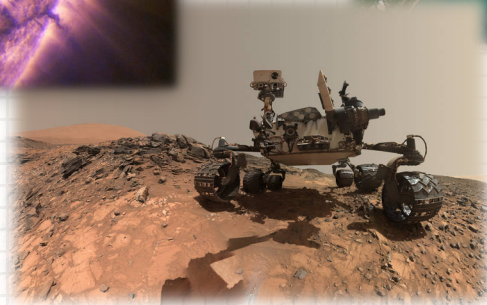
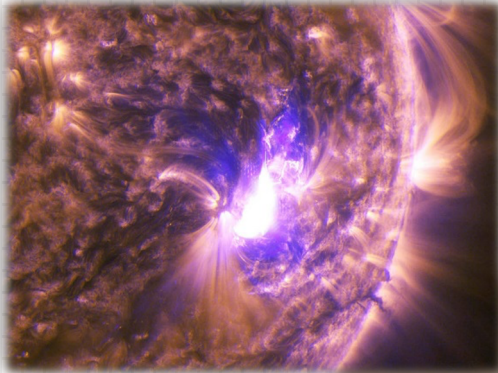
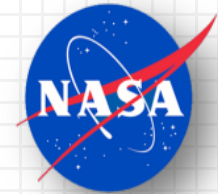
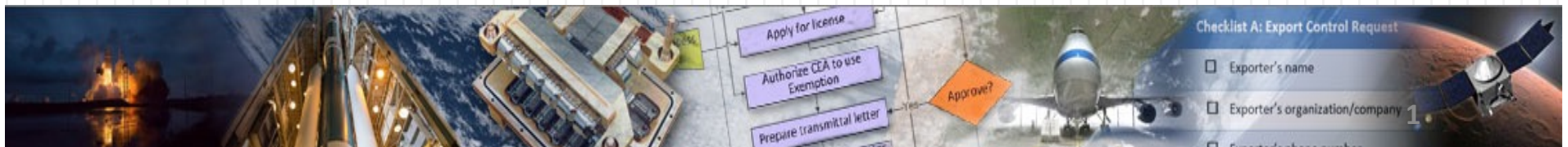


# 2021 Astro Explorers AO (MIDEX and Mission of Opportunity) Pre-Proposal Conference



Juan Santos  
NASA Headquarters Export Administrator (HEA)  
14 September 2021



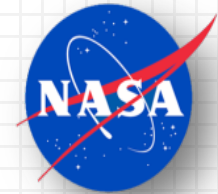


*...export controls do not exist simply as another set of regulations... They exist to ensure our technological superiority is never employed against us on the battlefield... They exist to ensure our security – our national security, our homeland security, our cybersecurity, and our economic security.”*



Penny Pritzker  
38<sup>th</sup> U.S. Secretary of Commerce

# Compliance is Part of the NASA Mission



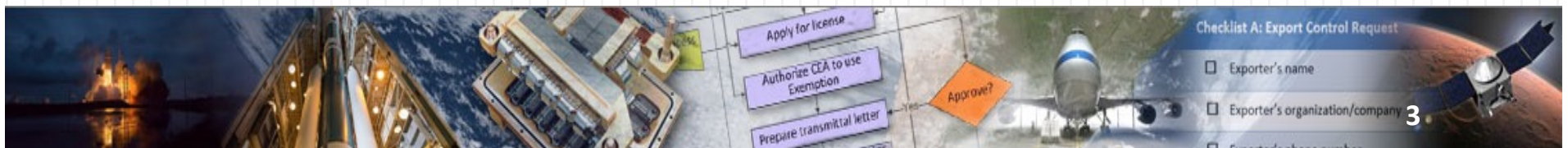
*“It is NASA policy to ensure that exports and transfers of commodities, technical data, or software to foreign persons are carried out in accordance with United States export control laws and regulations, and Administration and NASA policy.”*

**-NPD 2190.1B, Section 1.a.**

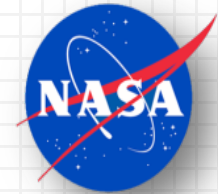
*“We want to maximize the benefits of our international efforts while ensuring that we comply with U.S. export control laws and regulations. This is the personal responsibility of each employee.”*

