR Guidelines as a global missile nonproliferation norm and seek to use the MTCR as a mechanism for taking joint action to combat missile proliferation. We will support prudent expansion of the MTCR's membership to include additional countries that subscribe to international nonproliferation standards, enforce effective export controls and abandon offensive ballistic missile programs. The United States will also promote regional efforts to reduce the demand for missile capabilities.

The United States will continue to oppose missile programs of proliferation concern, and will exercise particular restraint in missile-related cooperation. We will continue to retain a strong presumption of denial against exports to any country of complete space launch vehicles or major components.

The United States will not support the development or acquisition of space-launch vehicles in countries outside the MTCR.

For MTCR member countries, we will not encourage new space launch vehicle programs, which raise questions on both nonproliferation and economic viability grounds. The United States will, however, consider exports of MTCR-controlled items to MTCR member countries for peaceful space launch programs on a case-by-case basis. We will review whether additional constraints or safeguards could reduce the risk of misuse of space launch technology. We will seek adoption by all MTCR partners of policies as vigilant as our own.



**So After That, In Case You
May Have Forgotten, *In
Principle We Welcome
“International Participation”***

International Participation

- Recognizing the potential scientific, technical, and financial benefits offered to all partners by international cooperation, *participation by non-U.S. individuals and organizations as team members in Explorer investigations is welcomed*. Participation may include, but is not limited to, the contribution of scientific instruments, the spacecraft (or a portion thereof), and the subsequent sharing of the data from the mission, all on a no-exchange-of-funds basis. Carriers, launch vehicles and launch services, and space operations may also be contributed by international partners. Such participation can add to management complexity and risk, however, and proposed cooperative arrangements should offer significant benefits while maintaining clear technical and management interfaces. The proposal should discuss risks and benefits of proposed cooperative arrangements as well as management approaches to mitigating these risks. The direct purchase of supplies and/or services that do not constitute research from non-U.S. sources is permitted except that NASA is precluded from purchasing non-U.S. launch vehicles, nor may NASA funds provided to a mission team be used to purchase a launch vehicle from a non-U.S. source. The provision of launch services as a contribution to an Explorer mission by a non-U.S. partner is acceptable only on a no-exchange-of-funds basis (i.e., at no cost to NASA). The demonstrated reliability of the proposed launch vehicle and the resultant probability of mission success will be considered by NASA in the evaluation of risk. Information on the reliability of ELV's may be obtained from the point of contact listed in the *Expendable Launch Vehicle Opportunities* document in the [Explorer Program Library \(Appendix\)](#).
- Proposers are advised that a contract or subcontract by a U.S. team with a non-U.S. participant using funds derived from NASA must meet all applicable NASA and Federal regulations. Proposers are further advised that these regulations will place additional requirements on investigation teams that must be explicitly included in discussions of the investigation's cost, schedule, and risk management.

International Participation

**We Even Tell You How to
Propose It (in ENGLISH) &
How We Will Evaluate It
(FAIRLY) & *Don't be Late!***

**...and we also want to know the
Value (\$\$\$\$) of the
International Contribution.**

International Participation

- **Proposal Preparation and Submission** Non-U.S. proposals must be submitted in English and comply with all other submission requirements stated in the AO. *All foreign proposals will undergo the same evaluation and selection process as those originating in the U.S.* and must be received before the established closing date. All proposals received after the closing date will be treated in accordance with NASA's provisions for late proposals ([Appendix, Section](#)). *Proposals from foreign entities that include U.S. participation and proposals from U.S. entities that include foreign participation must include a cost plan for the U.S. entities, and, at a minimum, the integrated value of the contribution of each foreign entity.* See also [Section](#) for further guidance for proposal preparation.

International Participation

**Get Those Foreign
Endorsement Letters If You
Want Your Proposal to be
Considered – Somebody Has to
Agree to Pay the Bill! ... and
don't forget to have them
address the question of
committing their national
government.**

International Participation

- *Letters of Endorsement* Participation by non-U.S. individuals and/or institutions as team members or contributors to Explorer investigations must be endorsed by the institutions and governments involved. If government support is required, then a government endorsement is also needed. The letter of endorsement must provide evidence that the non-U.S. institution and/or government officials are aware and supportive of the proposed investigation and will pursue funding for the investigation if selected by NASA. Such endorsements must be submitted per the schedule in Section X.X. In exceptional cases, proposals containing a foreign component can be submitted without endorsement if the endorsement is not possible before the announced closing date. In such cases, the proposal should indicate when a decision on endorsement can be expected.