**-NPR 2190.1C, Section 2.1.1.**

*Compliance is everyone’s job at NASA*

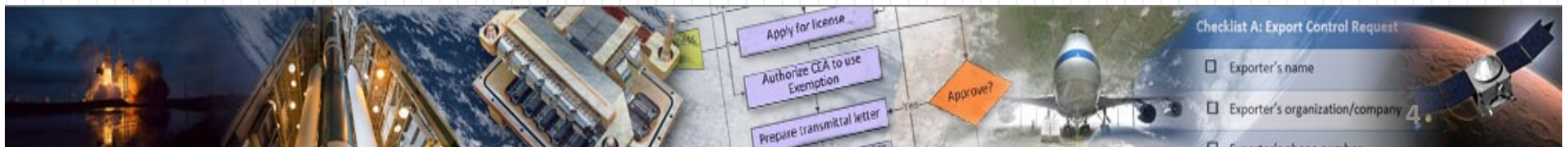


# What is an Export?

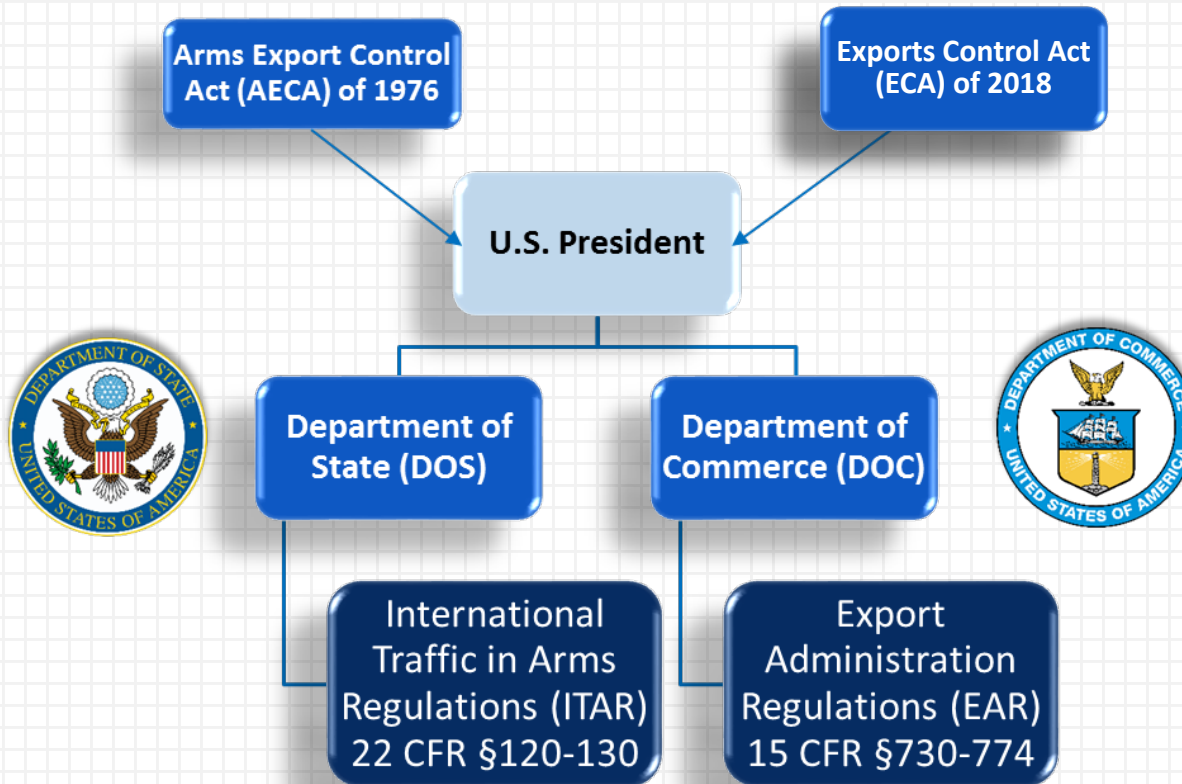
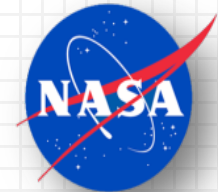


An export is the transfer of *anything* to a foreign person or a foreign destination by *any means*, *anywhere*, *anytime*.

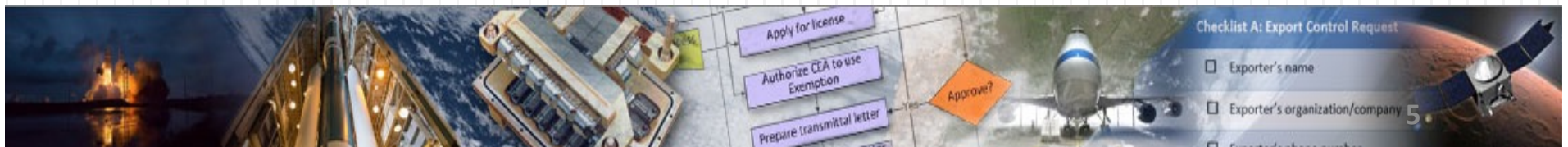
- An export can involve a commodity, software, technical data, technology, and/or providing a defense service or technical assistance.



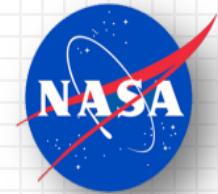
# Export Control Laws and Regulations



- The goal of these laws and regulations is to protect our national security and policy interests.
- Both the **ITAR** and the **EAR** include criminal and civil penalties for export control violations that can result in monetary penalties, imprisonment, or both.



# Export Control Laws and Regulations



Dept. of State

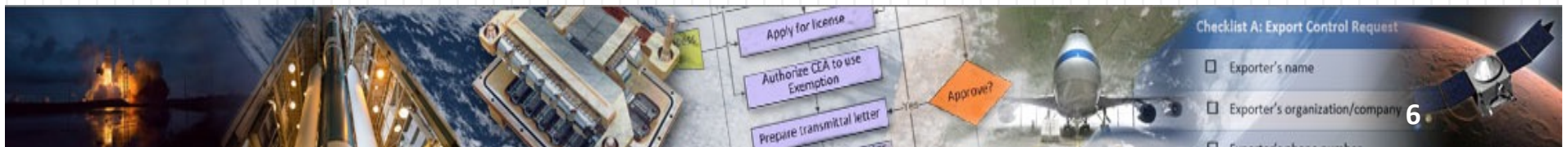
The **ITAR** controls the export of goods and technical data that are principally used in military or intelligence applications, including critical defense articles, services, and technologies. These items are identified on the **United States Munitions List (USML)**, and include certain items listed in the **Missile Technology Control Regime (MTCR) Annex**.



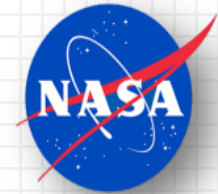
Dept. of Commerce

The **EAR** controls goods and technologies that have civil, commercial, military, and intelligence applications. These items are identified on the **Commerce Control List (CCL)**, including certain items found in the **MTCR Annex**.

If an item is listed on the USML or the CCL, an export authorization is required.



# United States Munitions List (USML)



I - Firearms, Close Assault Weapons, and Combat Shotguns

II - Guns and Armament

III - Ammunition/Ordnance

**IV - Launch Vehicles, Guided Missiles, Ballistic Missiles, Rockets, Torpedoes, Bombs, and Mines**

**V - Explosives and Energetic Materials, Propellants, Incendiary Agents and Their Constituents**

VI – Surface Vessels of War and Special Naval Equipment

VII - Ground Vehicles

**VIII - Aircraft and Related Articles**

IX - Military Training Equipment and Training

X - Personal Protective Equipment

**XI - Military Electronics**

**XII - Fire Control, Range Finder, Optical and Guidance and Control Equipment**

**XIII - Materials and Miscellaneous Articles**

XIV - Toxicological Agents, Including Chemical Agents, Biological Agents, and Associated Equipment

**XV - Spacecraft and Related Articles**

XVI - Nuclear Weapons Related Articles

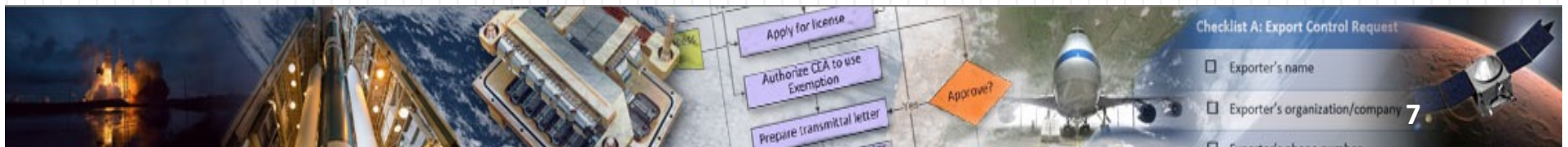
XVII - Classified Articles, Technical Data and Defense Services Not Otherwise Enumerated

XVIII - Directed Energy Weapons

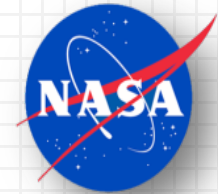
**XIX - Gas Turbine Engines and Associated Equipment**

XX - Submersible Vessels and Related Articles

XXI - Articles, Technical Data, and Defense Services Not Otherwise Enumerated



# Commerce Control List (CCL)



Category 0 - Nuclear Materials, Facilities and Equipment and Misc.