International Participation

**Hey... we even do the necessary
International Agreements with
the non-U.S. Partners – what a
deal!**

However....while NASA doing
the international agreements
is a good deal...

*...it may take a while to get
through the system and executed
(the “C-175” process involves
State and other
Departments/Agencies getting a
look at the cooperation).*

International Participation

- *Agreements with Selected Non-U.S. Participants* Should a non-U.S. proposal or a U.S. proposal with foreign participation be selected, NASA's Office of External Relations will arrange with the foreign sponsor for the proposed participation on a no-exchange-of-funds basis, in which NASA and the foreign sponsor will each bear the cost of discharging their respective responsibilities. It is the policy of NASA to establish formal international agreements with foreign partners in cooperations on flight missions. Whether an agreement is required during the concept study phase must be determined on a case-by-case basis. For major contributions, either by a foreign partner to a U.S. program or by a NASA-funded party to a foreign-led program, these agreements will be either a Memorandum of Understanding (MOU) or an implementing agreement under a framework agreement. Examples of major contributions are provision of an entire instrument, a launch, or a major spacecraft subsystem.
- For less significant exchanges, the agreement for the entire cooperation may take the form of a Letter of Agreement (LOA). Alternatively, for some major exchanges that will eventually be covered by a MOU or implementing agreement, it may be necessary to establish a study phase LOA that will remain in force until later entry into force of the MOU or implementing agreement. A common example of the latter situation would be a study phase award that entails only a minor U.S. Government financial commitment but requires the legal and/or export control framework provided by a formal international agreement.
- *For those cooperative contributions that will entail execution of a LOA (in lieu of a MOU) for either reason, the sponsoring foreign entity's letter of endorsement to support (if selected) the proposed foreign contribution must contain either (1) a clear statement that the sponsoring foreign entity is legally empowered to bind its own national government or (2) advance agreement that any LOA's required will be governed by U.S. law.*
- In the event that a non-U.S. proposal is selected, NASA will contract with a U.S. lead entity for performance of the U.S.-funded elements of the investigation.

International Participation

- **Also, did you know...**
 - **That Congress passed a law that requires NASA to notify the public about certain international cooperative activities at least 45 days prior to finalizing the arrangement?**
- **Well they did, and while it probably won't, it could affect the implementation of your proposal.**

International Participation

- Section 126(a) of Public Law 106-391 (NASA Authorization Act of 2000), entitled “Competitiveness and International Cooperation,” provides:
 - **Limitation.** (1) As part of the evaluation of the costs and benefits of entering into an obligation to conduct a space mission in which a foreign entity will participate as a supplier of the spacecraft, spacecraft system, or launch system, the Administrator shall solicit comment on the potential impact of such participation through notice published in Commerce Business Daily at least 45 days before entering into such an obligation.

International Participation

- The Authorization Committee's report includes the following comment on Section 126(a):
 - The Committee has supported international cooperation in space activity for years and continues to do so. When governments were the only significant organizations undertaking space activity, such cooperation could be undertaken in a manner to benefit the taxpayer of all the countries involved. In recent years, however, a commercial space sector has grown. The growth of this industry also benefits the taxpayers by creating new jobs, creating new space capabilities useful to consumers, reducing the costs of government space activities, and generating tax revenue. In 1996, worldwide spending on commercial space activity exceeded spending on government activity for the first time in history.
 - International government-to-government space cooperation may have consequences for the growth of the U.S. commercial space industry. Those consequences may be beneficial, but they also may harm U.S. competitiveness if foreign governments use such activities to aid their commercial space industries. This section of the bill directs NASA to try and determine those consequences in advance by soliciting comments through the Commerce Business Daily. It also directs NASA to take the broad U.S. national interests (*as defined earlier in the bill*) into account prior to starting an international cooperative effort.