Category 1 - Materials, Chemicals, Microorganisms and Toxins

Category 2 - Materials Processing

**Category 3 - Electronics**

**Category 4 – Computers**

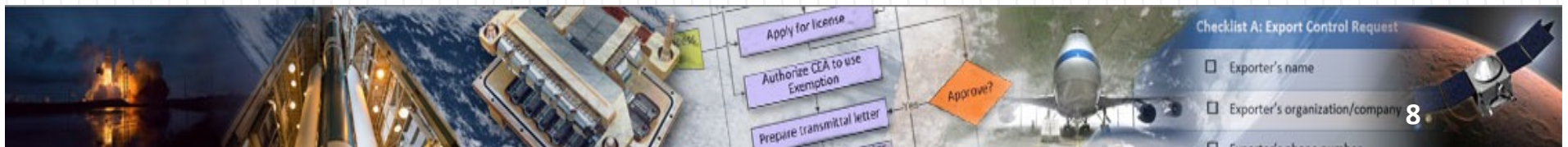
**Category 5 - Telecommunications and Information Security**

**Category 6 - Lasers and Sensors**

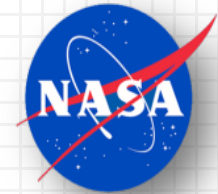
**Category 7 - Navigation and Avionics**

Category 8 - Marine

**Category 9 - Propulsion Systems, Space Vehicles and Related Equipment**







# Technical Data and Defense Services

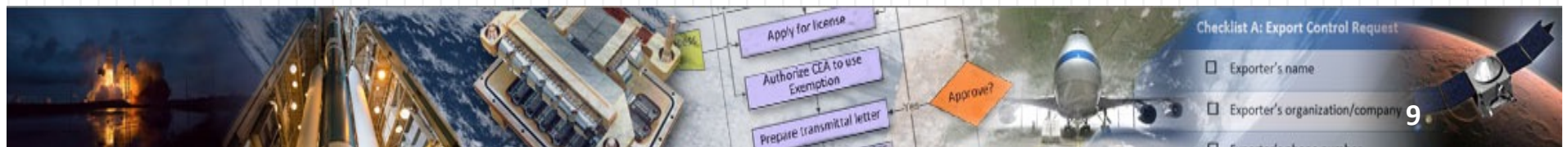
The Department of State (DOS) has specific definitions of technical data and defense services:

## Technical Data

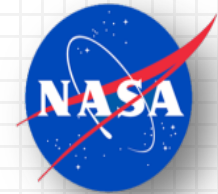
Technical data is information that is required for the design, development, production, manufacture, assembly, operation, repair, testing, maintenance or modification of an export-controlled item and must be protected in accordance with export control regulations (ITAR).

## Defense Services

The furnishing of assistance (including training) to foreign persons, whether in the United States or abroad in the design, development, engineering, manufacture, production, assembly, testing, repair, maintenance, modification, operation, demilitarization, destruction, processing or use of defense articles (ITAR).



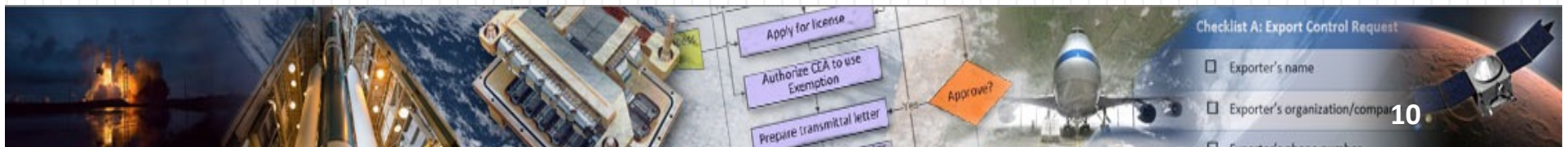
# Technology



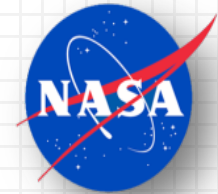
The Department of Commerce (DOC) has a specific definition of technology:

## Technology

Per DOC, technology is specific information necessary for the “development,” “production,” or “use” of a product. The information takes the form of “technical data” or “technical assistance” (EAR).



# Technology



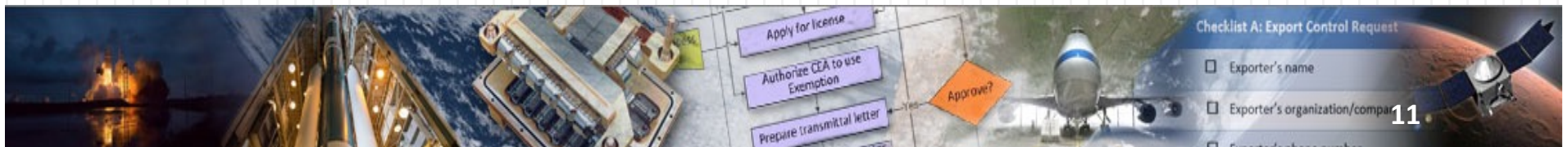
DOC has specific definitions of technical data and technical assistance:

## Technical Data

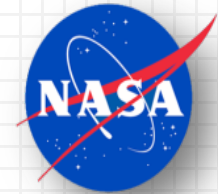
Per DOC, technical data may take forms such as blueprints, plans, diagrams, models, formulae, tables, engineering designs and specifications, manuals and instructions written or recorded on other media or devices such as disk, tape, read only memories.

## Technical Assistance

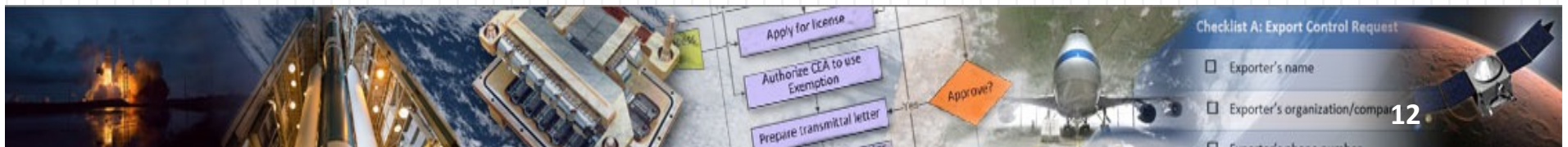
Per DOC, technical assistance may take forms such as instruction, skills, training, working knowledge, consulting services. Technical assistance may involve transfer of technical data.

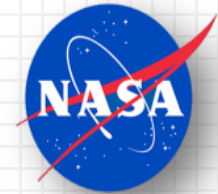


# Proposal Best Practices



- Mark or identify export-controlled and proprietary information in proposals
  - Marking either pages, sections, or paragraphs
- Identify all foreign partners and participants
- Understand your responsibilities under the U.S. export control regulations
  - Articulate your export control plans





# NASA's International Agreements

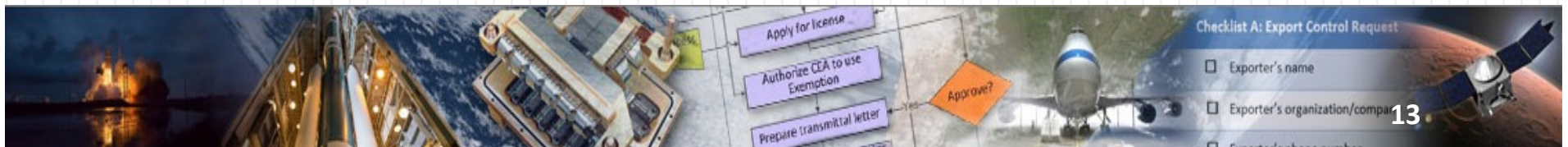
NASA's International Agreements - the basis for NASA foreign cooperative (or reimbursable) activity

- define the responsibilities of the parties, scope of the work to be performed, & the terms and conditions under which the cooperation will be effected

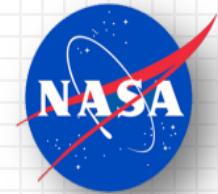
All NASA International Agreements contain a clause on transfers of controlled goods & data

NASA's International Agreements do **NOT** trump export control laws & regulations