International Participation

- (6) International cooperation in space exploration and science activities most effectively serves the United States national interest—
 - (A) when it—
 - (i) reduces the cost of undertaking missions the United States Government would pursue unilaterally;
 - (ii) enables the United States to pursue missions that it could not otherwise afford to pursue unilaterally; or
 - (iii) enhances United States capabilities to use and develop space for the benefit of United States citizens; and
 - (B) when it—
 - (i) is undertaken in a manner that is sensitive to the desire of United States commercial providers to develop or explore space commercially;
 - (ii) is consistent with the need for Federal agencies to use space to complete their missions; and
 - (iii) is carried out in a manner consistent with United States export control laws.

International Participation

- **Are you proposing any *CHINA (PRC)* involvement?**
 - Section 126(b) of Public Law 106-391 (NASA Authorization Act of 2000), entitled “Competitiveness and International Cooperation,” provides:
 - The Administrator shall certify to the Congress at least 15 days in advance of any cooperative agreement with the *People's Republic of China*, or any company owned by the *People's Republic of China* or incorporated under the laws of the *People's Republic of China*, involving spacecraft, spacecraft systems, launch systems, or scientific or technical information that--
 - (A) the agreement is not detrimental to the United States space launch industry; and
 - (B) the agreement, including any indirect technical benefit that could be derived from the agreement, will not improve the missile or space launch capabilities of the *People's Republic of China*.

International Participation

**You Thought That Was It,
Didn't You? It's Just the
Beginning!**

International Participation

- **P.L. 106-178 – Iran Non-Proliferation Act of 2002**
 - **SEC. 6. RESTRICTION ON EXTRAORDINARY PAYMENTS IN CONNECTION WITH THE INTERNATIONAL SPACE STATION.**
 - **(a) RESTRICTION ON EXTRAORDINARY PAYMENTS IN CONNECTION WITH THE INTERNATIONAL SPACE STATION-** Notwithstanding any other provision of law, no agency of the United States Government may make extraordinary payments in connection with the International Space Station to the Russian Aviation and Space Agency, any organization or entity under the jurisdiction or control of the Russian Aviation and Space Agency, or any other organization, entity, or element of the Government of the Russian Federation, unless, during the fiscal year in which the extraordinary payments in connection with the International Space Station are to be made, the President has made the determination described in subsection (b), and reported such determination to the Committee on International Relations and the Committee on Science of the House of Representatives and the Committee on Foreign Relations and the Committee on Commerce, Science, and Transportation of the Senate.

International Participation

And last but not least we have that pesky and dreaded Export Control stuff that you have to discuss in your proposal.

International Participation

**For Domestic Proposals
w/International Participation, consult
your Export Compliance Officers
(*and be nice to them*) and have them
tell us about the Export
Considerations Associated with the
Planned International Participation –
*This is a TEST, Don't Fail!***

International Participation

- *U.S. Export Laws and Regulations* Proposers should be aware that investigations selected that include international participation, either through involvement of non-U.S. nationals and/or involvement of non-U.S. entities must include in their proposal a section discussing compliance with U.S. export laws and regulations; e.g., 22 CFR 120-130, *et seq.* and 15 CFR 730-774, *et seq.*, as applicable to the scenario surrounding the particular international participation (see [Appendix](#)). Proposers must also comply with NASA FAR Supplement clause 1852.225-70 entitled "Export Licenses." The discussion must describe in detail the proposed international participation and is to include, but not be limited to, whether or not the international participation may require the prospective proposer to obtain the prior approval of the Department of State or the Department of Commerce via a technical assistance agreement or an export license, or whether a license exemption/exception may apply. If prior approvals via licenses are necessary, the proposal must discuss whether the license has been applied for or, if not, the projected timing of the application and any implications for the schedule. Information regarding U.S. export regulations is available at the World Wide Web addresses <http://www.pmdtc.org/> and <http://www.bxa.doc.gov/>. Prospective proposers are advised that under U.S. law and regulation, spacecraft and their specifically designed, modified, or configured systems; components; parts; etc., such as the instrumentation being sought under this AO, are generally considered "Defense Articles" on the United States Munitions List and subject to the provisions of the International Traffic in Arms Regulations (ITAR), 22 CFR 120-130, *et seq.*