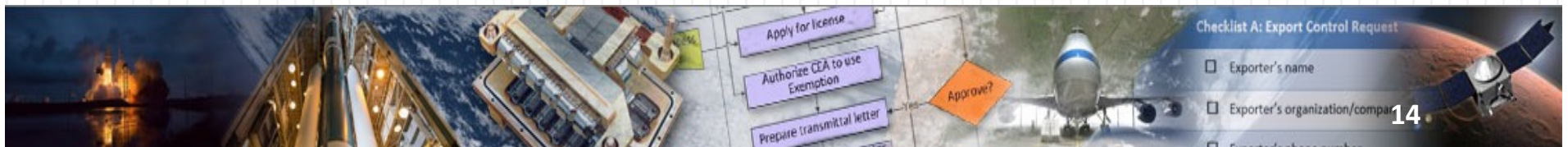
*An International Agreement does not replace a contractor's need for a license or other export authorization.*



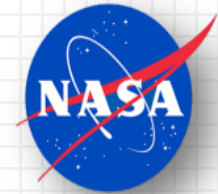
# NASA Contractors and Export Control



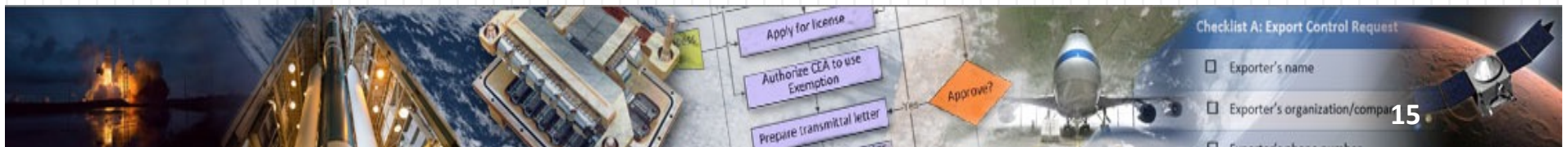
- Contractor and their subcontractors are responsible for export compliance, including obtaining the required export authorizations and keeping the required records, in the execution of contracted work (NASA Federal Acquisition Regulations (FAR) Supplement (NFS) 1825.1103-70 and 1852.225-70)
  - NFS Clause 1825.1103-70 “Export control”
  - NFS Clause 1852.225-70 “Export Licenses”
- NPD/NPR 2190 is applicable to NASA contractors and grantees as required in their contracts or grants
- NASA contractors, should be coordinating with NASA in advance of any license application that will further a NASA program
- NASA provides review of licenses submitted to the Department of State and the Department of Commerce



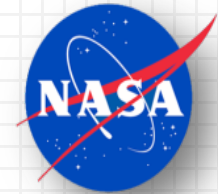
# NASA & Contractor Best Practices



- Early coordination between the NASA Program/Project Managers, Contractor(s), and NASA Headquarters or Center Export Administrator will benefit programs/projects.
  - Understand what is controlled
  - Identify international parties involved
  - Add export milestones to program/project schedule
  - Develop technology transfer control plan
  - Coordinate meetings with international partner(s) well in advance
- Mark/determine the export jurisdiction of data/hardware when created or acquired
- Recordkeeping



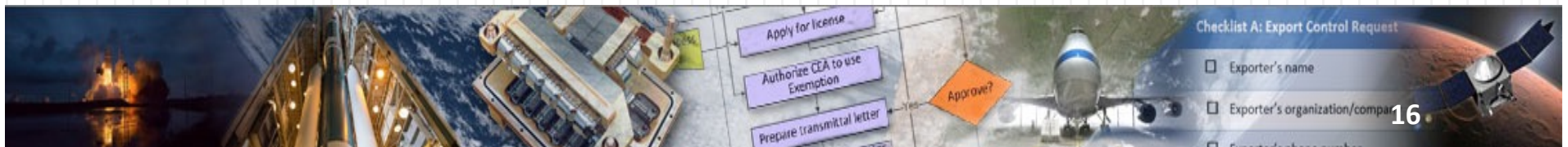
# Important Links



The Department of State is the regulatory authority for defense articles and defense services. <http://www.pmdtcc.state.gov/>

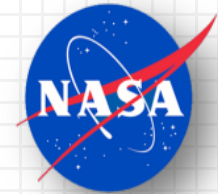
The Department of Commerce is the regulatory authority for dual-use items. <http://www.bis.doc.gov/>

The NASA Export Control Program is at <https://www.nasa.gov/oirr/export-control>





# Questions



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202-358-1792