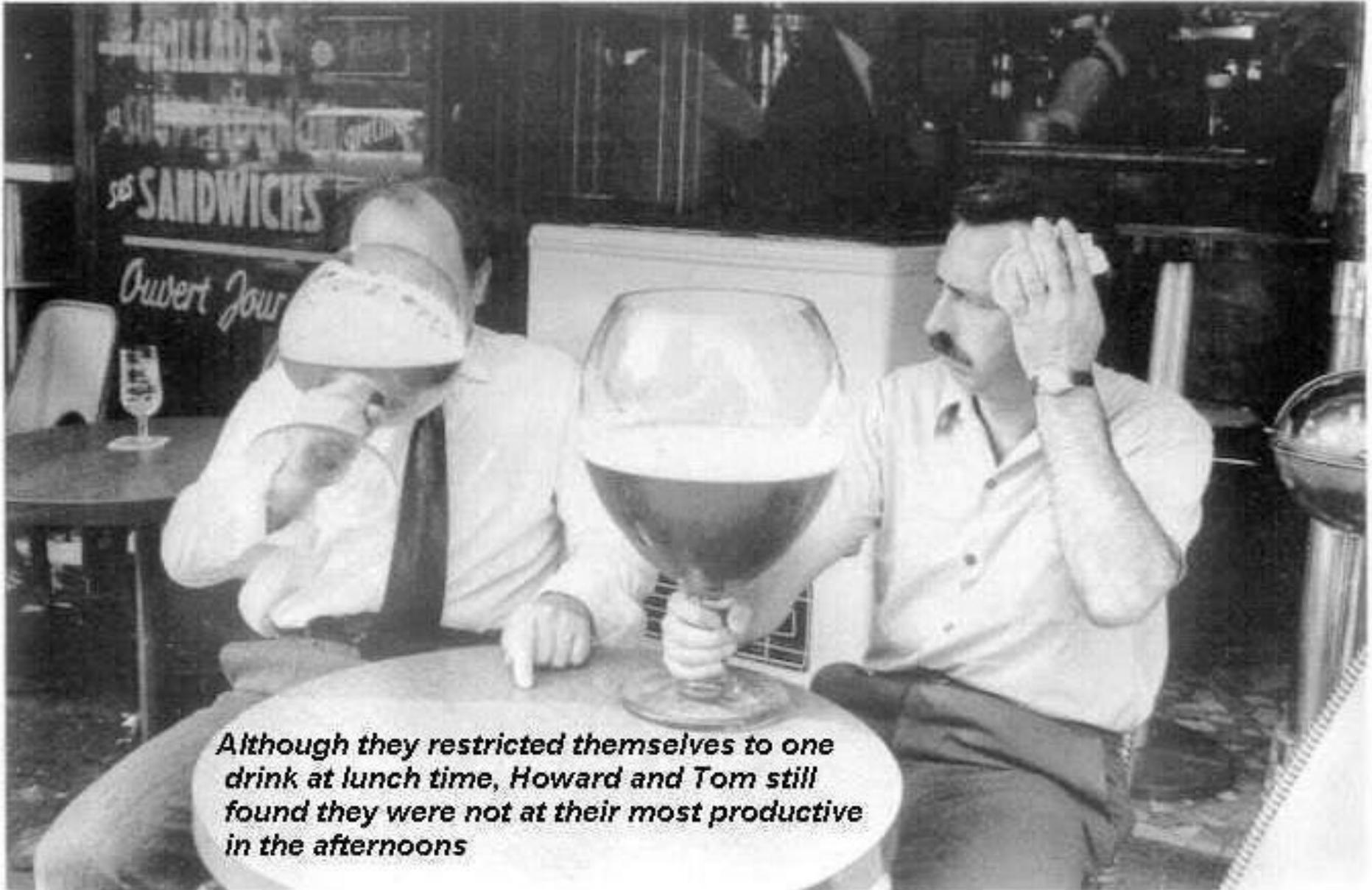
Life of your Export Compliance Officer

Womb to Tomb

Early life



Later Life



Although they restricted themselves to one drink at lunch time, Howard and Tom still found they were not at their most productive in the afternoons

Retirement

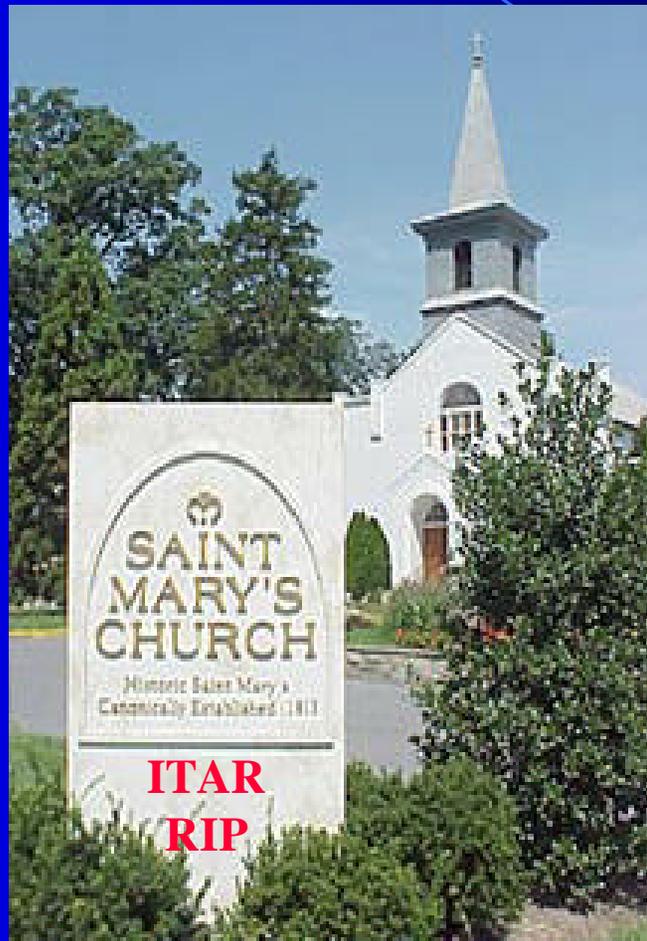


Chestnut Lodge (Mental) Hospital

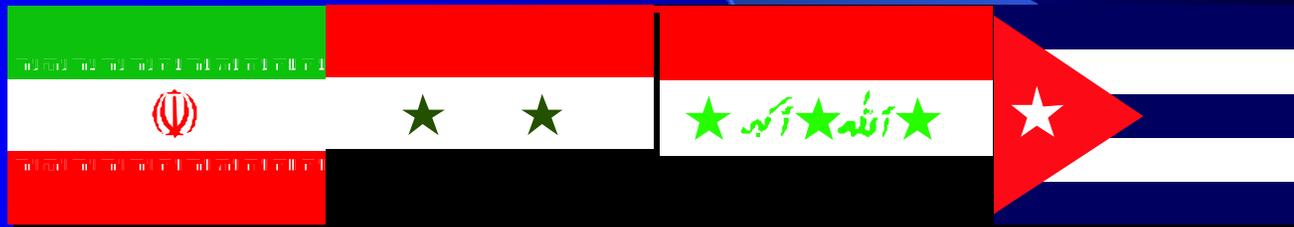
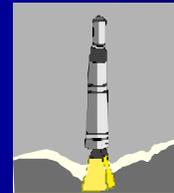
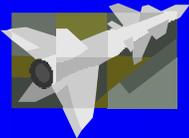
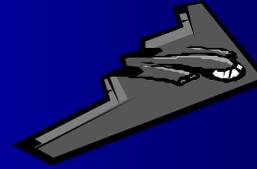
Located on West
Jefferson St. (Route 28)
Rockville, MD

*Source of inspiration
for “One Flew Over the
Cuckoo’s Nest”*

Final Resting Place of Many a Good Export Compliance Officer



The Dreaded ITAR



The International Traffic in Arms Regulations

As it applies to *CIVIL SPACE*

The *ITAR* (as it applies to *CIVIL SPACE*)

- What's covered?
 - *USML Category XV*
 - *Space Systems and Associated Equipment*
 - **USML Category XII**
 - **Fire Control, Range Finder, Optical and Guidance & Control Equipment**
 - **USML Category IV**
 - **Launch Vehicles ...**
 - **MTCR Annex Items (22 CFR 121.16)**

The *ITAR* (as it applies to *CIVIL SPACE*)

- **Category XV – Spacecraft Systems and Associated Equipment**
 - All satellites, except the International Space Station
 - Certain GPS receiving equipment
 - Certain radiation hardened microcircuits
 - All specifically designed or modified systems, components, parts, accessories, and associated equipment for the above, including satellite fuel, ground support equipment, test equipment, payload adapter or interface hardware, replacement parts, and non-embedded solid propellant orbit transfer engines.
 - All *technical data* and *defense services* directly related to the above, including detailed design, development, manufacturing or production data for all spacecraft and specifically designed or modified components.

The *ITAR* (as it applies to *CIVIL SPACE*)

- **Category XV - All spacecraft (except the ISS)**
 - *Scientific (term added in 1999)*
 - *Research (term added in 1999)*
 - *Experimental (term added in 1999)*
 - **Communications**
 - **Remote Sensing (and this doesn't mean just Earth remote sensors)**
 - **Navigation**
 - **Multi-mission**

The *ITAR* (as it applies to *CIVIL SPACE*)

- **ITAR Definitions**

- *Defense article*

- Includes both hardware and *technical data*

- *Defense service*

- Furnishing assistance or training to *foreign persons*
 - Furnishing *technical data* to *foreign persons*

- *Public domain*

- *Fundamental research*

The *ITAR* (as it applies to *CIVIL SPACE*)

- So what about “scientific instruments” for “scientific or research” satellites?
 - Unless you confirm that the instrument is under the jurisdiction of the Dept of Commerce, it is subject to the *ITAR*.
 - There are cases where a scientific instrument for a satellite has been determined to be under the jurisdiction of the Dept of Commerce.
 - Also, the Dept of Energy has obtained confirmation that the Alpha Magnetic Spectrometer that will be flown on the Shuttle and attached to the ISS, is subject to the jurisdiction of the Dept of Commerce.

The *ITAR* (as it applies to *CIVIL SPACE*)

- Jurisdiction requests – requests for a jurisdiction determination go to the Department of State, Office of Defense Trade Controls – they obtain input from Commerce, DoD and as appropriate, other U.S. Gov't Agencies and offices (including NASA, as appropriate). Once an item is determined to be under Commerce jurisdiction, you then need to do a “classification”.

The *ITAR* (as it applies to *CIVIL SPACE*)

- Commerce classification requests – go to BXA to determine the CCL classification, including EAR-99.

The *ITAR* (as it applies to *CIVIL SPACE*)

- **Selected ITAR Technical Data Exemptions:**
 - **125.4(b)(3) must work for the U.S. Government under a contract**
 - *125.4(b)(10) must be a bona-fide, full-time foreign national employee of an accredited U.S. institution of higher learning*
 - **125.4(b)(11) must be a transfer pursuant to a contract with the U.S. Government in furtherance of a U.S. Government international agreement, and must have prior written approval from State**
 - **125.5(c) “Plant” visits & technical data transfers in context of such a visit that are pre-authorized by a cognizant Agency of the U.S. Government**

The *ITAR* (as it applies to *CIVIL SPACE*)

- ITAR Defense Service Exemptions
 - Except for the “new” University exemption, don’t bother looking and be mindful that per 124.1, a Technical Assistance Agreement is required even if assistance on a defense article involves 100% public domain information. Can you believe it?
 - NASA is working to change this for NASA programs.

NASA Contractors and Export Control

- **State (and more recently, Commerce) staff license applications to NASA for review**
- **If you are (or will be) a NASA contractor, it is in your interest to coordinate with NASA in advance, any license application that you intend to submit and which will further a NASA program – NASA might have useful input in framing the application and can advocate for its timely approval. Seeing applications after the fact can result in delays, and if not to our liking or not framed correctly, an RWA.**

International Participation

- **Are you an *accredited U.S. institution of higher learning*?**
 - **The State Dept has just given you two new exemptions for certain, otherwise licensable activities under the International Traffic in Arms Regulations.**
 - **The exemptions are for “hardware” and “defense services”, but only in limited circumstances and only with certain entities in certain countries, including nationals of those countries, whether in the U.S. or abroad.**

Who Can I Call with Questions?

- **Office of External Relations, NASA HQs**
 - **Assessments and Technology Division (202-358-0330)**
 - **Export Control @ NASA**
 - **Foreign National Access to NASA**
 - **Space Science and Aeronautics Division (202-358-0900)**
 - **International Agreements**



Monitoring the present, securing the future.